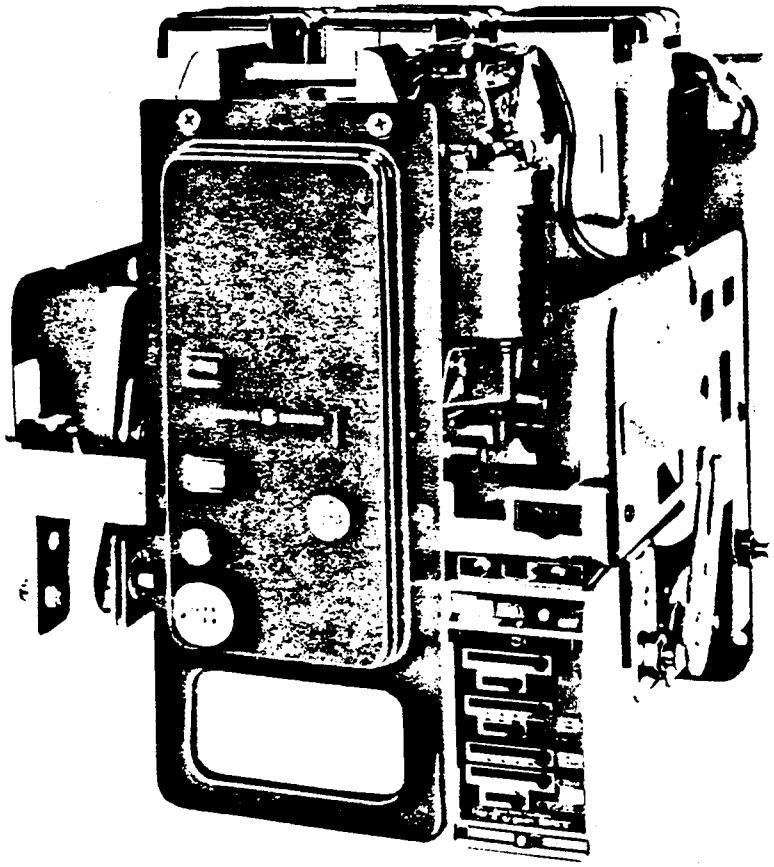
GEF-4527I
Supersedes GEF-4527A

RENEWAL PARTS

LOW VOLTAGE POWER CIRCUIT BREAKERS

TYPES

AKR-4/4A-30/30H
AKR-5/5A-30/30H
AKRU-4A/5A-30
AKR-3/3A-50/50H
AKR-4/4A-50/50H
AKR-5/5A-50/50H
AKRU-4A/5A-50
AKRT-4/4A-50
AKRT-5/5A-50



