

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY, SCHENECTADY, N. Y., SALES OFFICES IN PRINCIPAL CITIES

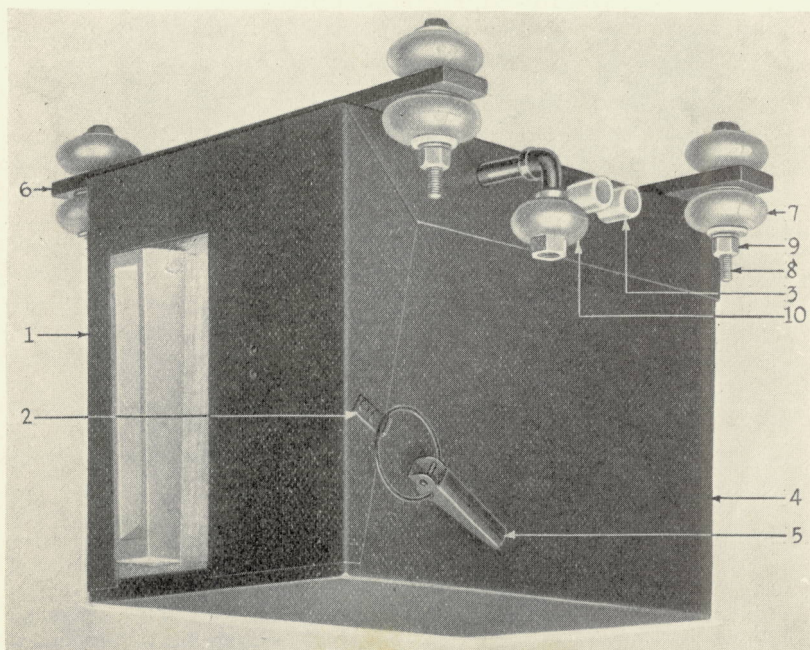
April, 1929



*GEF-978A

PARTS OF TYPE DB-981 LINE BREAKERS FORMS A1, A2, A3, A4, A5, A6, A7, AND A8

Ref. No.	Cat. No.	Line Breaker Form	No. Required	Description
1	221422	All Forms	1	BOX with dust guards, hinge brackets and catch for cover.....
	196972	"	2	Hinge bracket with hinge pin.....
2	1406321	"	2	Catch for cover.....



TYPE DB-981 FORM A LINE BREAKER

221423	All Forms	8	Rivet fastening hinge bracket or catch to box ($\frac{3}{16}$ in. by $\frac{1}{4}$ in. r.h., iron).....
3 136107	"	4	Soft rubber bushing for cable hole.....
4 221424	"	1	Cover with hinge straps and latch.....
221425	"	2	Hinge strap.....
5 205149	"	2	Latch for cover.....
173003	"	4	Rivet fastening hinge strap to cover ($\frac{3}{16}$ in. by $\frac{3}{8}$ in. r.h., iron).....
221423	"	4	Rivet fastening latch to cover ($\frac{3}{16}$ in. by $\frac{1}{4}$ in. r.h., iron).....
6 221426	"	2	Support for box.....
221427	"	2	Spacing block between contactor and box.....
149858	"	1	Bolt fastening support, spacing block and relay to box ($\frac{3}{8}$ in.-16, $2\frac{3}{4}$ in. hex. h. sherardized).....
1480533	"	3	Bolt fastening support and spacing block to box ($\frac{3}{8}$ in.-16, $2\frac{3}{8}$ in. hex. h. sherardized).....

NOTE.—Data subject to change without notice.

*Supersedes GEF-978.

