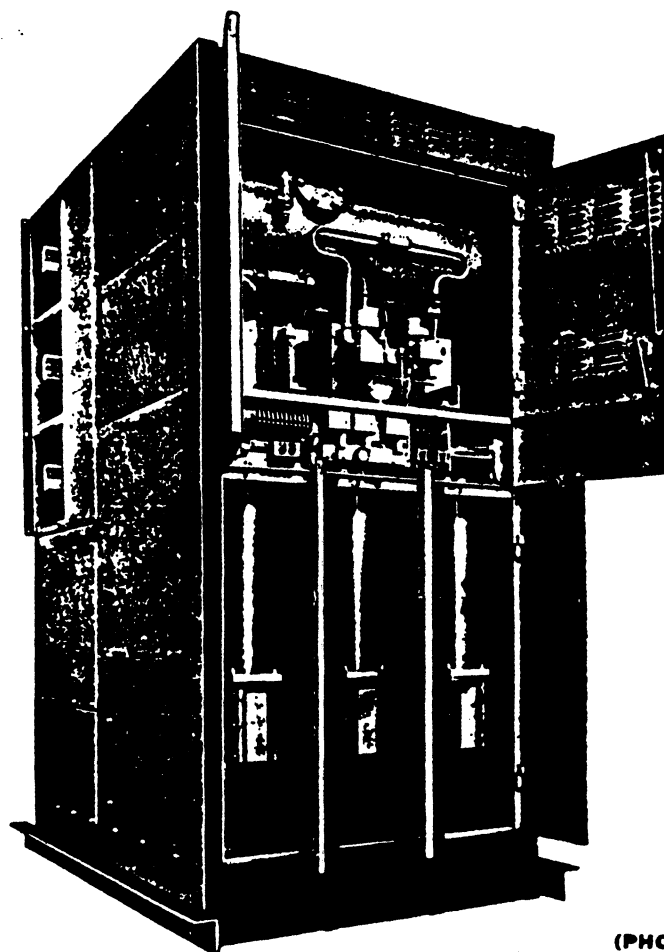


RENEWAL PARTS

TYPE ARA AIR-BLAST CIRCUIT BREAKERS

ARA-15-500-1 ARA-15-1000-1 ARA-15-1500-1
ARA-15-500-2 ARA-15-1000-2 ARA-15-1500-2
Rated 1200, 2000, 3000, and 4000 Amperes



(PHOTO 8005115)

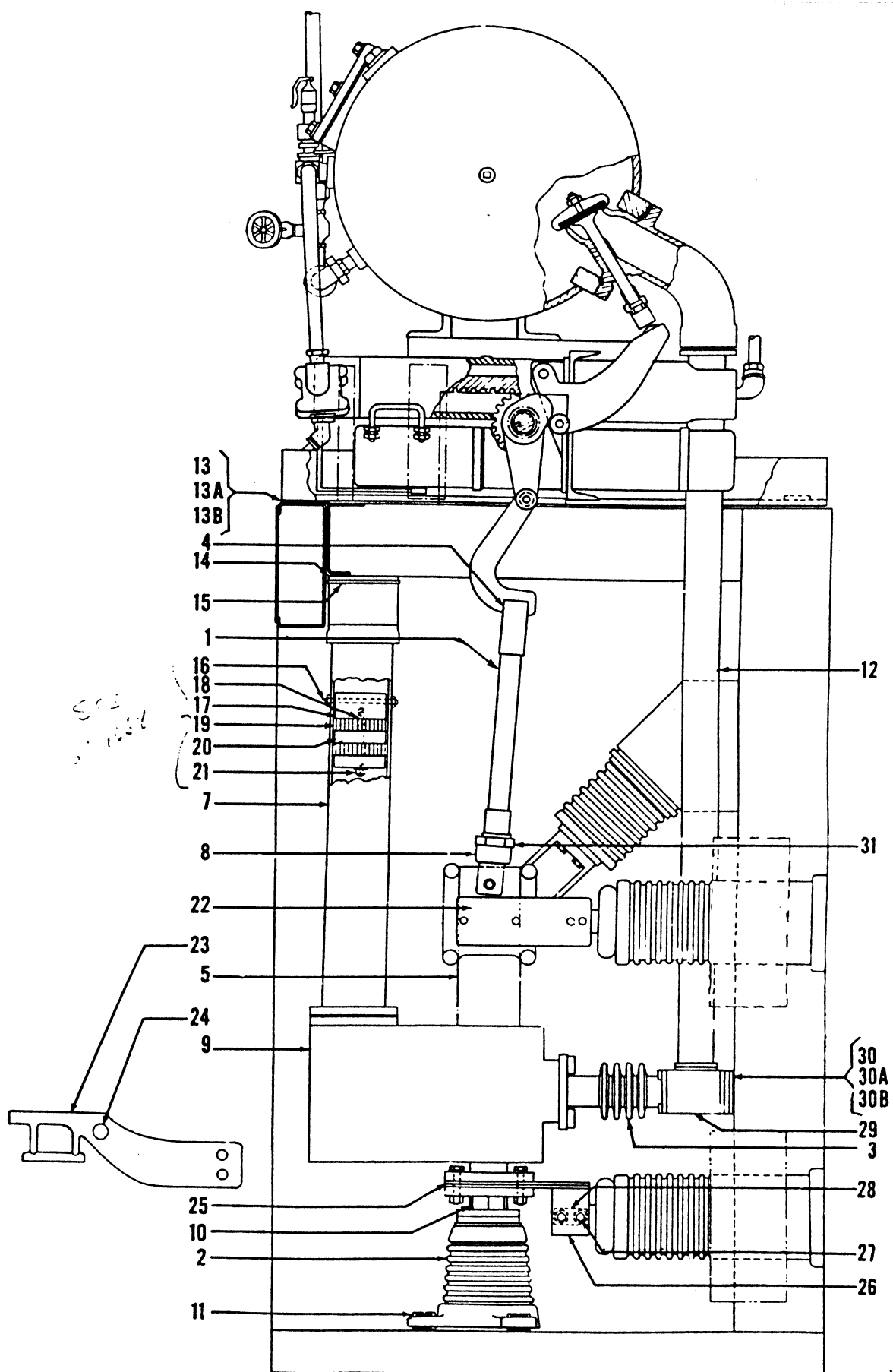
Fig. 1. Type ARA air-blast circuit breaker

NOTE:- The Renewal Parts information listed in this bulletin applies to all Type ARA Air-Blast Circuit Breakers rated 15 KV, 1200, 2000, 3000 and 4000 Amperes except breakers with the following serial numbers: 6268725, 6366763, 6366786, 6466001, 6466002, 6466004, 6466007, 6466014, 6466026, 6466041, 6466057, 6466073, 6466075, 6466077, 6466079, 6466089, 6466090. For renewal parts information on the above breakers apply to the Switchgear Division, General Electric Company, 6901 Elmwood Avenue, Philadelphia, 42, Pa.
For Type ARA Breakers rated 15 KV, 5000 amperes refer to parts bulletin GEG-6155.

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.

When ordering renewal parts, give quantity, catalog number, description of each item required, and complete nameplate reading.