Type AKR-5A-50 electrically operated

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

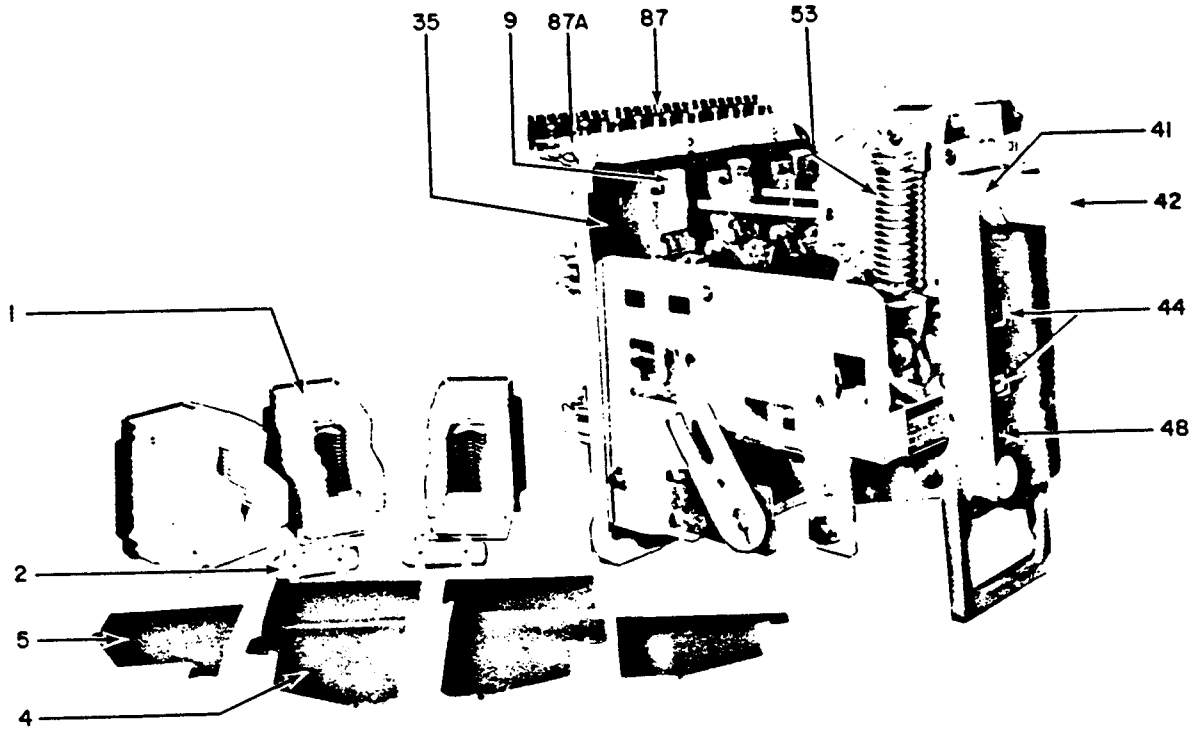


Figure 1. Type AKR-50 breaker with arc quenchers and barriers removed

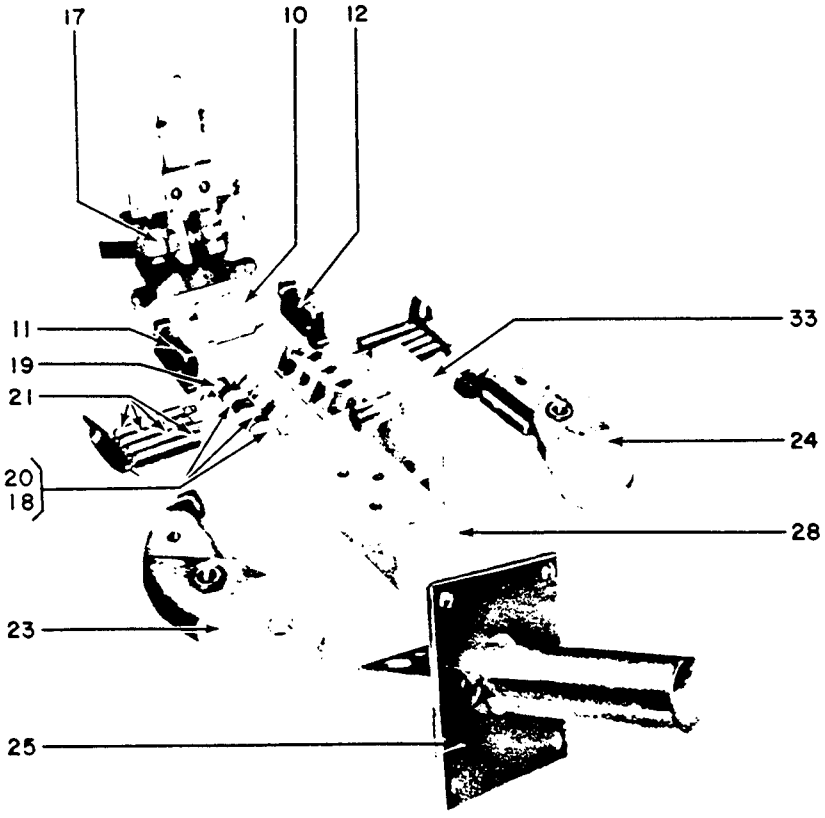


Figure 2. Current carrying parts for one pole, Type AKR-50 breaker

Fig. No.	Ref. No.	AKR-30	AKRU-30	AKR-30H	AKR-50	AKRU-50	AKRT-50	AKR-50H	Cat. No.	Description
1	1	3	3	-	-	-	-	-	425D404G2	Arc quencher
1	1	-	-	-	3	3	3	-	425D404G1	Arc quencher
1	1	-	-	3	-	-	-	-	425D404G4	Arc quencher
1	1	-	-	-	-	-	-	3	425D404G3	Arc quencher
1	2	2	2	2	2	2	2	2	193A1348P1	Clamp for arc quencher
	3	2	2	2	2	2	2	2	N22P23016B13	Screw for arc quencher clamp
1	4	2	2	2	2	2	2	2	568B545P1	Interphase barrier
1	5	2	2	2	2	2	2	2	192A9649P2	Vertical barrier, outer
	6	-	-	1	-	-	-	1	192A9903P1	Insulating barrier, left, on end of main shaft
	7	-	-	1	-	-	-	1	192A9903P2	Insulating barrier, right, on end of main shaft
	8	1	1	1	1	1	1	1	139C4611P1	Horizontal barrier
1	9	3	3	3	-	-	-	-	192A9902G1	Arc runner
1	9	-	-	-	3	3	3	3	568B504G1	Arc runner
2	10	-	-	-	3	3	-	3	192A9514P1	Pivot for stationary contact
2	11*	-	-	-	3	3	3	3	568B509G4	Stationary arcing contact, left
2	12*	-	-	-	3	3	3	3	568B509G3	Stationary arcing contact, right
	13	-	-	-	3	3	3	3	192A9544G1	Plunger for stationary arcing contact
	14	-	-	-	3	3	3	3	192A6990P146	Spring, outer, for stationary arcing contact
	15	-	-	-	3	3	-	3	192A6990P147	Spring, middle, for stationary arcing contact
	16	-	-	-	3	3	3	3	192A6990P148	Spring, inner, for stationary arcing contact
2	17	3	3	-	-	-	-	-	139C4632G1	Upper stud assembly
2	17	-	-	3	-	-	-	-	139C4632G2	Upper stud assembly
2	17	-	-	-	3	3	-	3	139C4600G3	Upper stud assembly
2	17	-	-	-	-	-	3	-	139C4600G4	Upper stud assembly
2	18*	6	6	6	-	-	-	-	192A9847G1	Stationary arcing contact
2	19*	-	-	-	6	6	6	6	192A9505G2	Stationary intermediate contact
2	20*	9	9	12	-	-	-	-	192A9847G2	Stationary main contact
2	20*	-	-	-	18	18	24	18	192A9505G1	Stationary main contact
2	21	15	15	18	24	24	30	24	192A9509G1	Spring assembly for stationary main contact
2	23*	3	3	3	-	-	-	-	192A9511G3	Movable contact
2	23*	-	-	-	3	3	-	3	192A9511G1	Movable contact, left
2	23*	-	-	-	-	-	3	-	192A9977G2	Movable contact, left
2	24*	-	-	-	3	3	-	3	192A9511G2	Movable contact, right
2	24*	-	-	-	-	-	3	-	192A9977G1	Movable contact, right
2	25	3	3	3	3	3	-	3	343L650G4	Lower stud
2	25	-	-	-	-	-	3	-	343L650G34	Lower stud
	26	3	3	3	-	-	-	-	192A9845P1	Pivot, outer, for movable contact
	27	3	3	3	-	-	-	-	192A9882G1	Pivot, inner, for movable contact
2	28	-	-	-	3	3	-	3	192A9912G1	Pivot for movable contact
	29	-	-	-	-	-	3	-	192A9972P1	Pivot, inner right, for movable contact
	30	-	-	-	-	-	3	-	192A9972P2	Pivot, inner left, for movable contact
	31	-	-	-	-	-	3	-	192A9972P3	Pivot, outer right, for movable contact
	32	-	-	-	-	-	3	-	192A9972P4	Pivot, outer left, for movable contact
2	33	-	-	-	3	3	-	3	192A9602P1	Shaft for movable contact pivot
2	33	-	-	-	-	-	3	-	192A9985P1	Shaft for movable contact pivot
	34	-	-	-	6	6	-	6	192A6990P152	Spring for movable contact pivot
	34	-	-	-	-	-	6	-	192A6990P190	Spring for movable contact pivot
1	35	1	1	1	1	1	-	1	172RE350P1	Insulation on back frame
	36	3	3	3	3	3	3	3	192A7573P111	Coupling pin for movable contact assembly
3	37	3	3	3	-	-	-	-	192A9554P1	Steel link for movable contact assembly
3	37	-	-	-	-	-	3	-	193A1411P1	Steel link for movable contact assembly
3	37	3	3	3	3	3	3	3	192A9597P1	Steel link for movable contact assembly
3	38	3	3	3	3	3	3	3	192A9554P1	Adjusting screw for contact assembly
3	39	3	3	3	3	3	3	3	192A9519G1	Plastic link for movable contact assembly
	40	3	3	3	3	3	3	3	192A7573P110	Insulated link pin for contact assembly
1	41	1	1	1	1	1	1	1	139C4610G1	Front escutcheon, manual breaker built June 1977 or later
1	41	1	1	1	1	1	1	1	139C4610G3	Front escutcheon, manual breaker built before June 1977
1	42	1	1	1	1	1	1	1	425D403P1	Plastic closing handle, manual breaker
3	43	1	1	1	1	1	1	1	192A9536G2	Handle crank
1	44	2	2	2	2	2	2	2	192A9613P1	Window, clear plastic
	45	1	1	1	1	1	1	1	139C4612P1	Front escutcheon, electrical breaker
3	46	1	1	1	1	1	1	1	192A9552G2	Adjustable link for manual mechanism
	47	1	1	1	1	1	1	1	192A6990P142	Return spring for handle
1	48	1	1	1	1	1	1	1	192A9572G2	Trip button and rod
	49	1	1	1	1	1	1	1	192A9616G2	CLOSE button for manual breaker
	50	1	1	1	1	1	1	1	192A6990P143	Spring for CLOSE button
4	51	1	1	1	1	1	1	1	139C4616G1	Mechanism assembly, manual breaker
	52	1	1	1	1	1	1	1	139C4616G2	Mechanism assembly, electrical breaker
1	53	1	1	-	-	-	-	-	192A9585G3	Closing spring assembly
1	53	-	-	1	-	-	-	-	192A9585G4	Closing spring assembly
1	53	-	-	-	1	1	1	-	192A9585G1	Closing spring assembly
1	53	-	-	-	-	-	-	1	192A9585G2	Closing spring assembly
	54	1	1	1	1	1	1	1	N529P53B	Plug button, stationary breaker only

* Recommended for stock for normal maintenance.