GEF-978A Parts of Type DB-981 Line Breakers

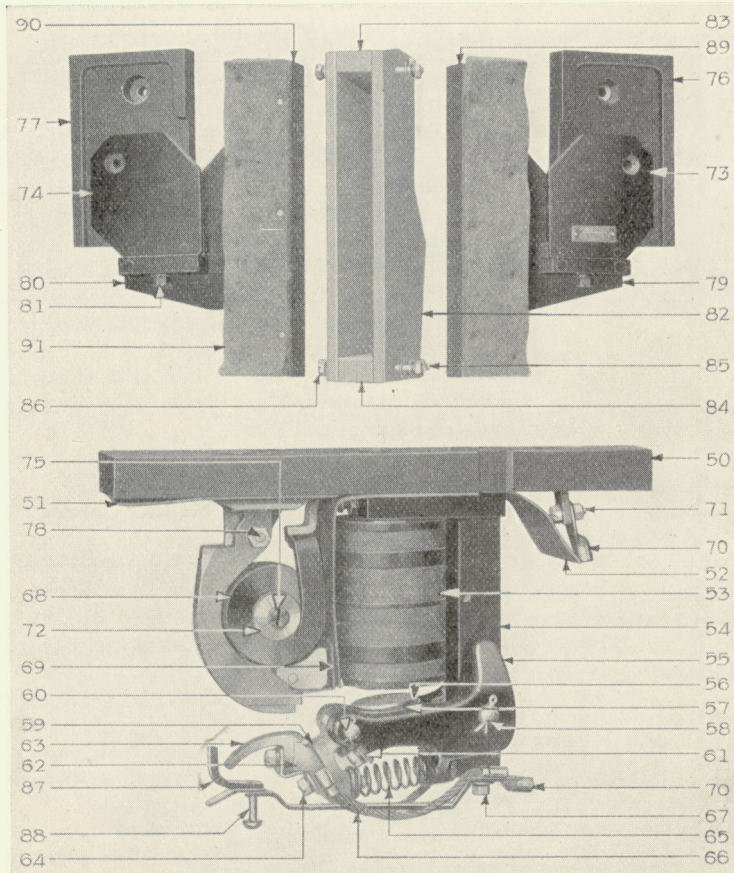
Ref. No.	Cat. No.	Line Breaker Form	No. Required	Description
	141259	All Forms	4	Washer for No. 149858 or 1480533 ($\frac{13}{32}$ in. by $\frac{3}{4}$ in. by 0.0625 in., sherardized).....
	1480735	"	4	Nut for No. 149858 or 1480533 ($\frac{3}{8}$ in.-16, hex. st'd, sherardized)....
	154197	"	4	Spring lock washer for No. 1480735 ($\frac{13}{32}$ in. by $\frac{25}{32}$ in. by $\frac{3}{32}$ in. thick)....
	1803472G2	"	4	Porcelain bolt insulator, complete, for $\frac{1}{2}$ in. supporting bolt.....
	1435581	"	8	Insulation washer, top or bottom.....
	1435582	"	8	Insulation washer, middle.....
	1803472P7	"	4	Insulation sleeve for bolt.....
7	450869	"	8	Porcelain insulator.....
8	1542074	"	4	Supporting bolt ($\frac{1}{2}$ in.-13, $4\frac{1}{2}$ in. sq. h. st'd, sherardized).....
9	1480738	"	4	Nut for No. 1542074 ($\frac{1}{2}$ in.-13, hex. st'd, sherardized).....
	16131	"	4	National lock washer for No. 1480738 ($\frac{17}{32}$ in. by $1\frac{1}{32}$ in. by $\frac{1}{8}$ in. thick)
10	258812	"	1	Insulated coupling for air pipe.....