(DWG PBC-17904)

Fig. 2. Side view of breaker

The following parts are recommended for normal maintenance:

Ref. No.	Cat.No.				No. per Breaker	Description
	Breaker Rating in Amperes					
	1200	2000	3000	4000		
1	6318451G4	6318451G5	6318452G3	6318452G3	3	Movable contact blade and operating rod assembly (includes Ref.No. 4 and 5)
2	6218630G2	6314606G1	6314606G1	6314606G1	3	Support insulator
3	6370828	6371216	6371216	6371216	3	Insulator for air line

The following parts are seldom required:

4	265B600G1	265B600G2	265B600G3	265B600G3	3	Operating rod and coupling
5	6318559G1	6318560G1	6421515G1	6421515G1	3	Movable contact blade
7	6300273P6	6371221P2	6371221P2	6371221P2	3	Stack (exhaust tube)
8	6370918P1	6370919P1	6370920P1	6370920P1	3	Coupling
9	See Pages 14 and 15				3	Arc chute
10	6318678P1	6318566G1	†	†	3	Arc chute pedestal
11	6243761	6243761	6243761	6243761	9	Leveling screw
12	6370838P4	6370838P4	6370838P4	6370838P5	1	Air line pipe
13	6370161P1	6370161P1	6370161P1	6370161P1	4	Shim, 1/8 in. thick
13A	6370161P2	6370161P2	6370161P2	6370161P2	4	Shim, 1/16 in. thick
13B	6370161P3	6370161P3	6370161P3	6370161P3	8	Shim, 1/32 in. thick
14	6370906P3	6370906P4	6370906P4	6370906P4	3	Gasket
15	6248172	6248173	6248173	6248173	3	Clamp plate
16	6177860P10	6177860P11	6177860P11	6177860P11	3	Stud
17	6218657P5	6218657P7	6218657P7	6218657P7	3	Block
18	6073080P54	6073080P54	6073080P54	6073080P54	3	Rod
19	6218080G7	6218080G3	6218080G3	6218080G3	6	Grid
20	6218657P6	6218657P8	6218657P8	6218657P8	6	Spacer
21	1472439	1472439	1472439	1472439	3	Nut
22	See Page 10				3	Wiping contact assembly
23	†	†	6355614P1	6355614P2	3	Connector (pedestal)
24	†	†	6371252P1	6371252P1	3	Pin
25	6318494P1	6248222	†	†	6	Connector
26	6371217P1	6248223	†	†	3	Clamping block
27	†	†	6270379	6079706	6	Spring
28	†	†	6300616P2	6300616P2	12	Nut plate
29	See Page 16				1	Air manifold
30	6440241P1	6440241P1	6440241P1	6440241P1	3	Shim, 1/16 in. thick
30A	6440241P2	6440241P2	6440241P2	6440241P2	3	Shim, 1/32 in. thick
30B	6440241P3	6440241P3	6440241P3	6440241P3	3	Shim, 1/8 in. thick
31	6370916P1	6370916P2	6370916P2	6370916P2	3	Nut
§32	6508097P1	6508097P2	6508097P3	6508097P4	1	Bushing spanner wrench

† None furnished in this rating

§ Not illustrated

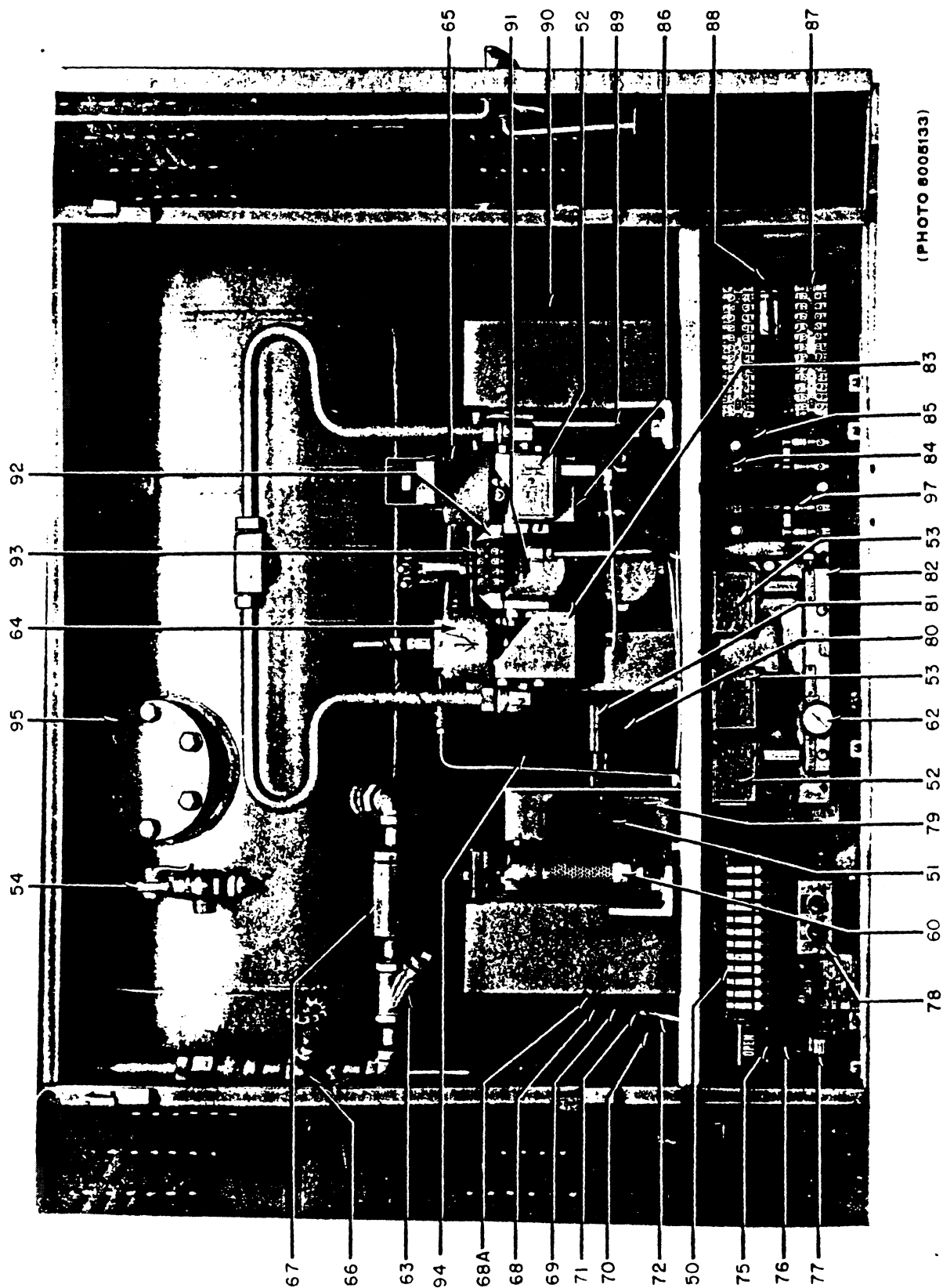


Fig. 3. Mechanism and control panel

TYPE ARA AIR-BLAST CIRCUIT BREAKERS

GEF-3707B

MECHANISM AND CONTROL PANEL

The following parts are recommended for normal maintenance:

Ref. No.	Cat.No.	No. Per Breaker	Description
+50	6353158G1	1	Auxiliary switch (Type SB-1) for -1 Breakers only
+50	284B102G1	1	Auxiliary switch (Type SB-1) for -2 Breakers only
Ø51	12HGA17E59	1	Closing relay, 125 volts DC
Ø51	12HGA17E60	1	Closing relay, 250 volts DC
52	6371113P1	2	Pressure regulator switch (alarm and interlock)
53	6371113P2	2	Pressure regulator switch (opening and closing)
54	377A466P1	1	Safety valve, 1/2 in. (300 lbs)
§55	6477881P4	2	Disk for drain valve (Ref.No. 66 and 96)

The following parts are seldom required:

60	3887726G15 3887726G15	1	(15A) Valve coil series resistor, 125 Volts, DC
60	3887726G23 3887726G23	1	(25A) Valve coil series resistor, 250 Volts, DC
561	6306791G2	1	Closing relay coil, 125 Volts DC
561	6306791G1	1	Closing relay coil, 250 Volts DC
62	6508017P2	1	Pressure gage
63	6300830G1	1	Air strainer
563A	6300830P4	1	Screen for air strainer (Ref.No. 63)
64	See Page 6	1	Closing control valve
65	See Page 6	1	Opening control valve
66	6300486P4	1	Inlet valve
67	See Page 9	1	Check valve
68	6370130P1	1	Crank
68A	6243801	1	Pin (for Ref.No. 68)
69	6076412P125	1	Eyebolt
70	Δ	1	Interlock (disconnect switch)
71	6240731	1	Turnbuckle
72	6076412P153	1	Eyebolt
§73	6440285	1	Link for counter spring (Ref.No. 76)
§74	6076404P9	1	Pin for crank (Ref.No. 75)
75	6318488P1	1	Indicator crank for -1 breakers only
75	6318488P2	1	Indicator crank for -2 breakers only
76	6001243	1	Spring for counter (Ref.No. 77)
77	6192382P5	1	Operation counter
78	6371920P1	1	Push button switch
79	6318634G1	1	Bracket for relay
80	6439285G1	1	Linkage frame for 1200 and 2000 amperes
80	6439285G2	1	Linkage frame for 3000 and 4000 amperes
81	See Page 11	1	Lever, shaft and cams
82	6318443P2	1	Manifold
83	6371241P2	1	Cover for closing control valve
84	6318426P1	1	Switch
85	6440257	1	Switch insulator
86	6371241P1	1	Cover for opening control valve
87	6078456G42	2	Terminal board
88	6318639G1	1	Panel
89	6476214G1	2	Support
90	See Page 7	1	Drain valve interlock
91	See Page 18	1	Cylinder, piston and valve
92	6318463P1	1	Bracket for terminal board
93	6078456G40	1	Terminal board
94	See Page 13	1	Blast valve, lifter, and damper mechanism
95	6371804P1	1	Inspection cover
§95A	6177567P9	1	Gasket for inspection cover (Ref.No. 95)
§96	6300486P11	1	Drain valve for Mass. Std. only, 3/4 in.
97	GE1463	2	Fuse - 15 amperes
97	GE1466	2	Fuse - 30 amperes