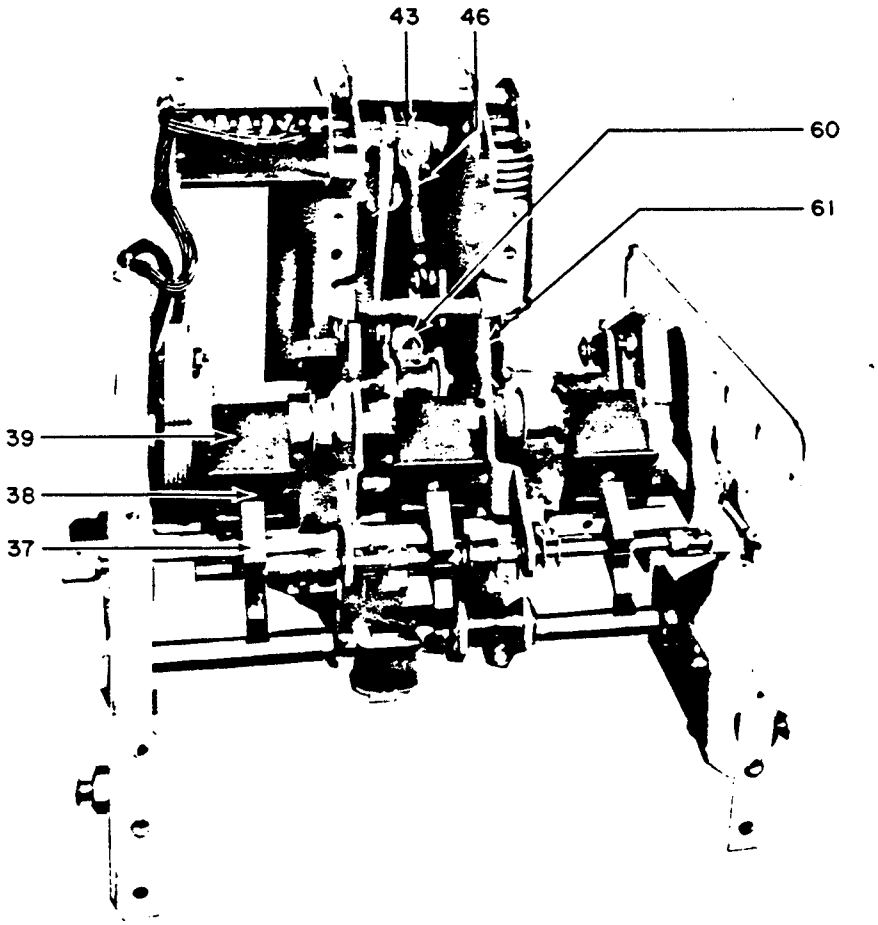


Figure 3. Front frame and mechanism assembly, Type AKR-50 breaker

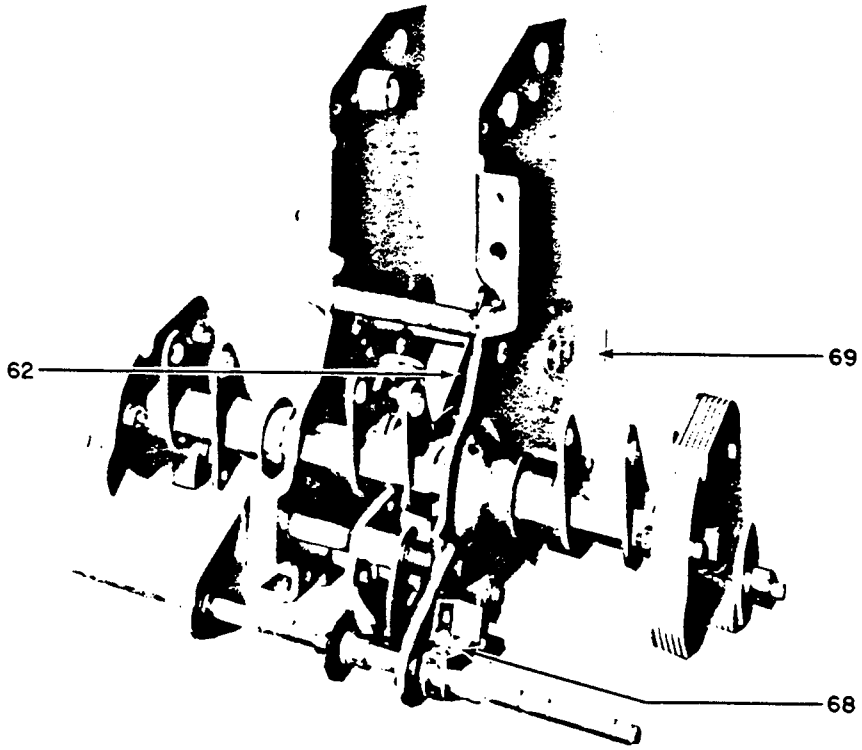


Figure 4. Mechanism assembly (Ref. 51)

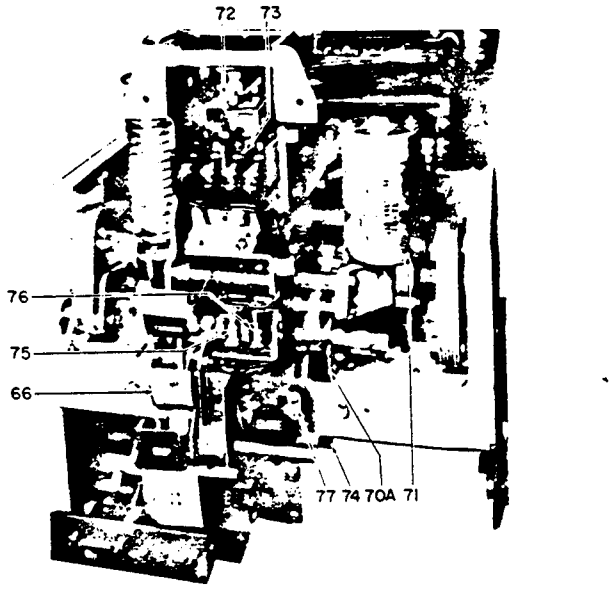


Figure 5. Electrically operated Type AKRU-50 with front escutcheon removed

Fig. No.	Ref. No.	AKR-30	AKRU-30	AKR-30H	AKR-50	AKRU-50	AKRT-50	AKR-50H	Cat. No.	Description
	55	2	2	2	2	2	2	2	192A9631P1	Channel insulation
	56	1	1	1	1	1	1	1	192A9562G2	Ratchet pawl, manual breaker
	57	2	2	2	2	2	2	2	192A9562G2	Ratchet pawl, electrical breaker
	58	1	1	1	1	1	1	1	192A9599G1	Bracket for pawl spring, manual breaker
	59	1	1	1	1	1	1	1	192A6990P207	Pawl spring (torsion)
3	60	1	1	1	1	1	1	1	192A6990P153	Opening spring
3	61	2	2	2	2	2	2	2	192A6282P37	Rubber buffer
4	62	1	1	1	1	1	1	1	192A9542P1	Open-close link to main shaft
	63	2	2	2	2	2	2	2	192A7573P108	Pin for pawl spring, electrical breaker
	64	2	2	2	2	2	2	2	192A6774P41	Spacer for pawl, manual breaker
	65	4	4	4	4	4	4	4	192A6774P41	Spacer for pawl, electrical breaker
5	66	1	1	1	1	1	1	1	568B518G2	Charge-discharge indicator
	67	1	1	1	1	1	1	1	192A6990P151	Spring for indicator
4	68	1	1	1	1	1	1	1	192A9651G1	Buffer paddle assembly for trip shaft
4	69	1	1	1	1	1	1	1	568B520G2	Open-close indicator, manual breaker
	70	1	1	1	1	1	1	1	568B522G1	Open-close indicator, electrical breaker
5	70A	1	1	1	1	1	1	1	568B511G2	Ratchet assembly with roller
5	71*	1	1	1	1	1	1	1	See Table D	Gear motor
5	72*	1	1	1	1	1	1	1	See Table D	Closing relay
5	73*	1	1	1	1	1	-	-	See Table D	Anti-pump relay
5	74*	1	1	1	1	1	1	1	See Table D	Closing solenoid
5	75	1	1	1	1	1	1	1	192A7153P7	Cut-off switch (2NO)
5	76	1	1	1	1	1	1	1	192A7153P8	Cut-off switch (2NC)
5	77	1	1	1	1	1	1	1	192A9717G2	Closing push-button switch on escutcheon
7	78	1	1	1	1	1	1	1	See Table A	Shunt trip device
7	79*	1	1	1	1	1	1	1	See Table A	Coil for shunt trip device
7	80	1	1	1	1	1	1	1	See Table C	Mounting hardware for shunt trip device
8	81	1	1	1	1	1	1	1	See Table A	Undervoltage device
8	82*	1	1	1	1	1	1	1	See Table A	Coil for undervoltage device
8	83	1	1	1	1	1	1	1	See Table C	Mounting hardware for undervoltage device
10	84	1	1	1	1	1	1	1	See Table B	Auxiliary switch
10	85	1	1	1	1	1	1	1	See Table C	Mounting hardware for auxiliary switch
9	86	1	1	1	1	1	1	1	TAKYUVT-3	Static timing unit for undervoltage device, 208, 240V, 50/60 Hz input
9	86	1	1	1	1	1	1	1	TAKYUVT-1	Static timing unit for undervoltage device, 125V dc input
9	86	1	1	1	1	1	1	1	TAKYUVT-2	Static timing unit for undervoltage device, 250V dc input
1	87	†	†	†	†	†	†	†	192A9768P1	Movable secondary disconnect, 7 points
1	87A	1	1	1	1	1	1	1	568B580P1	Bracket
	87B	-	1	-	-	1	-	-	192A9767P1	Secondary disconnect insulation
	88	†	†	†	†	†	†	†	6523600G1	Stationary secondary disconnect, 7 points (equipment mounted)

* Recommended for stock for normal maintenance.
† Quantity varies according to wiring. Maximum of 3 per breaker.