TYPE DB-291, FORM K7 CONTACTOR

	224755	All Forms	1	TYPE DB 291, FORM K7 CONTACTOR, complete, with support, blowout coil and arc chute.....
Following are the parts:				
50	201305	"	1	Supporting block for contactor.....
51	165383	"	1	Insulation shield between supporting block and blowout coil support..
	174888	"	1	Screw fastening insulation shield to supporting block (No. 8, $\frac{3}{4}$ in. r.h., sherardized).....
52	165359	"	1	Insulation shield between blowout and operating coils.....
53	201310	"	1	OPERATING COIL with connection blocks (Spec. F-323352 stamped on coil).....
	411512	"	2	Copper terminal for operating coil.....
	105331	"	2	Screw fastening copper terminal to operating coil (14-24, $\frac{3}{8}$ in. r.h., sherardized).....
	154194	"	2	Spring lock washer for No. 105331 ($\frac{11}{16}$ in. by $\frac{25}{32}$ in. by $\frac{5}{16}$ in. thick)....
54	201311	"	1	MAGNET FRAME with bushing and washers.....
	165363	"	1	Bushing for magnet frame (0.690 in. outside diam., $1\frac{1}{32}$ in. long, phosphor bronze).....
	165364	"	2	Washer for magnet frame, used with bushing No. 165363 ($\frac{11}{16}$ in. by $1\frac{3}{8}$ in. by 0.050 in. countersunk hole, brass).....
	201312	"	2	Bolt fastening magnet frame to supporting block ($\frac{3}{8}$ in.-16, $1\frac{1}{2}$ in. hex. h. slot., sherardized).....
	1408643	"	2	Washer for No. 201312 ($\frac{13}{32}$ in. by 1 in. by 0.0625 in., sherardized)....
	154197	"	2	Spring lock washer for No. 141259 ($\frac{13}{32}$ in. by $\frac{25}{32}$ in. by $\frac{3}{32}$ in. thick)....
	165365	"	1	Magnet pole, sherardized).....
	216681	"	1	Set screw for magnet pole ($\frac{5}{16}$ in.-18, $\frac{7}{8}$ in. sq. h. sherardized).....
	151481	"	1	Lock nut for No. 216681 ($\frac{5}{16}$ in.-18, $\frac{3}{16}$ in. thick, $\frac{11}{32}$ in. across flats, hex. cham. both sides, sherardized).....
	154196	"	1	Spring lock washer for No. 151481 ($\frac{21}{64}$ in. by $\frac{37}{64}$ in. by $\frac{5}{16}$ in. thick).....
55	165367	"	1	ARMATURE with bushings, magnet disk, spring retainer and stop
	165368	"	2	Long split bushing for armature ($\frac{9}{16}$ in. outside diam., $\frac{15}{16}$ in. long, phosphor bronze).....
	1463669	"	2	Short split bushing for armature ($\frac{11}{16}$ in. outside diam., $\frac{3}{4}$ in. long, phosphor bronze).....
56	165370	"	1	Magnet disk for armature.....
57	165371	"	1	Phosphor bronze disk between magnet disk and armature.....
58	165372	"	1	Hinge pin for armature ($\frac{9}{16}$ in. by $3\frac{7}{16}$ in.).....
	133468	"	2	Spring cotter for No. 165372 ($\frac{1}{8}$ in. by $\frac{3}{4}$ in., sherardized).....
59	1478640	"	1	OPERATING ARM with bushing.....
	1464810	"	1	Bushing for operating arm.....
60	165374	"	1	Hinge pin for operating arm ($\frac{7}{16}$ in. by $3\frac{3}{8}$ in.).....

TYPE DB-291, FORM K7 CONTACTOR

Ref. No.	Cat. No.	Line Breaker Form	No. Required	Description
	110774	All Forms	2	Spring cotter for No. 165374 ($\frac{3}{32}$ in. by $\frac{5}{8}$ in., sherardized).....
61	165375	"	1	Stop plate for operating arm, sherardized).....
	17376	"	2	Cap screw fastening stop plate to armature ($\frac{5}{16}$ in.-18, $\frac{3}{4}$ in. hex. h. slot., sherardized).....
	154196	"	2	Spring lock washer for No. 17376 ($\frac{21}{64}$ in. by $\frac{37}{64}$ in. by $\frac{5}{64}$ in. thick).....
62	230929	"	1	CONTACT ARM with contact tip.....
63	1467860	"	1	Contact tip for contact arm.....
	151313	"	1	Cap screw fastening contact tip to contact arm ($\frac{5}{16}$ in.-18, $1\frac{1}{8}$ in. hex. h. slot., sherardized).....
	154196	"	1	Spring lock washer for No. 151313 ($\frac{21}{64}$ in. by $\frac{37}{64}$ in. by $\frac{5}{64}$ in. thick)..



TYPE DB-291 FORM K7 CONTACTOR

64	143997	All Forms	1	Cap screw fastening pigtail shunt and contact arm to operating arm ($\frac{3}{8}$ in.-16, $1\frac{1}{4}$ in. hex. h. slot., sherardized).....
	154197	"	1	Spring lock washer for No. 143997 ($\frac{13}{32}$ in. by $\frac{25}{32}$ in. by $\frac{3}{32}$ in. thick)....
	410778	"	1	Washer for No. 143997 ($\frac{13}{32}$ in. by 1 in. by 0.075 in. brass).....
65	165378	"	1	Compression spring.....
	498980	"	1	Spring seat ($\frac{17}{64}$ in. by $1\frac{1}{8}$ in. by $\frac{1}{8}$ in. thick, fiber).....
	498981	"	1	Spring retainer ($\frac{17}{64}$ in. by $\frac{11}{16}$ in. by $\frac{3}{16}$ in. thick, fiber).....
	126913	"	1	Screw fastening No. 498980 and No. 498981 to operating arm (14-24, $\frac{7}{8}$ in. r.h., sherardized).....
	154194	"	1	Spring lock washer for No. 126913 ($\frac{17}{64}$ in. by $\frac{29}{64}$ in. by $\frac{5}{64}$ in. thick)....
	143974	"	1	Washer for No. 126913 ($\frac{17}{64}$ in. by $\frac{1}{2}$ in. by 0.0625 in., sherardized)....