+ For auxiliary switch parts refer to Parts Bulletin GEF-2445

Ø For closing relay parts refer to Parts Bulletin GEF-2623

§ Not illustrated

Δ Specify Cat.No. 6316402NAG2 for the 1200, 2000 and 3000 ampere breakers; specify Cat.No. 6316402NAG3 for the 4000 ampere breakers

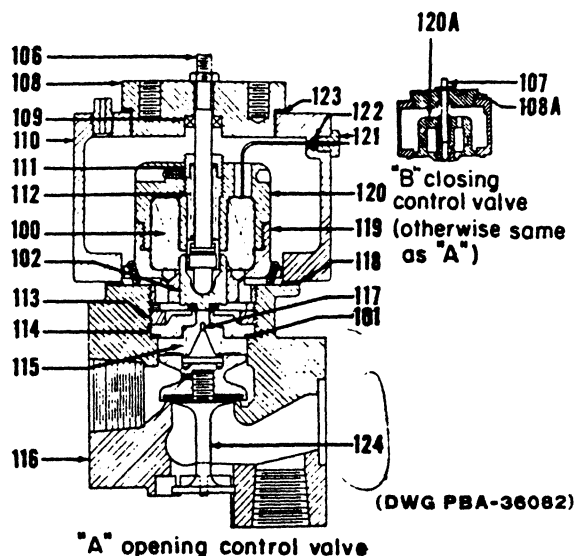


Fig. 4. Opening and closing control valves
(Ref. No. 64 and 65)

FOR CONTROL VALVE KIT 275A6844G-1

The following parts are recommended for normal maintenance:

Ref. No.	Cat. No.	No. Per Breaker	Description
100	6275074G1	2	Control valve coil, 125 Volt DC
100	6275074G2	2	Control valve coil, 250 Volt DC
101	177V335 SUP	2	Gasket 202A4044G-1
102	6476242G2	2	Armature and disk (pilot valve)

The following parts are seldom required:

64	†6350109G2	1	Closing control valve complete less coil
65	†6350109G1	1	Opening control valve complete less coil
106	6371226G1	1	Plunger assembly (for Ref.No. 65 only)
107	6245990	1	Spring plunger (for Ref.No. 64 only)
108	6371275P1	1	Cap (for Ref.No. 65 only)
108A	6371291P2	1	Cap (for Ref.No. 64 only)
109	6508026P1	2	Seal (packing)
110	6318632P1	2	Pressure chamber
111	6247854	2	Adjusting screw
112	6275422	2	Spring
113	6248227	2	Retaining ring
114	6371219P1	2	Pilot valve seat
115	6270392	2	Spring
116	6355363P2 SUP	2	Valve body 6355363P-2
117	6248205	2	Stop pin
118	6371295P1	2	Gasket
119	6371289P1	2	Lower coil frame
120	6370160P3	1	Upper coil frame (for Ref.No. 65 only)
120A	6370160P2	1	Upper coil frame (for Ref.No. 64 only)
121	6247857	4	Wire inlet screw
122	6370141P2	2 4	Gasket
123	6371290P1	2	Gasket
124	392A125G2	2	Valve piston (main valve) 392A125G2
§125	6509350AB	π	Control valve wrench
§126	6477797AAP14	π	Control valve wrench

§ Not illustrated

π Order as required

† Catalog number listed is for valve only. Orders for valve should also include coil, ref. 100, so valve and-coil can be assembled and tested together.

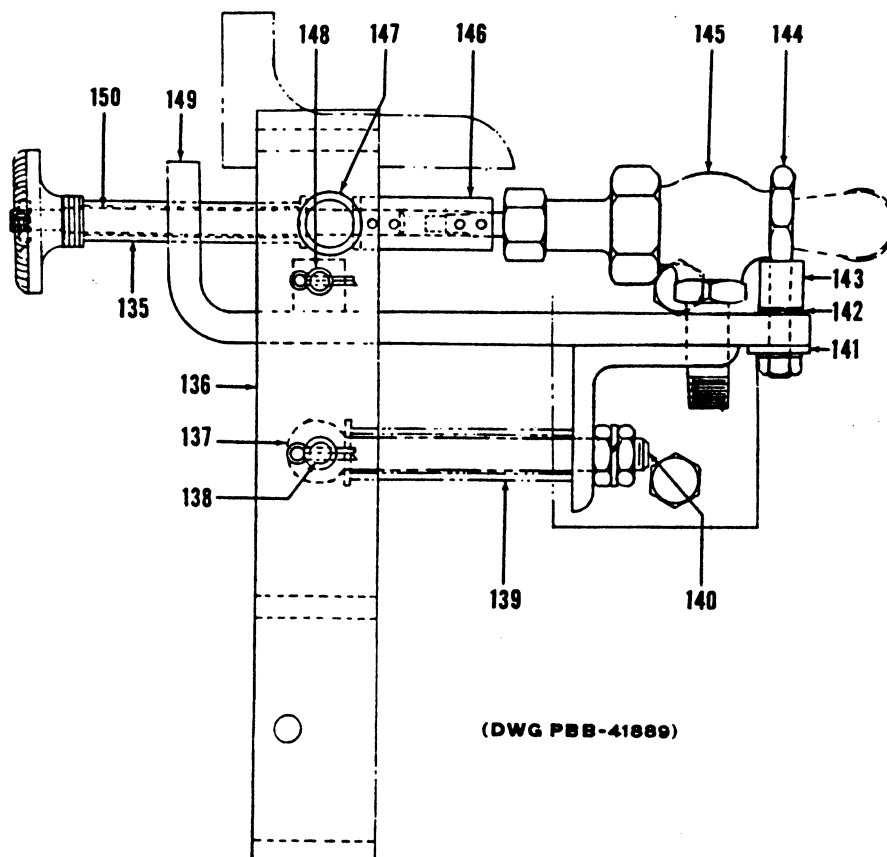


Fig. 5. Drain valve interlock (Ref. No. 90)

The following parts are recommended for normal maintenance:

Ref. No.	Cat.No.	No. Per Breaker	Description
§130	6477881P2	1	Disk for drain valve (Ref.No. 145)

The following parts are seldom required:

90	6350120G2	1	Drain valve interlock complete for 1200, 2000 and 4000 ampere breakers
90	6350120G1	1	Drain valve interlock complete for 3000 ampere breakers
135	6477401FAP2	1	Spacer
136	6318628G1	1	Guard
137	6176109P80	2	Spacer
138	6076404P24	1	Pin
139	6372975	1	Spring
140	6371277P1	1	Eyebolt
141	6371222P22	1	Plate
142	6371222P11	2	Shim
143	6248156	1	Yoke block
144	6009190P7	1	Yoke
145	6371970P1	1	Drain valve, 1/4 in.
146	6370914P3	1	Sleeve
147	6440296	1	Pin
148	6076403P24	1	Pin
149	6420561G2	1	Bracket for 1200, 2000 and 4000 ampere breakers
149	6420561G1	1	Bracket for 3000 ampere breakers
150	6370913P3	1	Stem