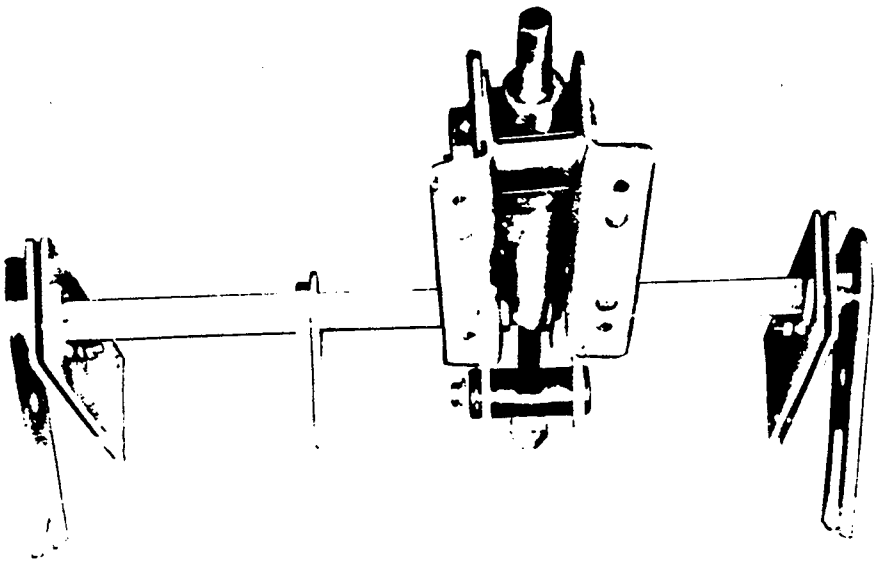


Figure 6. Drawout racking mechanism (Ref. 107)

Fig. No.	Ref. No.	AKR-30	AKRU-30	AKR-30H	AKR-50	AKRU-50	AKRT-50	AKR-50H	Cat. No.	Description
26	89	-	-	-	6	6	-	6	192A9668G1	Primary disconnect (not used on AKRU-50 with 2500 A fuse)
	89	3	-	3	-	-	-	-	192A9668G2	Primary disconnect, upper studs only
	89	3	3	3	-	-	-	-	192A9668G3	Primary disconnect, lower studs only
	89	-	3	-	-	-	-	-	192A9668G4	Primary disconnect, upper studs only
	89	-	-	-	-	-	6	-	192A9668G5	Primary disconnect
28	90	-	-	-	-	6	-	-	568B589G1	Primary disconnect (only for AKRU-50 with 2500 A fuse)
24	91	-	1	-	-	1	-	-	425D409G1	Open fuse lockout device, drawout breaker
16	92	-	-	-	1	1	-	1	See Table J	Power sensor logic unit
17	93	-	-	-	1	1	-	1	108D8102G10	Power supply for use with power sensor
18	94	-	-	-	1	1	-	1	343L650G2	Magnetic trip device for use with power sensor
19	95	-	-	-	1	1	-	1	See Table K	Current sensor assembly for power sensor
12	96	1	1	1	1	1	1	1	See Table E	Programmer unit, solid-state, Type ECS
11	97	1	1	1	1	1	1	1	See Table F	Programmer unit, solid-state, Type SST
13	100	1	1	1	1	1	1	1	568B598G1	Flux shift trip device
14	101	3	3	3	3	3	3	3	See Table G	Current sensor for use with Type SST
15	102	3	3	3	3	3	3	3	See Table H	Current sensor for use with Type ECS
23, 25	103	1	1	1	1	1	1	1	See Table L	Neutral ground-sensing CT
20, 21	104	1	1	1	1	1	1	1	See Table L	Disconnect for neutral ground-fault sensor (breaker mounted)
20, 22	105	1	1	1	1	1	1	1	See Table L	Disconnect for neutral ground-fault sensor (equipment mounted)
	106	1	1	1	1	1	1	1	134C2160G1	Positive interlock
6	107	1	1	1	1	1	1	1	139C4618G1	Drawout racking mechanism
	108	1	1	1	1	1	1	1	192A6990P156	Torsion spring, positive interlock
	109	1	1	1	1	1	1	1	192A6990P159	Return spring, sliding cover
	110	1	1	1	1	1	1	1	568B557G1	Discharge interlock linkage for closing spring
	111	1	1	1	1	1	1	1	192A9628P1	Interlock link for closing spring
	112	1	1	1	1	1	1	1	192A6990P157	Torsion spring for closing spring interlock
26, 28	113	-	3	-	-	3	-	-	See Table M	Fuse in primary circuit
									Tools	
	150								568B386G1	Maintenance closing handle
	151								673D500-636G5	Drawout racking handle
	152	1	-	1	1	-	1	1	192A8227P6	Terminal board (6 terminals) for stationary breaker
		1	-	1	1	-	1	1	192A8227P7	Terminal board (10 terminals) for stationary breaker

* Recommended for stock for normal maintenance.
† Quantity varies according to wiring. Maximum of 3 per breaker.

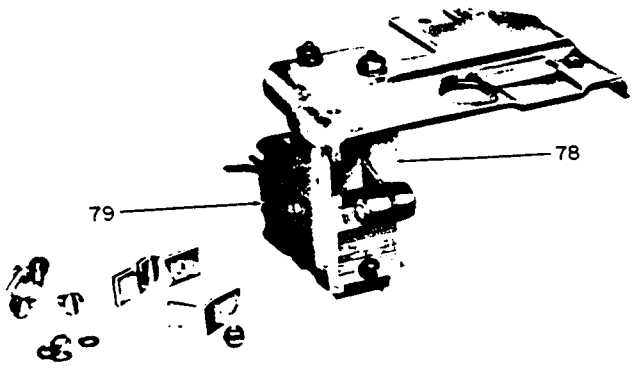


Figure 7. Shunt trip device (Ref. 78) with mounting hardware (Ref. 80)

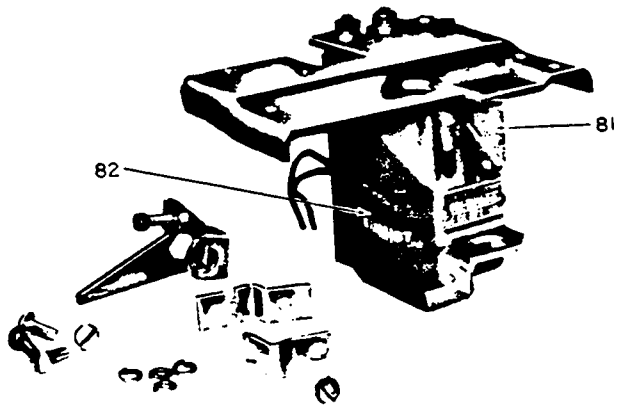


Figure 8. Undervoltage device, instantaneous unit shown (Ref. 81), with mounting hardware (Ref. 83)

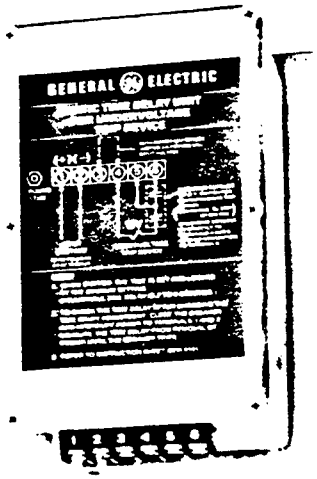


Figure 9. Externally mounted timing unit for undervoltage device (Ref. 86)