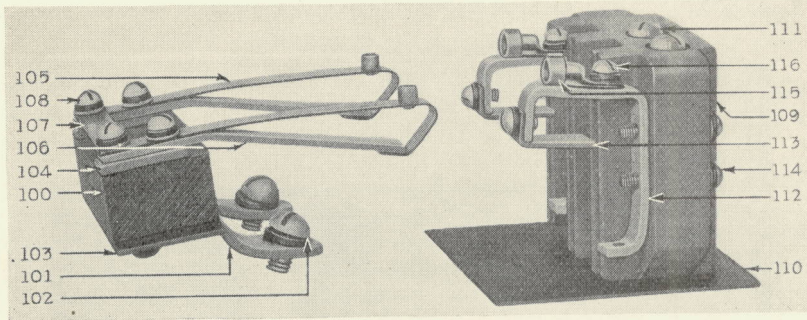
GEF-978A Parts of Type DB-981 Line Breakers

TYPE DB-291 FORM K7 CONTACTOR

Ref. No.	Cat. No.	Line Breaker Form	No. Required	Description
66	165381	All Forms	1	Pigtail shunt.....
67	17366	"	1	Cap screw fastening pigtail shunt to magnet frame ($\frac{5}{16}$ in.-18, $\frac{7}{8}$ in. hex. h. slot., sherardized).....
	154196	"	1	Spring lock washer for No. 17366 ($\frac{31}{64}$ in. by $\frac{37}{64}$ in. by $\frac{5}{64}$ in. thick).....
68	257105	"	1	BLOWOUT COIL with connection strip and support with contact tip and dowel pins.....
	1467860	"	1	Contact tip for blowout coil.....
	17376	"	1	Cap screw fastening contact tip to support ($\frac{5}{16}$ in.-18, $\frac{3}{4}$ in. hex. h. slot., sherardized).....
	154196	"	1	Spring lock washer for No. 17376 ($\frac{31}{64}$ in. by $\frac{37}{64}$ in. by $\frac{5}{64}$ in. thick)....
	151848	"	2	Cap screw fastening blowout coil support to supporting block ($\frac{3}{8}$ in.-16, $1\frac{1}{2}$ in. hex. h. slot., sherardized).....
	154197	"	2	Spring lock washer for No. 151848 ($\frac{13}{32}$ in. by $\frac{25}{32}$ in. by $\frac{3}{32}$ in. thick).....
	1408643	"	2	Washer for No. 151848 ($\frac{13}{32}$ in. by 1 in. by 0.0625 in., sherardized).....
	126871	"	1	Cap screw fastening blowout coil copper connection strip to supporting block (14-24, $\frac{3}{4}$ in. hex. h. slot., sherardized).....
	154194	"	1	Spring lock washer for No. 126871 ($\frac{17}{64}$ in. by $\frac{29}{64}$ in. by $\frac{5}{64}$ in. thick).....
	143974	"	1	Washer for No. 126871 ($\frac{17}{64}$ in. by $\frac{1}{2}$ in. by 0.0625 in., sherardized)....
69	1404938	"	1	Insulation shield between blowout coil support and operating coil.....
	201313	"	2	Punched copper tube cable terminal for magnet frame or blowout coil connection strip (2 $\frac{5}{8}$ in. long, $\frac{3}{16}$ in. bolt hole).....
70	201314	"	2	Punched copper tube cable terminal for magnet frame or blowout coil connection strip (2 $\frac{1}{8}$ in. long, $\frac{1}{16}$ in. bolt hole).....
71	17366	"	1	Cap screw fastening Nos. 201313, 201314 to blowout coil connection strip ($\frac{5}{16}$ in.-18, $\frac{7}{8}$ in. hex. h. slot., sherardized).....
	1480733	"	1	Nut for No. 17366 ($\frac{1}{16}$ in.-18, hex. st'd, sherardized).....