§ Not illustrated

TYPE ARA AIR-BLAST CIRCUIT BREAKERS

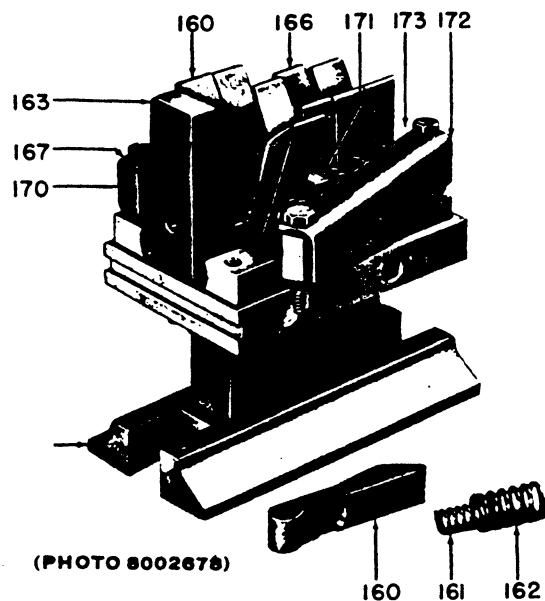


Fig. 6. Main contact assembly for 1200 and 2000 amperes (Ref. No. 165)

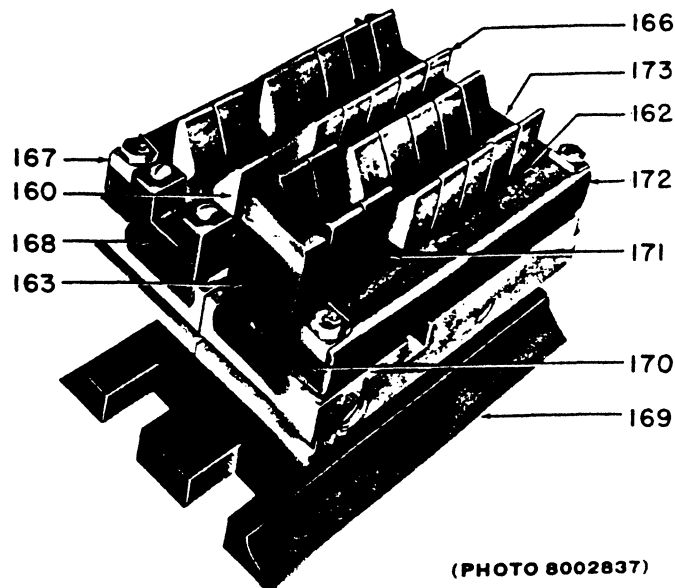


Fig. 7. Main contact assembly for 3000 and 4000 amperes (Ref. No. 165)

The following parts are recommended for normal maintenance:

Ref. No.	Cat.No.	No. Per Breaker	Description
160	6192978G1	12	Secondary arcing contact finger
161	6275464	†	Inner spring
162	6275463	†	Outer spring
163	6218636G2	3	Arcing plate for 1200 amperes only (lower gap electrode)
163	6315665G2	3	Arcing plate for 2000, 3000 and 4000 amperes (lower gap electrode)

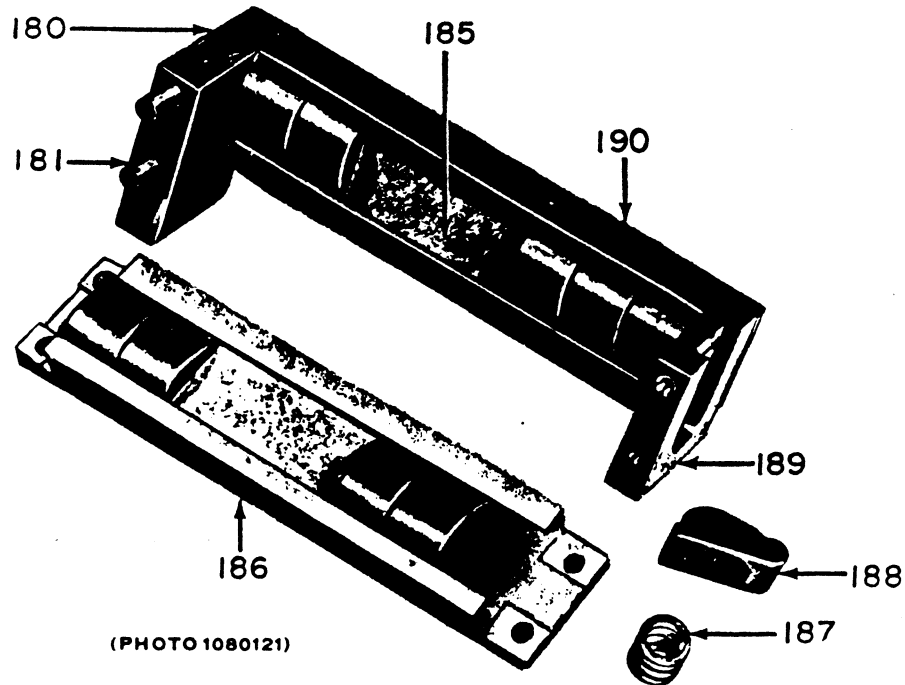
The following parts are seldom required:

Ref. No.	Cat.No.			No. Per Breaker	Description
	Breaker Rating in Amperes				
	1200	2000	3000 & 4000		
165	6350102G2	6350105G3	6350113G2	3	Main contact assembly complete
166	6247873	6247873	6247873	4	Main contact finger (primary)
167	6177491P13	6177491P13	6177491P13	12	Locking plate
168	†	†	6370952P1	3	Lug
169	6318418P1	6318416P1	6420553G1	3	Contact support
170	6440208	6247831	6247831	6	Bar
171	6440207	6242771	6247827	3	Spacer
172	6370190P1	6370169P1	6370169P1	6	Spring retainer
173	6440209	6242777	6242793	3	Bar

† 30 are furnished on the 1200 ampere breakers; 42 are furnished on the ~~2000~~ ampere breakers; 63 are furnished on the 3000 and 4000 ampere breakers.

† 18 are furnished on the 1200 ampere breakers; 30 are furnished on the ~~2000~~ ampere breakers; 72 are furnished on the 3000 and 4000 ampere breakers.

† None furnished in this rating.



(PHOTO 1080121)

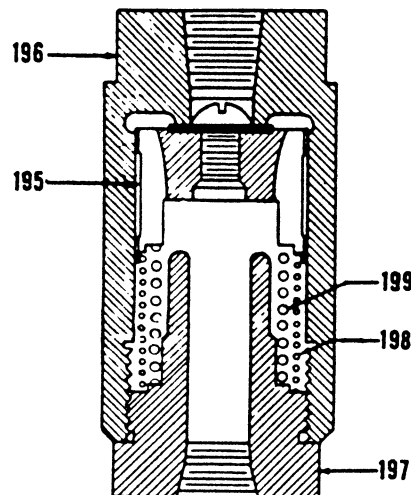
Fig. 8. Auxiliary contacts (Ref. No. 184)

The following parts are recommended for normal maintenance:

Ref. No.	Cat.No.		No. Per - Breaker	Description
	Breaker Rating in Amperes			
	1200	2000, 3000 4000		
180	6370835G1	6370819G1	3	Arcing plate (upper gap electrode)
181	6315672P7	6315672P7	6	Rivet

The following parts are seldom required:

184	6315680G1	6315672G1	3	Auxiliary contact complete
185	6440239	6248114	6	Spacer
186	6370836P1	6370825P1	3	Channel
187	6371811P1	6371811P1	30	Spring
188	6440233	6440233	30	Finger
189	6440275	6440225	3	Rear plate
190	6370836P2	6370825P2	3	Channel



CHECK VALVE (Ref.No. 67)

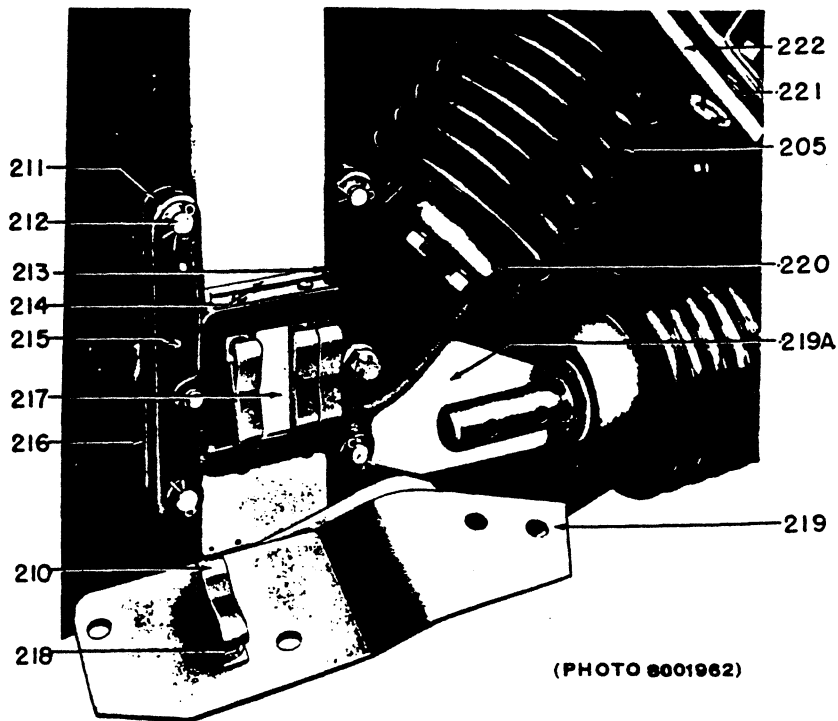
The following parts are recommended for normal maintenance:

Ref. No.	Cat.No.	No. Per Breaker	Description
195	6192584G2	1	Piston and disk

The following parts are seldom required:

67	6114403G3	1	Check valve complete
196	6192531P1	1	Valve body
197	6192532P3	1	Valve cap
198	6270333	1	Outer spring
199	6270349	1	Inner spring

Fig. 9. Check valve
(Ref. No. 67)



(PHOTO 8001962)

Fig. 10. Wiping contact assembly for 1200 and 2000 amperes (Ref. No. 22)

The following parts are recommended for normal maintenance:

Ref. No.	Cat.No.	No. Per Breaker	Description
205	808B751G1	3	Support insulator

The following parts are seldom required:

Ref. No.	Cat.No.		No. Per Breaker	Description
	Breaker Rating in Amperes			
	1200	2000		
22	6155674G4	6350106G1	3	Wiping contact assembly complete
210	6477239P4	6477239P4	(a)	Wiping contact finger
211	6245674	6245674	12	Roller
212	6076405P21	6076405P21	12	Pin
213	(b)	(b)	3	Felt wiper
214	6245676	6248218	12	Retainer
215	6076401P20	6076401P20	3	Pin
216	6248154P1	6248154P1	3	Spacer
217	6247889	6248221	6	Spacer
218	6275479	6275479	(a)	Spring
219	6318494P2	6371213P1	3	Connection bar, right
219A	6318494P3	6371213P2	3	Connection bar, left
220	6252361P1	6355601P1	3	Wiping contact support
221	6245672	6245672	12	Leveling screw
222	6300261P1	6300261P1	3	Mounting plate

(a) 48 are furnished in the 1200 ampere breakers; 60 are furnished in the 2000 ampere breaker.

(b) Specify Cat.No. 6508037P1 (14 in. long) for the 1200 ampere breakers; specify Cat.No. 6508037P1 (20 in. long) for the 2000 ampere breakers.

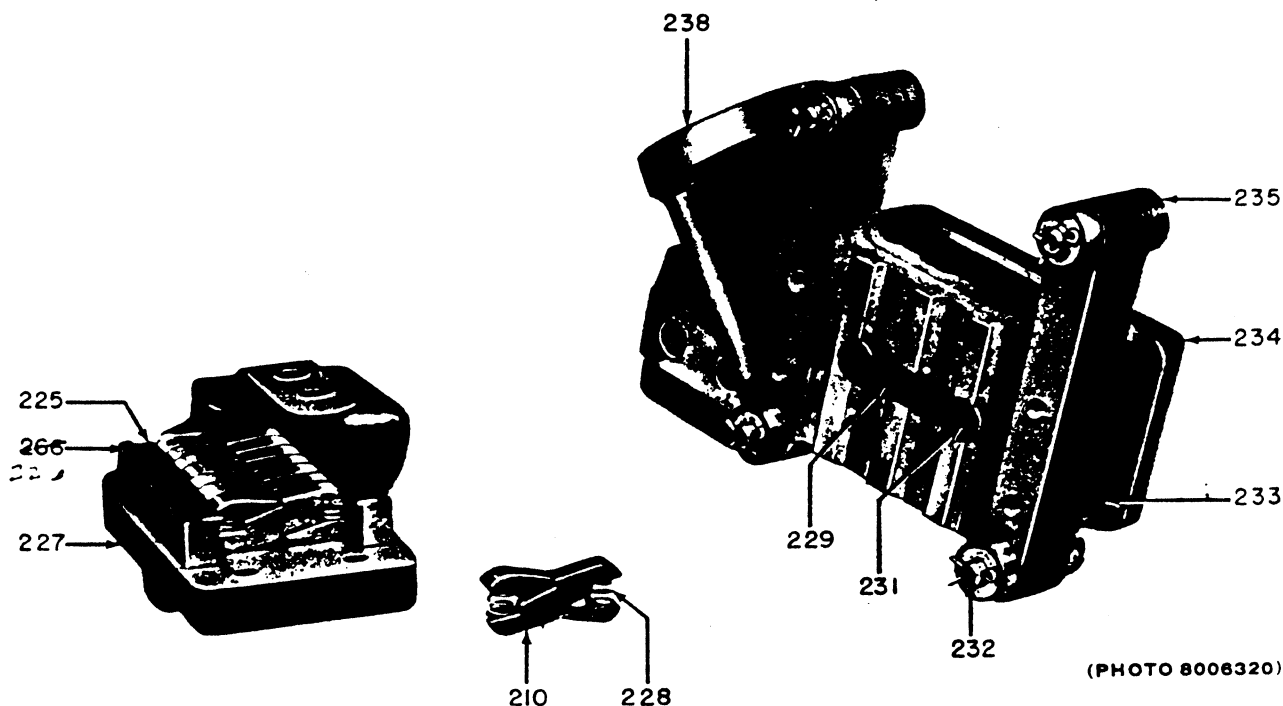


Fig. 11. Wiping contact assembly for 3000 and 4000 amperes (Ref. No. 22)

The following parts are recommended for normal maintenance:

Ref. No.	Cat.No.	No. Per Breaker	Description
§205	808B751G1	3	Support insulator

The following parts are seldom required:

22	6350112G1	3	Wiping contact assembly complete for 3000 amperes
22	6350112G2	3	Wiping contact assembly complete for 4000 amperes
210	6477239P4	96	Wiping contact finger
225	6371257P1	12	Retainer block
226	6608037P2	3	Felt wiper, 21 in. long 179V8471.1
227	6420547P4	3	Connector, left, for 3000 amperes
227	6420547P2	3	Connector, left, for 4000 amperes
228	6275479	96	Spring
229	6245979	6	Roller
§ 230	6245981	6	Pin for Ref.No. 229
231	6245980	6	Pin
232	6247853P2	12	Pin
233	6371256P1	12	Spacer block
234	6420547P3	3	Connector, right, for 3000 amperes
234	6420547P1	3	Connector, right, for 4000 amperes
235	6245674	24	Roller
§ 236	6245672	12	Leveling screw
§ 237	6300261P1	3	Mounting plate
238	6420548P1	3	Wiping contact support

§ Not illustrated

TYPE ARA AIR-BLAST CIRCUIT BREAKERS

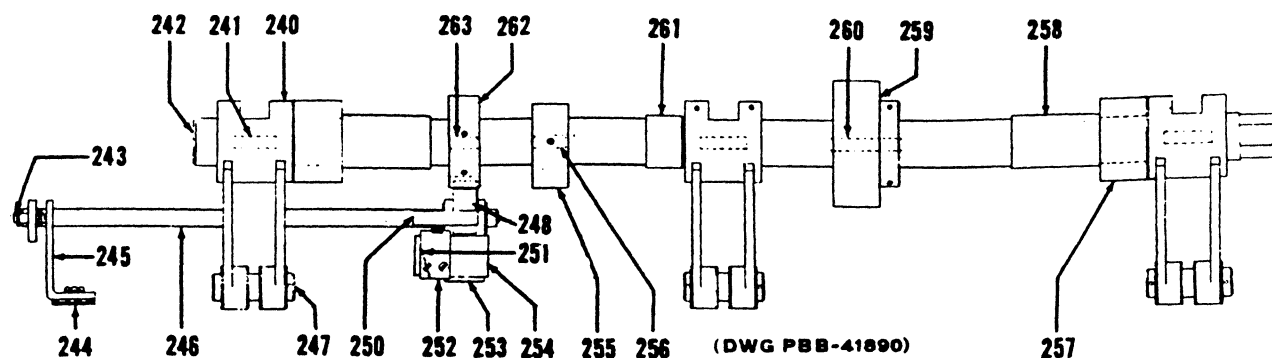


Fig. 12. Lever, shaft and cams (Ref. No. 81)