TABLE A

Volts	Hertz	Shunt Trip Device		Instantaneous Undervoltage Device		Time Delay Undervoltage Device†	
		Complete with Coil (less mounting) Reference 78 (Fig. 7)	Coil Only Reference 79	Complete with Coil (less mounting) Reference 81 (Fig. 8)	Coil Only Reference 82	Complete with Coil (less mounting) Reference 81 (Fig. 8)	Coil Only Reference 82
24	DC	139C4378G1	6275081G55	568B309G1	6275081G15	----	----
48	DC	139C4378G3	6275081G28	568B309G2	6275081G9	----	----
125	DC	139C4378G4	6275081G29	568B309G3	6275081G18	568B309G5	6275081G61
250	DC	139C4378G5	6275081G30	568B309G4	6275081G19	568B309G6	6275081G59
70	60	139C4378G6	6275081G62	----	----	----	----
120	60	139C4378G7	6275081G25	568B309G7	6275081G26	----	----
120	50	139C4378G8	6275081G56	568B309G8	6275081G4	----	----
208	60	139C4378G10	6275081G26	568B309G10	6275081G27	568B309G24	6275081G59
208	50	139C4378G11	6275081G26	568B309G11	6275081G12	568B309G24	6275081G59
240	60	139C4378G13	6275081G26	568B309G13	6275081G7	568B309G24	6275081G59
240	50	139C4378G14	6275081G26	568B309G14	6275081G12	568B309G24	6275081G59
380	50	139C4378G17	6275081G27	568B309G17	6275081G31	----	----
480	60	139C4378G18	6275081G27	568B309G18	6275081G31	----	----
480	50	139C4378G19	6275081G4	568B309G19	6275081G3	----	----
575	60	139C4378G21	6275081G7	568B309G21	6275081G20	----	----
575	50	139C4378G22	6275081G29	568B309G22	6275081G8	----	----

† Breaker-mounted time-delay undervoltage device must be used in conjunction with separately mounted static timing unit (reference 86)

TYPE AK POWER CIRCUIT BREAKERS

TABLE B. AUXILIARY SWITCHES

Cat. No.	Stages	Contact Arrangement					
192A9791P2	2	ab	ab	--	--	--	--
192A9791P3	3	ab	ab	ab	--	--	--
192A9791P5	5	ab	ab	ab	ab	ab	--
192A9791P6	6	ab	ab	ab	ab	ab	ab
192A9791P7	6	ab	ab	ab	ab	aa	aa
192A9791P8	6	ab	ab	ab	ab	bb	bb
192A9791P9	6	ab	ab	ab	bb	bb	bb
192A9791P10	6	ab	ab	bb	bb	ab	ab
192A9791P12	6	ab	ab	ab	aa	ab	ab

TABLE C. MOUNTING KITS

(Necessary material to add accessories to a breaker not equipped previously with the device)

139C4621G18	Mounting kit for shunt trip (also order auxiliary switch and mounting kit if breaker does not have switch)
139C4622G18	Mounting kit for undervoltage device (time delay or instantaneous)
568B571G12	Mounting kit for auxiliary switch

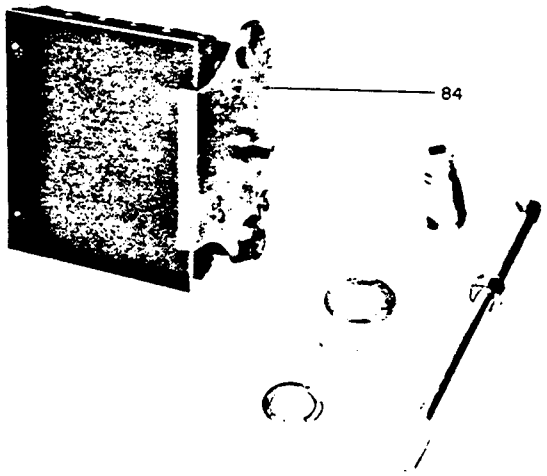


Figure 10. Auxiliary switch, six-stage (Ref. 84)

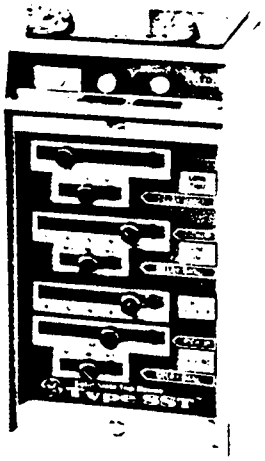


Figure 11. Type SST solid-state programmer unit (Ref. 97)

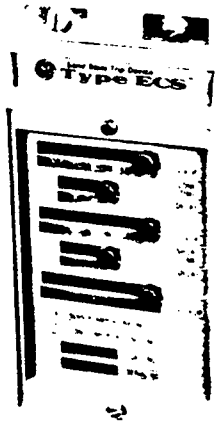


Figure 12. Type ECS solid-state programmer unit (Ref. 96)

TABLE D. ELECTRICAL CLOSING DEVICES

Volts	Hertz	Gear Motor Reference 71	Closing Relay (X) Reference 72	Anti-pump Relay (W) Reference 73	Closing Solenoid (CC)† Reference 74
48	DC	568B565P1	192A9770P1	192A9771P1	192A9794P1
125	DC	568B565P3	192A9770P2	192A9771P2	192A9794P2
250	DC	568B565P2	192A9770P3	192A9771P3	192A9794P3
120	60	568B565P3	192A9770P4	192A9771P4	192A9794P4
120	50	568B565P3	192A9770P5	192A9771P4	192A9794P5
208	60	568B565P2	192A9770P6	192A9771P5	192A9794P6
208	50	568B565P2	192A9770P7	192A9771P5	192A9794P6
240	60	568B565P2	192A9770P8	192A9771P6	192A9794P7
240	50	568B565P2	192A9770P9	192A9771P6	192A9794P7

† For both electrically operated and manual (with remote close) breakers

TABLE E. SOLID STATE PROGRAMMER UNIT, TYPE ECS (REF. 96)

Trip Elements					AKR-4/4A-30/30H AKRU-4A-30 Current Sensor Rating		AKR-4/4A-50/50H AKRT-4/4A-50 AKRU-4A-50
					100 or 150 Amps	225, 300, 400, 600 or 800 Amps	
L	$S_{(LO)}$	I	-	2T	568B604G100	568B604G98	568B604G98
L	$S_{(HI)}$	I	-	2T	568B604G96	568B604G93	568B604G93
L	$S_{(LO)}$	-	-	2T	568B604G99	568B604G97	568B604G97
L	$S_{(HI)}$	-	-	2T	568B604G94	568B604G91	568B604G91
L	-	I	-	2T	568B604G95	568B604G92	568B604G92
L	$S_{(LO)}$	I	-	-	568B604G82	568B604G41	568B604G41
L	$S_{(HI)}$	I	-	-	568B604G68	568B604G3	568B604G3
L	$S_{(LO)}$	-	-	-	568B604G81	568B604G40	568B604G40
L	$S_{(HI)}$	-	-	-	568B604G66	568B604G1	568B604G1
L	-	I	-	-	568B604G67	568B604G2	568B604G2

TABLE F. SOLID STATE PROGRAMMER UNIT, TYPE SST (REF. 97)