	154196	"	1	Spring lock washer for No. 1480733 ($\frac{21}{64}$ in. by $\frac{27}{64}$ in. by $\frac{5}{64}$ in. thick)....
72	201318	"	1	Insulated blowout coil core.....
73	201319	"	1	Pole piece with feeder block, right hand.....
74	201320	"	1	Pole piece with feeder block, left hand.....
75	17380	*	2	Screw fastening pole piece to blowout coil core ($\frac{5}{16}$ in.-18, $\frac{5}{8}$ in. f.h., sherardized).....
76	201321	"	1	Insulation side plate for blowout coil, right-hand.....
77	201322	"	1	Insulation side plate for blowout coil, left-hand.....
	176330	"	4	Screw fastening side plate to pole piece (10-30, $\frac{3}{4}$ in. r. h., brass)....
	154191	"	4	Spring lock washer for No. 176330 ($\frac{13}{32}$ in. by $\frac{25}{32}$ in. by 0.0625 in.).....
	201323	"	4	Washer for No. 176330 ($\frac{13}{32}$ in. by $\frac{13}{32}$ in. by 0.030 in., brass).....
78	2420438	"	1	Cap screw for insulation side plates ($\frac{5}{16}$ in.-18, $2\frac{3}{4}$ in. hex. h. slot., brass)
	498560	"	2	Washer for No. 2420438 ($\frac{21}{64}$ in. by $\frac{5}{8}$ in. by 0.0625 in., sherardized)....
	1480733	"	1	Nut for No. 2420438 ($\frac{5}{16}$ in.-18, hex. st'd, sherardized).....
	154196	"	1	Spring lock washer for No. 1480733 ($\frac{21}{64}$ in. by $\frac{27}{64}$ in. by $\frac{5}{64}$ in. thick)....
79	201332	"	1	Field piece, right-hand, with feeder block.....
80	201333	"	1	Field piece, left-hand, with feeder block.....
81	112303	"	2	Cap screw fastening pole piece and field piece feeder blocks together ($\frac{5}{16}$ in.-18, 1 in. hex. h. slot., sherardized).....
	154196	"	2	Spring lock washer for No. 112303 ($\frac{21}{64}$ in. by $\frac{27}{64}$ in. by $\frac{5}{64}$ in. thick)....
	201334	"	1	ARC CHUTE, consists of side plates with upper and lower spacing blocks.....
82	201335	"	2	Side plate.....
83	201336	"	1	Spacing block, upper, for arc chute sides.....
84	201337	"	1	Spacing block, lower, for arc chute sides.....
85	141220	"	3	Cap screw for side plates and spacing blocks (14-24, $2\frac{1}{4}$ in. hex. hd. slot., sherardized).....
86	278560	"	2	Cap screw for side plates, spacing blocks and arc chute supports (14-24, $3\frac{1}{4}$ in. hex. h. slot., sherardized).....
	143974	"	10	Washer for No. 141220 or 278560 ($\frac{17}{64}$ in. by $\frac{1}{2}$ in. by 0.0625 in., sherardized).....