The following parts are seldom required:

Ref. No.	Cat.No.	No. Per Breaker	Description
81	6318614G1	1	Lever shaft and cams for 1200, 2000, and 3000 amperes
81	6318614G2	1	Lever, shaft and cams for 4000 amperes
240	6315623G2	3	Lever
241	6177352P10	3	Key
242	6318615P1	1	Shaft for 1200, 2000, and 3000 amperes
242	6318615P2	1	Shaft for 4000 amperes
243	6076404P10	1	Pin
244	6301604P5	8	Shim
245	6370862P1	1	Bracket
246	6316402NAG6	1	Link shaft for 1200, 2000 and 3000 amperes
246	6316402NAG7	1	Link shaft for 4000 amperes
247	6440708	3	Pin
248	6370859P2	1	Prop
§249	6075992P32	1	Key for prop (Ref.No. 248)
250	6245953	1	Spring
251	6245954	1	Spacer
252	CR9440D1A	1	Switch
253	6370917P1	1	Bearing
253A	6371960P1	2	Shim for bearing, 1/32 in. thick (Ref.No. 253)
253B	6371960P2	3	Shim for bearing, 1/64 in. thick (Ref.No. 253)
254	6371750P25	1	Bracket
255	6370118P1	1	Cam (Blast valve)
256	6075992P25	1	Key for cam (Ref.No. 255)
257	6248178	2	Spacer for 1200, 2000, 4000 amperes only
258	6370912P5	2	Bushing
259	6326049P3	1	Gear
260	6176066P11	1	Key for gear (Ref.No. 259)
261	6370912P2	1	Bushing
262	6370858P1	1	Cam (interlock)
263	6200914P9	1	Key for cam (Ref.No. 262)

§ Not illustrated

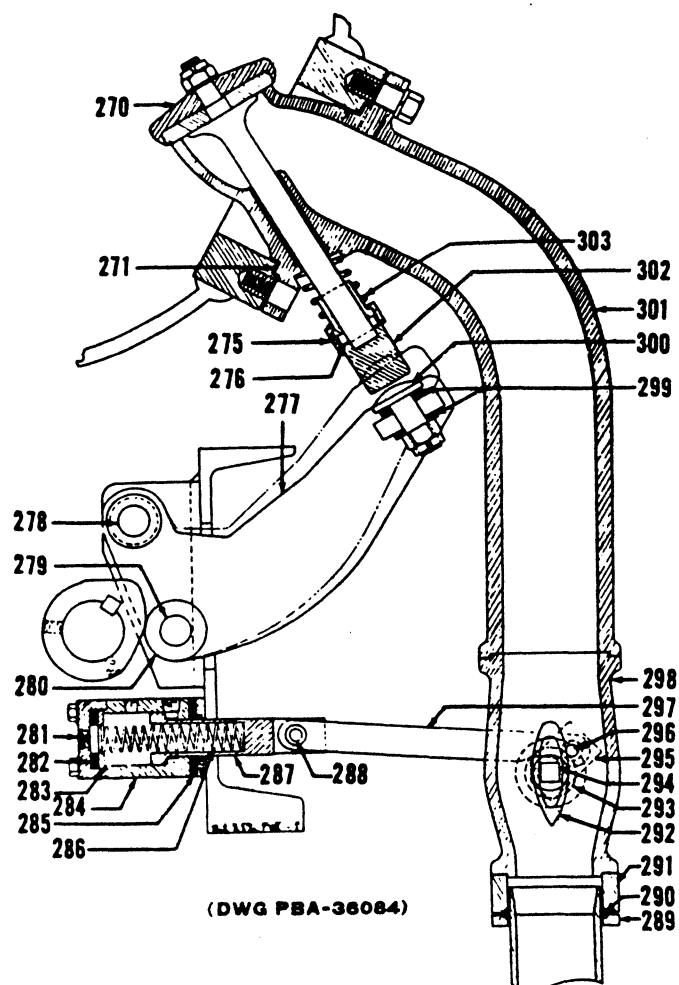


Fig. 13. Blast valve, lifter, and damper mechanism (Ref. No. 94, 94A, 94B)

FOR BLAST VALVE KIT SEE DWG 275A1, ETC.

The following parts are recommended for normal maintenance:

Ref. No.	Cat.No.	No. Per Breaker	Description
270	279B312G1	1	Valve seat disk and retainer
271	6177567P9	1	Gasket

The following parts are seldom required:

94	6155659G5	1	Blast valve
94A	6155659G4	1	Blast valve lifter
94B	6155659G3	1	Damper mechanism
275	6245640	1	Spring and pin retainer
276	6153908P23	1	Pin
277	6315669G1	1	Crank (valve operator)
278	6076409P260	1	Pin
279	6157528P5	1	Pin
280	6370878G2	1	Roller
281	6420521P3	1	Head
282	6248142P2	1	Buffer
283	6248141P2	1	Retainer
284	6420521P1	1	Cylinder
285	6248215P3	1	Buffer

The following parts are seldom required:

Ref. No.	Cat.No.	No. Per Breaker	Description
286	6275486	1	Spring
287	6420521P2	1	Piston
288	6076404P410	1	Pin
289	6370995P1	1	Clamping ring
290	6152388P7	1	Gasket
291	6370994P1	1	Adapter
292	6420522P1	1	Damper
293	6370976P5	1	Bushing
294	6248249	1	Shaft
295	6370997P2	1	Crank
296	6370879P6	1	Pin
297	6248214	1	Connecting rod
298	6420570P1	1	Damper housing
299	6200648P27	4	Shims
300	6247829	1	Striking bolt
301	6355365G2	1	Valve body
302	6247828	1	Valve stem cap
303	6275458	1	Spring

TYPE ARA AIR-BLAST CIRCUIT BREAKERS

GEF-3707B

The following parts are recommended for normal maintenance :

Ref. No.	Catalog Number				No. per Breaker	Description
	Breaker Rating in Amperes					
	1200	2000	3000	4000		
310	6370986P1	6318894P1	6318415P1	6318882P1	3	Lower arc wedge
311	6370988G1	6318888G1	6318460G2	6318884G1	3	Arc barrier
312	6318406P2	6318893P2	6315602P5	6315602P5	3	Contact block, right
313	6318406P1	6318893P1	6315602P6	6318883P1	3	Contact block, left
314	6248212	6370950G1	6370950G1	6370950G1	3	Burning tip
315	6371268P3	6371268P1	6371268P2	6371268P2	3	Contact stud
316	6370905P5	6370905P3	6370905P3	6370905P3	3	Rod
317	6152388P35	6152388P4	6152388P4	6152388P4	3	Air line insulator gasket

The following parts are seldom required :