Trip Elements					AKR-5/5A-30/30H AKRU-5A-30 Current Sensor Range		AKR-5/5A-50/50H AKRU-5A-50	AKRT-5/5A-50
					100 to 300 Amps	300 to 800 Amps		
L	$S_{(LO)}$	I	G	3T	568B604G90	568B604G53	568B604G49	568B604G57
L	$S_{(HI)}$	I	G	3T	568B604G80	568B604G21	568B604G15	568B604G27
L	$S_{(LO)}$	-	G	3T	568B604G89	568B604G52	568B604G48	568B604G56
L	$S_{(HI)}$	-	G	3T	568B604G78	568B604G19	568B604G13	568B604G25
L	-	I	G	3T	568B604G79	568B604G20	568B604G14	568B604G26
L	$S_{(LO)}$	I	G	T	568B604G88	568B604G51	568B604G47	568B604G55
L	$S_{(HI)}$	I	G	T	568B604G77	568B604G10	568B604G12	568B604G24
L	$S_{(LO)}$	-	G	T	568B604G87	568B604G50	568B604G46	568B604G54
L	$S_{(HI)}$	-	G	T	568B604G75	568B604G16	568B604G10	568B604G22
L	-	I	G	T	568B604G76	568B604G17	568B604G11	568B604G23
L	$S_{(LO)}$	I	-	2T	568B604G86	568B604G45	568B604G45	568B604G45
L	$S_{(HI)}$	I	-	2T	568B604G74	568B604G9	568B604G9	568B604G9
L	$S_{(LO)}$	-	-	2T	568B604G85	568B604G44	568B604G44	568B604G44
L	$S_{(HI)}$	-	-	2T	568B604G72	568B604G7	568B604G7	568B604G7
L	-	I	-	2T	568B604G73	568B604G8	568B604G8	568B604G8
L	$S_{(LO)}$	I	-	-	568B604G84	568B604G43	568B604G43	568B604G43
L	$S_{(HI)}$	I	-	-	568B604G71	568B604G6	568B604G6	568B604G6
L	$S_{(LO)}$	-	-	-	568B604G83	568B604G42	568B604G42	568B604G42
L	$S_{(HI)}$	-	-	-	568B604G69	568B604G4	568B604G4	568B604G4
L	-	I	-	-	568B604G70	568B604G5	568B604G5	568B604G5

L = Long time delay element
$S_{(LO)}$ = Short time delay element (1.75 to 4L range)
$S_{(HI)}$ = Short time delay element (3L to 10L range)
I = Instantaneous trip element
G = Ground fault protective element
T = Annunciator target (ground fault indication)
2T = Annunciator targets (overcurrent and short circuit indication)
3T = Annunciator targets (overcurrent, short circuit and ground fault indication)

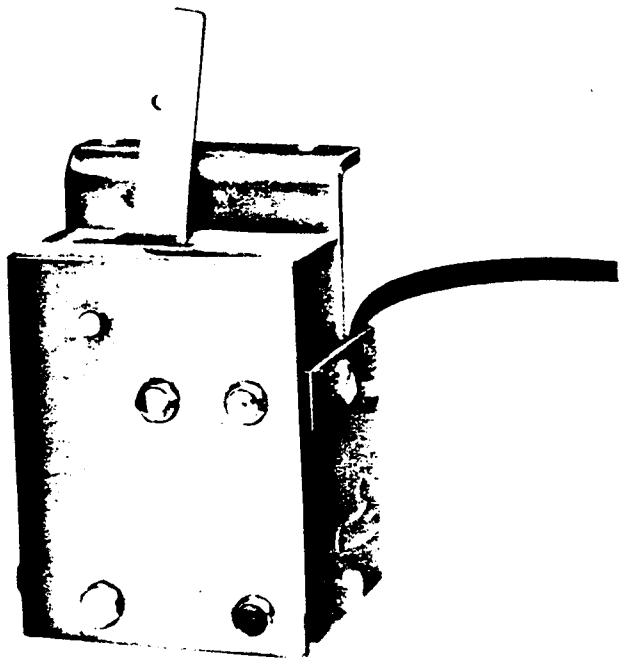


Figure 13. Flux shift trip device for use with Type ECS or SST programmer (Ref. 100)

TABLE G. CURRENT SENSOR AND TAP CHANGER FOR USE WITH TYPE SST

Current Rating (Amperes)	AKR-5/5A-30 AKRU-5A-30 AKR-5/5A-30H	AKR-5/5A-50 AKRU-5A-50 AKR-5/5A-50H	AKRT-5/5A-50
100-300	568B632G1	----	----
300-800	568B632G2	568B632G2	----
600-1600	----	568B632G3	----
800-2000	----	----	568B632G6

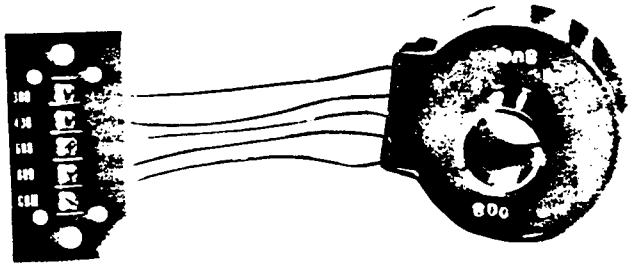


Figure 14. Current sensor and tap changer for use with SST (Ref. 101)

TABLE H. CURRENT SENSOR FOR USE WITH TYPE ECS

Current Rating (Amperes)	AKR-4/4A-30 AKRU-4A-30 AKR-4/4A-30H	AKR-4/4A-50 AKRU-4A-50 AKR-4/4A-50H	AKRT-4/4A-50
100	568B605G1	----	----
150	568B605G2	----	----
225	568B605G3	----	----
300	568B605G4	568B605G4	----
400	568B605G5	568B605G5	----
600	568B605G6	568B605G6	----
800	568B605G7	568B605G7	568B605G7
1200	----	568B605G8	568B605G8
1600	----	568B605G9	568B605G9
2000	----	----	568B605G10

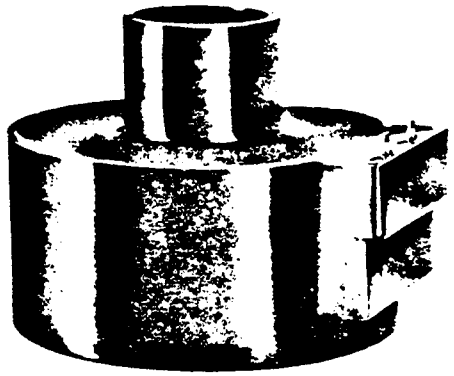


Figure 15. Current sensor for use with ECS (Ref. 102)

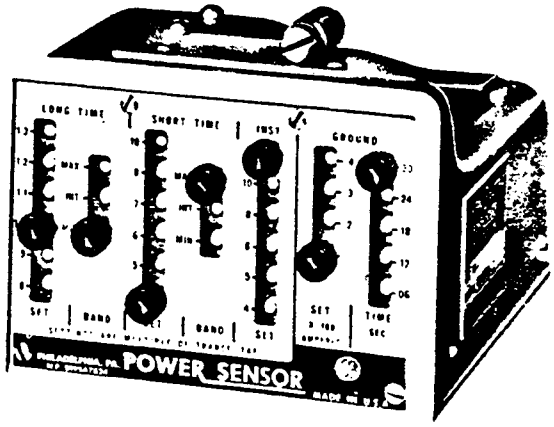


Figure 16. Power Sensor logic unit (Ref. 92)

TABLE J. POWER SENSOR LOGIC UNIT, TYPE PS-1A

Trip Elements				Cat. No.
L	$S_{(LO)}$	I	G	184L410G52
L	$S_{(HI)}$	I	G	184L410G55
L	$S_{(LO)}$	-	G	184L410G61
L	$S_{(HI)}$	-	G	184L410G64
L	-	I	G	184L410G58
-	$S_{(LO)}$	I	G	184L410G67
-	$S_{(HI)}$	I	G	184L410G70
-	$S_{(LO)}$	-	G	184L410G73
-	$S_{(HI)}$	-	G	184L410G76
L	$S_{(LO)}$	I	-	184L410G41
L	$S_{(HI)}$	I	-	184L410G42
L	$S_{(LO)}$	-	-	184L410G44
L	$S_{(HI)}$	-	-	184L410G45
L	-	I	-	184L410G43
-	$S_{(LO)}$	I	-	184L410G46
-	$S_{(HI)}$	I	-	184L410G47
-	$S_{(LO)}$	-	-	184L410G48
-	$S_{(HI)}$	-	-	184L410G49