TYPE DB-291 FORM K7 CONTACTOR

Ref. No.	Cat. No.	Line Breaker Form	No. Required	Description
	150479	All Forms	5	Nut for No. 141220 or 278560 (14-24, hex. st'd, sherardized).....
	154194	"	5	Spring lock washer for No. 150479 ($\frac{17}{64}$ in. by $\frac{29}{64}$ in. by $\frac{5}{64}$ in. thick)...
87	13D331	"	1	Arcing horn with connection strip.....
88	144977	"	1	Screw fastening arcing horn to arc chute (14-24, $1\frac{1}{4}$ in. r.h., sherardized).....
	143974	"	1	Washer for No. 144977 ($\frac{17}{64}$ in. by $\frac{1}{2}$ in. by 0.0625 in., sherardized).....
	154194	"	1	Spring lock washer for No. 144977 ($\frac{17}{64}$ in. by $\frac{29}{64}$ in. by $\frac{5}{64}$ in. thick).....
89	201338	"	1	Support, right-hand, for arc chute.....
90	201339	"	1	Support, left-hand, for arc chute.....
91	201340	"	2	Felt dust guard with tacks, for arc chute.....
	127349	"	4	Screw fastening support to field piece (No. 10, 1 in. f.h., sherardized)...



TYPE FI-102, FORM A4 INTERLOCK

221429	All Forms	1	TYPE FI-102, FORM A4 INTERLOCK, complete.....
Following are the parts:			
100	1466941	"	1 Finger block.....
101	1403462	"	1 Support for finger block.....
102	143510	"	2 Screw fastening finger block support to contactor ($\frac{5}{16}$ in.-18, $\frac{5}{8}$ in. r.h., sherardized).....
	154196	"	2 Spring lock washer for No. 143510 ($\frac{21}{64}$ in. by $\frac{37}{64}$ in. by $\frac{5}{64}$ in. thick).....
103	165421	"	1 Insulation shield between finger block and support.....
104	165418	"	1 Finger base.....
	167648	"	2 Screw fastening finger base to finger block (10-30, $\frac{3}{4}$ in. r.h., sherardized).....
105	201343	"	2 Contact finger with tip.....
106	1442537	"	2 Stop for contact finger.....
107	1452051	"	1 Connection strip for contact finger.....
108	175561	"	4 Screw fastening contact finger to base (10-30, $\frac{1}{2}$ in. r.h., sherardized).....
	155830	"	4 Washer for No. 175561 ($\frac{3}{16}$ in. by $\frac{3}{8}$ in. by 0.034 in., sherardized)....
	154191	"	4 Spring lock washer for No. 175561 ($\frac{13}{64}$ in. by $\frac{25}{64}$ in. by 0.0625 in.).....
109	1430969	"	1 Contact block.....
110	1401323	"	1 Insulation shield between contact block and contactor.....
111	154327	"	2 Screw fastening contact block to contactor (14-24, 3 in. r. h., sherardized).....
	143974	"	2 Washer for No. 154327 ($\frac{17}{64}$ in. by $\frac{1}{2}$ in. by 0.0625 in., sherardized)....
	154194	"	2 Spring lock washer for No. 154327 ($\frac{17}{64}$ in. by $\frac{29}{64}$ in. by $\frac{5}{64}$ in.).....
112	209987	"	2 Contact support.....
113	462387	"	2 Contact plate for contact support.....
114	220659	"	4 Screw fastening contact support to contact block (10-30, $1\frac{1}{8}$ in. r.h., sherardized).....
	155830	"	4 Washer for No. 220659 ($\frac{3}{16}$ in. by $\frac{3}{8}$ in. by 0.034 in., sherardized).....
	154191	"	4 Spring lock washer for No. 220659 ($\frac{13}{64}$ in. by $\frac{25}{64}$ in. by 0.0625 in.).....

GEF-978A Parts of Type DB-981 Line Breakers

TYPE FI-102 FORM A4 INTERLOCK

Ref. No.	Cat. No.	Line Breaker Form	No. Required	Description
115	417591	All Forms	2	Copper terminal for contact support.....
116	170576	"	4	Screw fastening contact plate or copper terminal to support (10-30, 1/4 in. r. h., sherardized).....
	154191	"	4	Spring lock washer for No. 170576 (3/8 in. by 5/16 in. by 0.0625 in.).....
	1401991	"	1	Supporting plate between interlock and contactor.....
	148921	"	2	Screw fastening No. 1401991 to contactor (14-24, 1/2 in. f.h., sherardized).....

TYPE DB-685, FORMS D1, D2, D3 AND D4 RELAYS

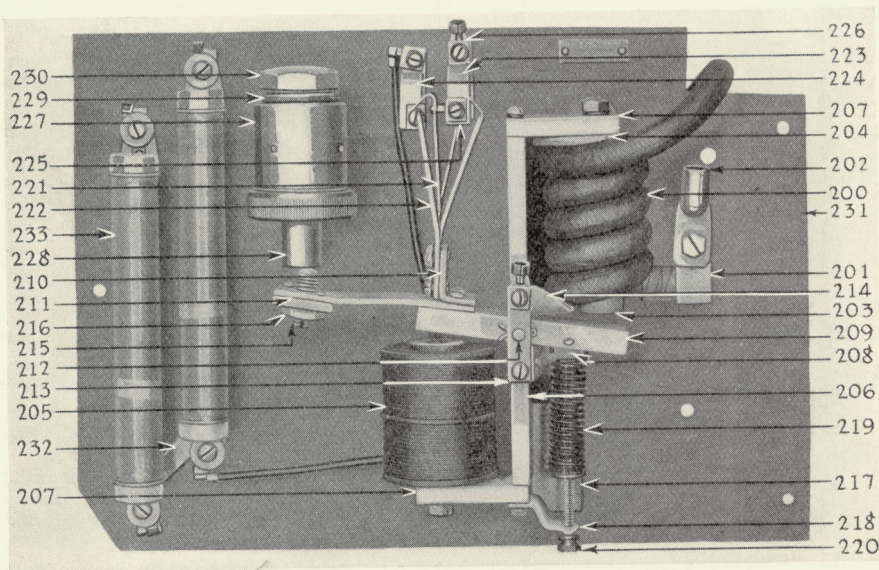
257132	A1, A5	1	TYPE DB-685, FORM D1 RELAY, without base.....
257133	A2, A6	1	TYPE DB-685, FORM D2 RELAY, without base.....
270290	A3, A7	1	TYPE DB-685, FORM D3 RELAY, without base.....
270291	A4, A8	1	TYPE DB-685, FORM D4 RELAY, without base.....