9	6350102G1	6350105G2	6350113G3	6350113G1	3	Arc chute complete
165		see page 8			3	Main contact assembly
184		see page 9			3	Auxiliary contact assembly
320	6370991P1	6371253P1	6371253P1	6371253P1	3	Stack clamp plate (upper)
321	6152388P14	6152388P20	6152388P20	6152388P20	3	Gasket
322	6370992P1	6371254P1	6371254P1	6371254P1	3	Stack clamp plate (lower)
323	6370990P1	6371255P1	6371255P1	6371255P1	3	Gasket
324	6370984P1	6370110P1	6370110P1	6370110P1	3	Front plate
325	6370901P8	6370901P14	6370901P14	6370901P14	6	Screw
326	6248207	6247825	6247825	6247825	3	Tail barrier
327	6420556G1	6420556G1	6420556G1	6420556G1	3	Resistor
328	6370983P1	6371205P2	6371205P2	6371205P2	3	Bottom plate
329	6420519P2	6420552P2	6420550P2	6420550P2	3	Side plate, right
330	6420519P1	6420552P1	6420550P1	6420550P1	3	Side plate, left
331	6370985G1	6370826G1	6370826G1	6370826G1	6	Cooling plate
332	†	†	6315600P3	†	3	Filler block
333	6370989P3	6476172P1	6315600P4	6476171P1	3	Filler block, left
334	6370989P4	6476171P1	†	†	3	Filler block, right
335	6248208	6248240	6248241	6248241	3	Seal
336	†	6248237	6248237	6248237	3	Key
337	6371271G1	6371271G2	6371271G2	6371271G2	3	Resistor plate
338	6370191P2	6301662P2	6301662P2	6301662P2	6	Clamp
339	†	6371261P1	†	†	3	Spacer, left
340	†	6371261P2	†	†	3	Spacer, right
341	†	†	6270919P14	6270919P14	12	Stud
342	6245669	6245669	6245669	6245669	3	Gasket
343	6245661	6245661	6245661	6245661	6	Nut
344	6177567P10	6177567P10	6177567P10	6177567P10	6	Gasket
345	6300242P1	6370117P1	6370117P1	6370117P1	3	Clamp plate
346	6300249P1	6370116P1	6370900P1	6370900P1	3	Adapter block
347	6440268	6440268	6440268	6440268	†	Dowel
348	6420514G1	6420528G2	6420551G1	6420551G1	3	Back plate
349	6318404P1	6318414P2	6318617P1	6318617P1	3	Top plate
350	6370989P1	6318892P1	6315603P3	6476169P1	3	Filler block, left
351	6370989P2	6318892P2	†	6476170P1	3	Filler block, right
352	6370834P1	6370822P1	6370904P1	6370904P1	3	Spacer, left
353	6370834P2	6370822P2	6370904P2	6370904P2	3	Spacer, right
354	†	6245948	†	†	6	Barrier
355	†	6248119	6248119	6248119	6	Eyebolt
356	†	6318427P1	6318427P1	6318427P1	3	Clamp
357	†	6248121	6248121	6248121	3	Stud
358	†	†	6315603P4	†	3	Filler block
359	6370955P3	6370955P3	6370955P3	6370955P3	12	Eyebolt
360	6477414DAP14	6477414DAP14	6477414DAP14	6477414DAP14	6	Fiber stud

§ Not illustrated

† None furnished in this rating

‡ 3 are furnished in the 1200 and 2000 ampere breakers ; 9 are furnished in the 3000 and 4000 ampere breakers

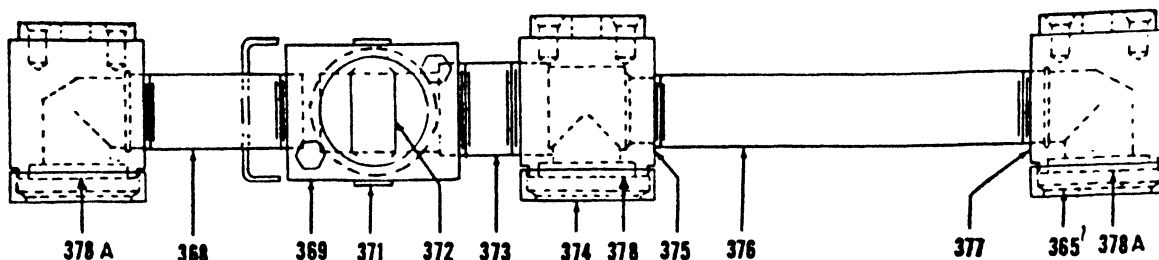


Fig. 15. Air manifold (Ref. No. 29)

(DWG PBB-41891)

The following parts are recommended for normal maintenance:

Ref. No.	Cat. No.				No. Per Breaker	Description
	Breaker Rating in Amperes					
	1200	2000	3000	4000		
365	6177567P17	6177567P16	6177567P16	6177567P16	3	Gasket

The following parts are seldom required:

29	6326078G12	6326078G11	6326078G9	6326078G10	1	Air manifold complete
368	6370933P11	6370933P11	6370933P9	6370933P14	1	Pipe
369	6300298P1	6300298P1	6300298P1	6300298P1	1	Clamp plate
§ 370	6152388P7	6152388P7	6152388P7	6152388P7	1	Gasket (for Ref. No. 371)
371	6300296P1	6300296P1	6300296P1	6300296P1	1	Tee
372	6370931P1	6370931P1	6370931P1	6370931P1	1	Splitter
373	6270953P13	6270953P16	6270953P15	6270953P17	1	Pipe
374	6370934P1	6370934P2	6370934P2	6370934P2	3	Clamp plate
375	6370841G1	6370841G3	6370841G3	6370841G3	1	Tee
376	6370933P4	6370933P1	6370933P1	6370933P13	1	Pipe
377	6370841G2	6370841G4	6370841G4	6370841G4	2	Elbow
378	6157085P9	6157085P8	6157085P8	6157085P8	*3	Washer
378A	-----	6157085P10	-----	-----	2	Washer

§ Not illustrated

* 1 required for the 2000-ampere breaker

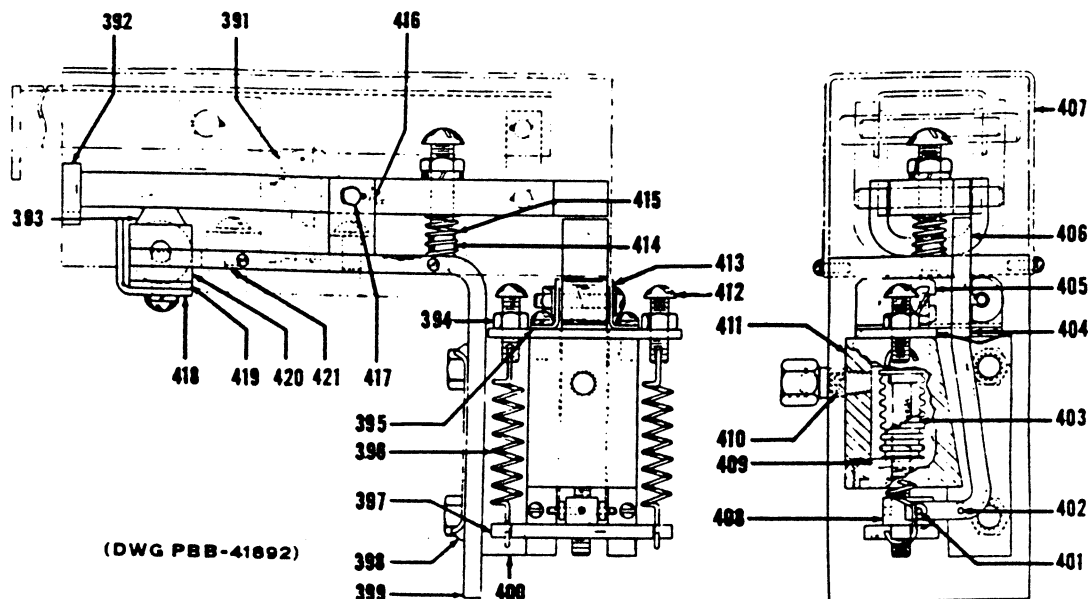


Fig. 16. Manual trip and low pressure lockout (Ref. No. 390)

The following parts are seldom required:

Ref. No.	Cat. No.	No. Per Breaker	Description
390	6350101G3	1	Manual trip and low pressure lockout complete
391	6300281	1	Nut
392	6318447P5	1	Manual trip lever
393	6371802G1	1	Holding magnet
394	6248210	2	Adjusting nut
395	6370975P2	1	Magnet support
396	6275484	2	Spring
397	6248144	1	Spring support plate
398	6301604P13	1	Locking plate
399	6420511P6	1	Mounting bracket
400	6248247	1	Block
401	6370945P2	1	Pivot pin
402	6508045P1	1	Pivot pin
403	6370973G1	1	Pressure bellows unit
404	6370977P1	1	Frame stop plate
405	(4Y29P4) 6155617-PK2	1	Alnico magnet
406	6370972P1	1	Crank for lockout arm
407	6370978P3	1	Cover
408	6248112P2	1	Shackle
409	6508019P1	1	Gasket
410	6248147	1	Orifice fitting
411	6318444P1	1	Frame
412	6248145	2	Screw
413	6370975P1	1	Magnet support
414	6248201	1	Stop
415	6275492	1	Spring
416	6371274P1	1	Bearing
417	6076402P21	1	Pin
418	6440704	1	Angle
419	6440701	1	Magnet frame base plate
420	6440703	2	Magnet frame bracket
421	6248250	6	Shim for magnet