L = Long time-delay element
$S_{(LO)}$ = Short time-delay element (2 to 5X range)
$S_{(HI)}$ = Short time-delay element (4 to 10X range)
I = Instantaneous trip element
G = Ground fault protective element

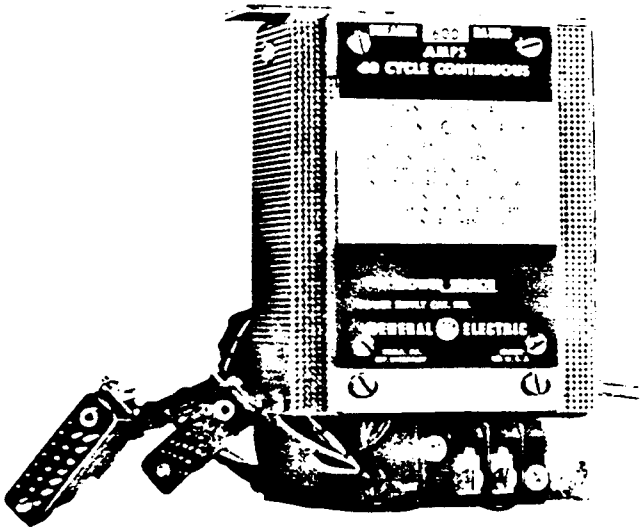


Figure 17. Power supply for use with Power Sensor (Ref. 93)

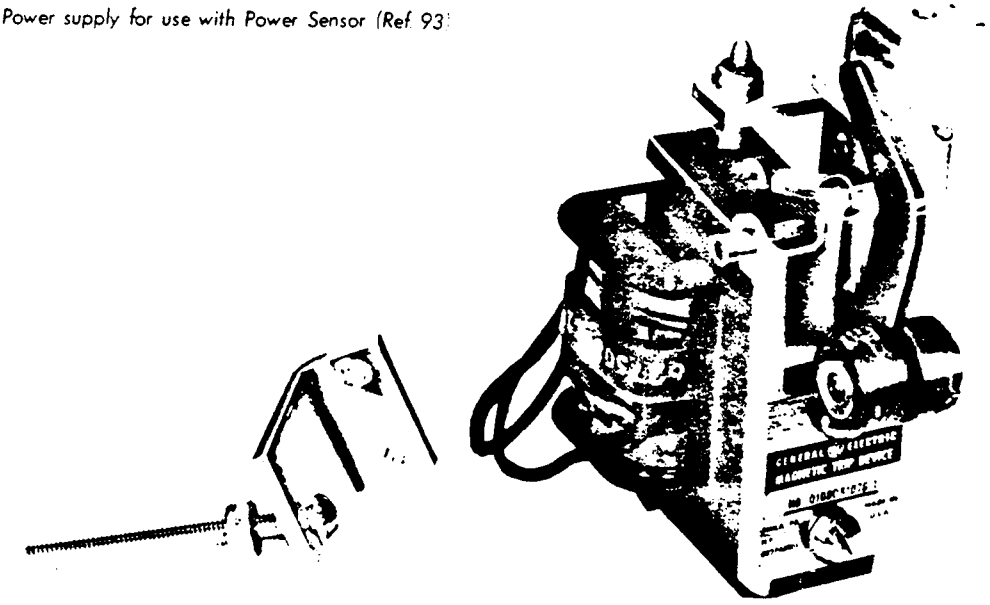


Figure 18. Magnetic trip device for use with Power Sensor (Ref. 94)

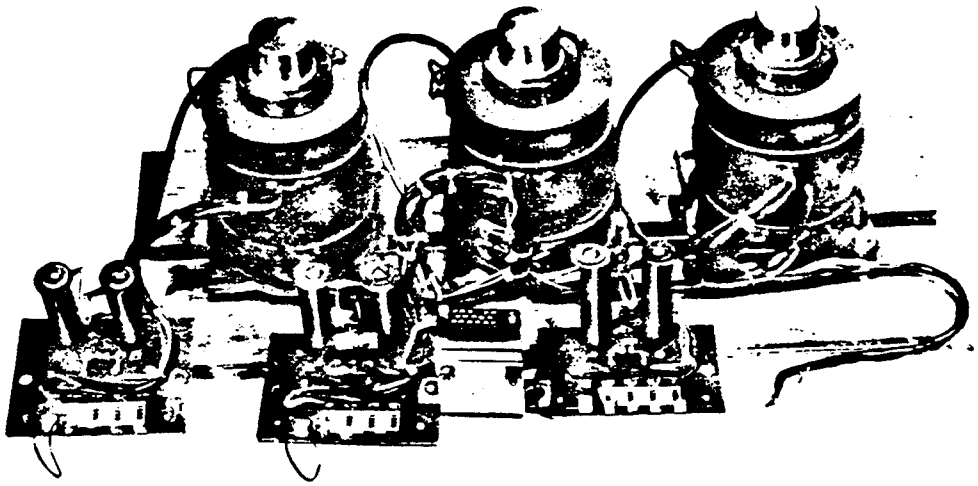


Figure 19. Current sensor assembly

TABLE K. CURRENT SENSOR ASSEMBLY
(Reference 95)
(for use with power sensor)

Current Rating (Amperes)	With Ground Fault Protection	Without Ground Fault Protection
200-600	669D896P109	669D896P105
600-1600	669D896P111	669D896P107

TABLE L. NEUTRAL GROUND SENSING CT AND DISCONNECTS

Neutral CT Current Rating (Amperes)	Power Sensor	SST		
	AKR-3/3A-50/50H AKRU-3A-50	AKR-4/4A-30/30H AKR-5/5A-30/30H AKRU-4/4A-30	AKR-4/4A-50/50H AKR-5/5A-50/50H AKRU-5/5A-50	AKRT-4/4A-50 AKRT-5/5A-50
100-300	----	343L650G25	----	----
300-800	----	343L650G13	343L650G13	----
300-1200	192A9749P1	----	----	----
600-1600	----	----	343L650G14	----
800-2000	----	----	----	343L650G28
Disconnect Assembly				
Breaker mounted	121C7578G4	343L650G15	343L650G15	343L650G15
Equipment mounted	121C7578G2	343L671G1	343L671G1	343L671G1

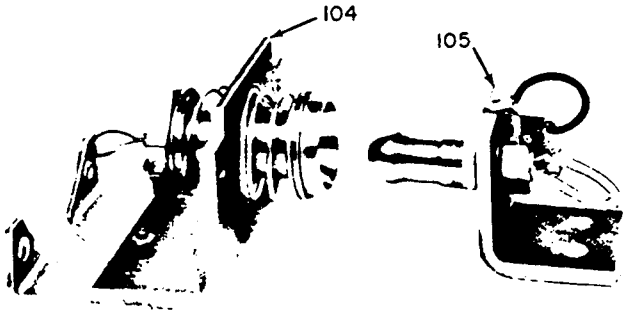


Figure 20. Disconnect assembly for Power Sensor

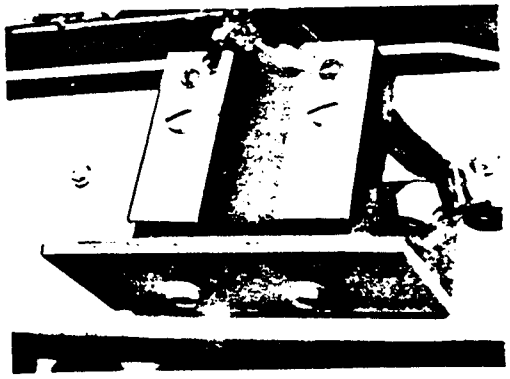


Figure 21. Disconnect assembly for SST, mounts on breaker (Ref. 104)