Following are the parts:

200	209171	A1, A5	1	SERIES OVERLOAD COIL with terminal and connection block....
200	209172	A2, A6	1	SERIES OVERLOAD COIL with terminal and connection block....
200	230931	A3, A7	1	SERIES OVERLOAD COIL with terminals.....
200	221433	A4, A8	1	SERIES OVERLOAD COIL with terminals.....
	201314	A1, A5	1	Punched copper tube cable terminal for No. 209171 (1 1/2 in. bolt hole)
	176934	A2, A6	1	Punched copper tube cable terminal for No. 209172 (1 1/2 in. bolt hole)
	32539	A3, A7	2	Punched copper tube cable terminal for No. 230931 (1 3/8 in. bolt hole)
	36031	A4, A8	2	Punched copper tube cable terminal for No. 221433 (1 3/8 in. bolt hole)
201	209975	A1, A5	1	Connection block for series overload coil.....
201	1469084	A2, A6	1	Connection block for series overload coil.....
	1406360	A1, A2, A5, A6	1	Spacing block between connection block and base.....
	144977	"	1	Screw fastening connection block and spacing block to base (14-24, 1 1/4 in. r.h. sherardized).....
	154194	"	1	Spring lock washer for No. 144977 (1 1/4 in. by 3/8 in. by 5/64 in. thick)....
	143974	"	1	Washer for No. 144977 (1 1/4 in. by 1/2 in. by 0.0625 in. sherardized)....
202	201314	A1, A5	1	Punched copper tube cable terminal for series overload coil connection block (1 1/2 in. bolt hole).....
202	176934	A2, A6	1	Punched copper tube cable terminal for series overload coil connection block (1 1/2 in. bolt hole).....
	2405347	A1, A2, A5, A6	1	Cap screw fastening terminal to connection block (5/16 in.-18, 5/8 in. hex. h. slot., sherardized).....
	154196	"	1	Spring lock washer for No. 2405347 (2 1/4 in. by 3/4 in. by 5/64 in. thick)....
	133716	A3, A4, A7, A8	2	Connection screw for series overload coil (3/8 in.-16, 2 in. hex. h. slot., sherardized).....
	141259	"	4	Washer for No. 133716 (1 3/8 in. by 3/4 in. by 0.0625 in. sherardized)....
	141257	"	6	Nut for No. 133716 (3/8 in.-16, 1/4 in. thick, hex. st'd, sherardized)
	154197	"	2	Spring lock washer for No. 141257 (1 3/8 in. by 3/8 in. by 3/32 in. thick)....
	32539	"	2	Punched copper tube cable terminal for connection screw (1 3/8 in. bolt hole).....
203	209981	All Forms	1	Magnet core for series overload coil.....
204	491379	"	1	Insulation washer for magnet core (1 in. by 2 3/4 in. by 0.125 in. fiber)
	17366	"	1	Cap screw fastening magnet core to support (5/16 in.-18, 7/8 in. hex. h. slot., sherardized).....
	154196	"	1	Spring lock washer for No. 17366 (2 1/4 in. by 3/4 in. by 5/64 in. thick)....
205	209976	"	1	HOLDING COIL.....
	411512	"	1	Large copper terminal for holding coil lead.....
	410567	"	1	Small copper terminal for holding coil lead.....
	17366	"	1	Cap screw fastening holding coil to support (5/16 in.-18, 7/8 in. hex. h. slot., sherardized).....
	154196	"	1	Spring lock washer for No. 17366 (2 1/4 in. by 3/4 in. by 5/64 in. thick)....
206	209977	"	1	Frame with armature stop plate and supports for coils.....
207	1469086	"	2	Support for coils.....
	167685	"	4	Screw fastening series or holding coil support to frame (10-30, 7/8 in. r.h., sherardized).....
	154191	"	4	Spring lock washer for No. 167685 (1 3/8 in. by 3/8 in. by 0.0625 in.)....