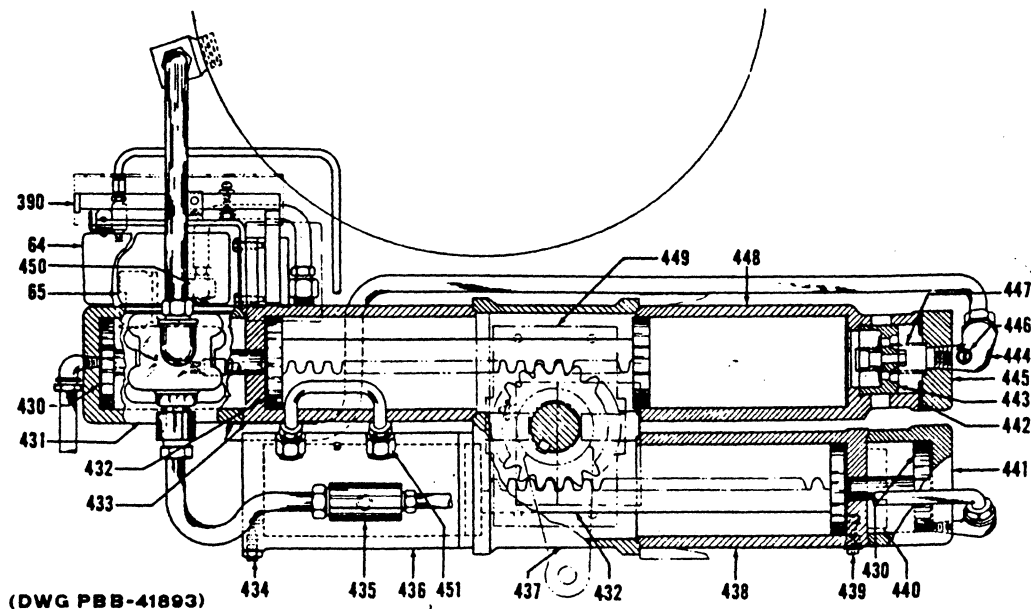


Fig. 17. Cylinder, piston and valve (Ref. No. 91)

The following parts are seldom required:

Ref. No.	Cat. No.	No. Per Breaker	Description
64	See Page 6	1	Closing control valve
65	See Page 6	1	Opening control valve
91	6155670G5	1	Cylinder piston and valve for 60 cycles
91	6155670G6	1	Cylinder piston and valve for 25 cycles
390	See Page 17	1	Manual trip and low-pressure lockout
430	6315621P1	2	Booster piston
431	366A301G1	1	Booster cylinder (front)
432	6315622G1	2	Piston and rack - <i>gear for piston and rack see pg 12 ref 259</i>
433	6355332P1	1	Cylinder (main opening cylinder)
434	6247845	3	Screw (needle valve)
435	6370930P1	1	Tee
436	6355332P3	1	Cylinder (opening dashpot cylinder) for 60 cycles
436	6355332P7	1	Cylinder (opening dashpot cylinder) for 25 cycles
437	6327298G1	1	Gear housing
438	6355332P5	1	Cylinder (closing dashpot cylinder)
439	6245997	1	Pipe plug
440	6248155P1	1	Spacer for 1200 amperes only
440	6248155P2	1	Spacer for 2000, 3000, and 4000 amperes
441	6315619P2	1	Booster cylinder (rear)
442	6440242	1	Gasket
443	6370843G3	1	Dump valve for 1200 amperes only
443	6370843G1	1	Dump valve for 2000 amperes only
443	6370843G2	1	Dump valve for 3000 and 4000 amperes
444	6557717P1 SUP	1	Metering elbow <i>see 455A531G-2</i>
445	6370844P1	1	Dump valve cap
446	6440728 7	1	Metering screw <i>included in ref 451</i>
447	6301557	1	Spring
448	6355371P1	1	Closing cylinder
449	6370135P1	4	Cover
450	366A300P1 SUP	1	Metering connection <i>see 455A531G-1</i>
\$450A	366A300P2 2	1	Metering screw for Ref. 450 <i>included in ref 451</i>
451	366A300P1 SUP	1	Metering connection (60 cycles only) <i>see 455A531G-2</i>
\$451	366A300P2 2	1	Metering screw for Ref. 451 <i>included in ref 451</i>

\$ Not illustrated

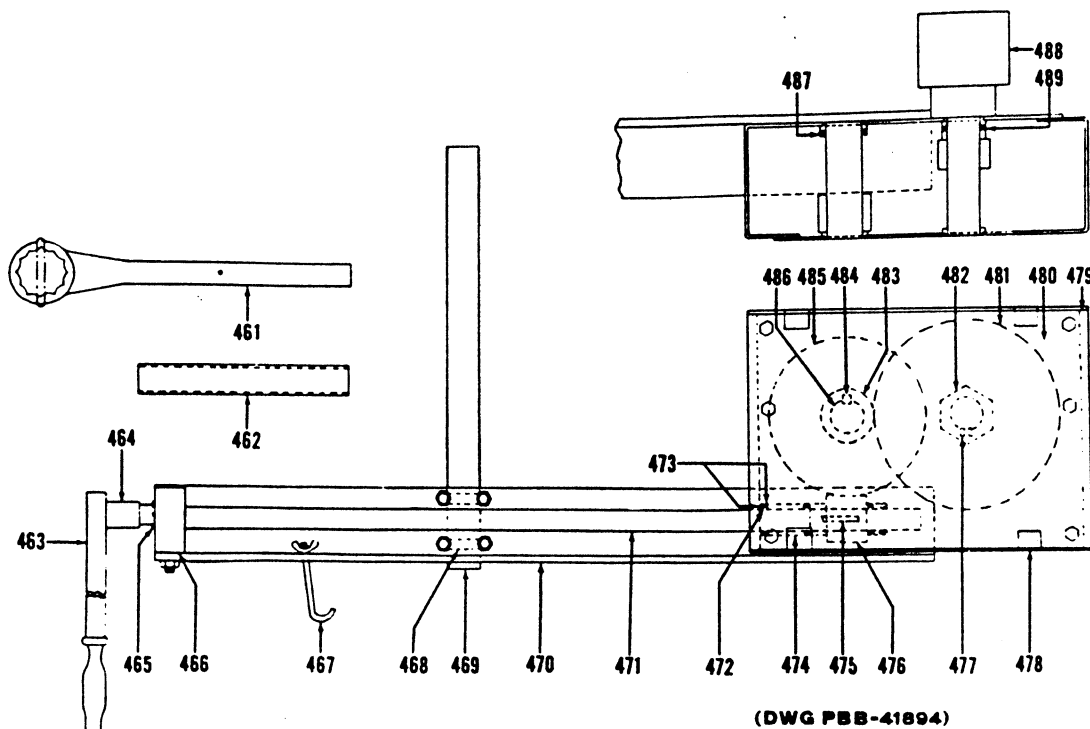


Fig. 18. Maintenance closing device (Ref. No. 460)

MAINTENANCE CLOSING DEVICE FOR BREAKERS RATED 1200 & 2000 AMPERES

The following parts are seldom required:

Ref. No.	Cat. No.	No. Per Breaker	Description
460	6155685G4	1	Maintenance closing device complete (includes Ref.No. 461 and 462)
461	6476215G1	1	Wrench
462	6508044P1	1	Handle

MAINTENANCE CLOSING DEVICE FOR BREAKERS RATED 3000 & 4000 AMPERES

460	6155685G3	1	Maintenance closing device, complete (includes Ref.No. 463 to 489 incl)
463	6508044P2	1	Master ratchet wrench
464	6508044P3	1	Socket
465	6270237P23	1	Bushing
466	6370929P1	1	Bearing block
467	6248100	1	J-bolt
468	6440459	2	Yoke
469	6440457	1	Handle
470	6440298P1	1	Angle
471	6370923P1	1	Crank shaft
472	6248102	6	Thrust washer
473	6248101P3	8	Thrust washer
474	6248104	1	Spacer
475	6073111P11	1	Key
476	6318453P3	1	Worm
477	6008844P17	1	Key
478	6318608P1	1	Cover
479	6318608P2	1	Cover
480	6327780G1	1	Frame
481	6318453P2	1	Spur gear
482	6318450P2	1	Shaft
483	6318453P4	1	Pinion
484	6008844P16	1	Key
485	6318453P1	1	Worm gear
486	6318450P5	1	Shaft
487	6248101P2	2	Thrust washer
488	6318450P6	1	Socket
489	6248101P1	2	Thrust washer

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