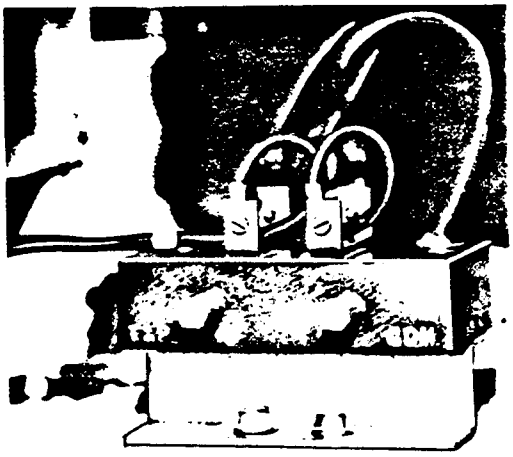


Figure 22. Disconnect assembly for SST, mounts in breaker housing (Ref. 105)

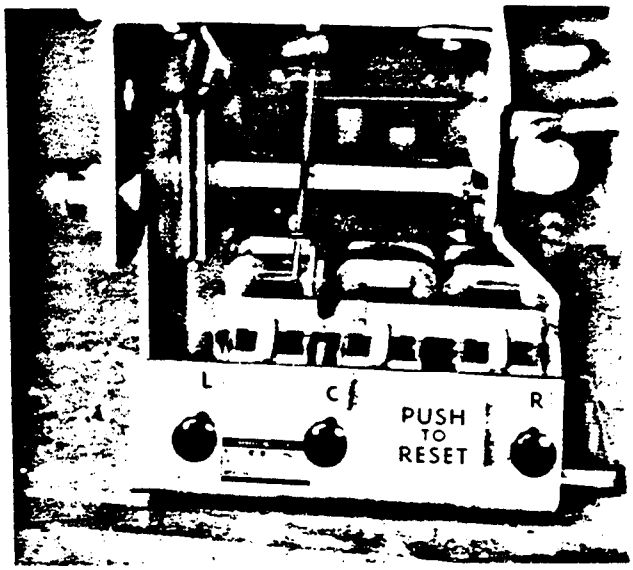


Figure 24. Open fuse lockout device (Ref. 91)

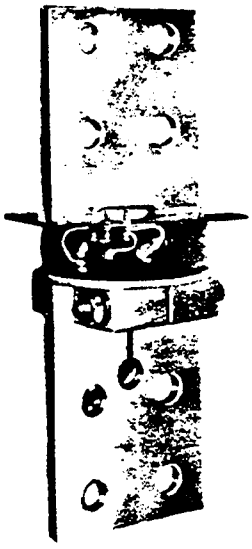


Figure 23. Neutral current transformer for Power Sensor

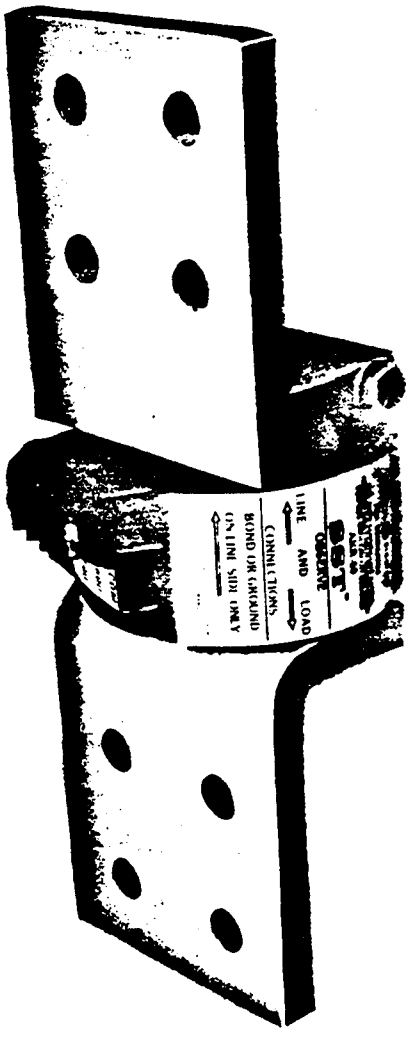


Figure 25. Neutral current transformer for SST

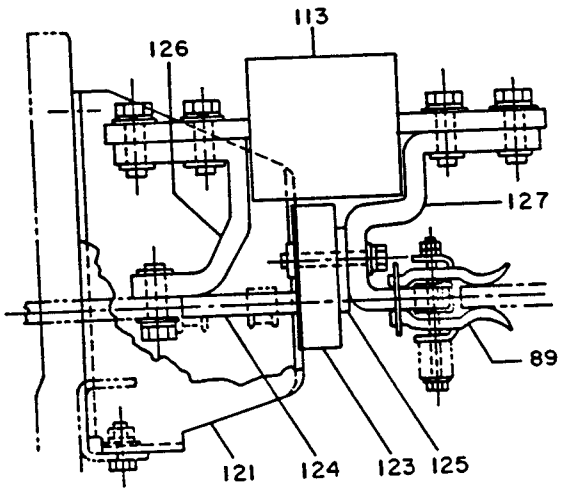


Figure 26. Fuse mounting – 300 to 2000 ampere fuse

TABLE M. FUSES FOR FUSED BREAKERS
(Reference 113)

Current Rating (Amperes)	AKRU-4A-30 AKRU-5A-30	AKRU-4A-50 AKRU-5A-50	NEMA Class
300	GF8B300	----	J
350	GF8B350	----	J
400	GF8B400	----	J
450	GF8B450	GF8B450	J
500	GF8B500	GF8B500	J
600	GF8B600	GF8B600	J
800	GF8B800	GF8B800	L
1000	GF8B1000	GF8B1000	L
1200	GF8B1200	GF8B1200	L
1600	GF8B1600	GF8B1600	L
2000	----	GF8B2000	L
2500	----	GF9F2500AK	-

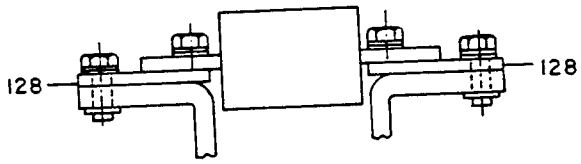


Figure 27. Mounting detail for 300, 350, and 400 ampere fuse

TABLE N. FUSE MOUNTING FOR AKRU-30 AND AKRU-50
(with fuse 2000 Amperes or less)

Fig. No.	Ref. No.	Qty	Cat. No.	Description
26	121	1	139C4631P1	Support frame, left
-	122	1	139C4631P2	Support frame, right
26	123	1	568B599G1	Support
26	124	1	192A9813P1	Spacer
26	125	3	192A9801P1	Spacer
26	126	3	192A9802G1	Fuse support
26	127	3	192A9803G1	Fuse support
27	128	6	192A9501P6	Spacer (used only with 300, 350, 400 ampere fuse on AKRU-30)

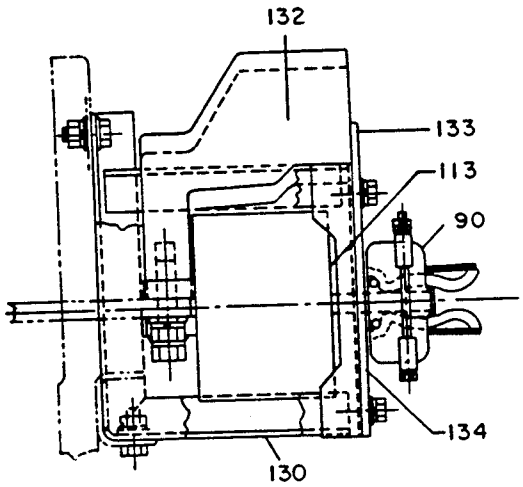


Figure 28. Fuse mounting – 2500 ampere fuse

TABLE O. FUSE MOUNTING FOR AKRU-50
(with 2500 Ampere fuse)

Fig. No.	Ref. No.	Qty	Cat. No.	Description
28	130	1	568B581G2	Support frame, left
-	131	1	568B581G1	Support frame, right
28	132	3	425D411G2	Heat sink
28	133	1	192A9661P1	Upper barrier
28	134	1	192A9806G1	Lower barrier
	135	12	568B552P1	Retainer

GENERAL ELECTRIC COMPANY
CIRCUIT PROTECTIVE DEVICES DEPARTMENT
PLAINVILLE, CONNECTICUT 06062

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10–78 (3M)