TYPE DB-685, FORMS D1, D2, D3, AND D4 RELAYS

Ref. No.	Cat. No.	Line Breaker Form	No. Required	Description
208	209978	All Forms	1	Armature stop with rivets.....
	144977	"	2	Screw fastening coil support to base (14-24, 1 1/4 in. r.h. sherardized) ..
	143974	"	2	Washer for No. 144977 (1 1/4 in. by 1/2 in. by 0.0625 in. sherardized).....
	154194	"	2	Spring lock washer for No. 144977 (1 1/4 in. by 29/64 in. by 5/64 in. thick).....
	1410771	"	2	Spacing washer for coil supports and frame (9/32 in. by 1 1/8 in. by 1/4 in. thick, fiber).....
209	257134	"	1	Armature with bearing, tripping arm and supporting bracket for contact fingers.....
210	1452401	"	1	Supporting bracket for contact finger.....
	203912	"	1	Bearing bushing for armature (1/4 in. by 5/16 in. by 1 1/2 in. brass).....
211	1493571	"	1	Tripping arm for dashpot.....
212	1421786	"	1	Hinge pin for armature (1/4 in. by 2 1/2 in.).....
	188154	"	1	Spring cotter for hinge pin (5/8 in. by 3/4 in. sherardized).....
213	1469087	"	1	Bearing block for armature.....
214	1451265	"	1	Support for series overload coil.....
	167685	"	2	Screw fastening bearing block to frame (10-30, 7/8 in. r.h. sherardized)
	154191	"	2	Spring lock washer for No. 167685 (13/64 in. by 25/64 in. by 0.0625 in.).....



THE ABOVE ILLUSTRATION IS REPRESENTATIVE OF THE TYPE DB-685 FORM D RELAYS, BASE AND RESISTOR UNITS COVERED BY THIS BULLETIN

215	409046	All Forms	1	Adjusting screw for tripping arm.....
216	151842	"	1	Lock nut for adjusting screw (1/2 in.-13, 1/4 in. thick, hex. st'd, sher.)
217	1407200	"	1	Calibrating plate.....
	166096	"	2	Screw fastening calibrating plate to frame (10-30, 3/8 in. r.h. sher.)
	154191	"	2	Spring lock washer for No. 166096 (13/64 in. by 25/64 in. by 0.0625 in.).....
218	1406397	"	1	Calibrating spring support.....
219	176211	"	1	Calibrating tension spring.....
220	1499537	"	1	Calibrating adjusting screw.....
221	201343	"	2	Contact finger with tip.....
222	1442537	"	2	Stop for contact finger.....
	166096	"	4	Screw fastening contact finger and stop to support (10-30, 3/8 in. r.h.)
	154191	"	4	Spring lock washer for No. 166096 (13/64 in. by 25/64 in. by 0.0625 in.).....
223	209982	"	1	Large contact support with contact plate.....
224	209983	"	1	Small contact support with contact plate.....
225	462387	"	2	Contact plate.....
	175561	"	2	Screw fastening contact plate to support (10-30, 1/2 in. r.h. sher.)
	154191	"	2	Spring lock washer for No. 175561 (13/64 in. by 25/64 in. by 0.0625 in.).....

GEF-978A Parts of Type DB-981 Line Breakers

TYPE DB-685, FORMS D1, D2, D3, AND D4 RELAYS

Ref. No.	Cat. No.	Line Breaker Form	No. Required	Description
	167685	All Forms	4	Screw fastening contact support and terminal base to relay base (10-30, $\frac{7}{8}$ in. r.h. sherardized)
	150279	"	4	Washer for No. 167685 ($\frac{13}{64}$ in. by $\frac{13}{32}$ in. by 0.044 in. sherardized)
	154191	"	4	Spring lock washer for No. 167685 ($\frac{13}{64}$ in. by $\frac{25}{64}$ in. by 0.0625 in.)
226	1406318	"	2	Terminal base
	417591	"	1	Copper terminal for No. 1406318
	166096	"	2	Screw fastening terminal to base (10-30, $\frac{3}{8}$ in. r.h. sherardized)
	154191	"	2	Spring lock washer for No. 166096 ($\frac{13}{64}$ in. by $\frac{25}{64}$ in. by 0.0625 in.)
227	257135	"	1	Air cylinder with piston, rod, spring and cover
	2190688P2	"	1	Piston for air cylinder
	2408419	"	1	Rod for piston
228	1437290	"	1	Insulation for piston rod
	2410633	"	1	Pressure spring for piston
	2190688P4	"	1	Cover for air cylinder
229	2190688P5	"	1	Supporting bracket for air cylinder
230	2190688P13	"	1	Retaining nut for air cylinder
	1455065	"	1	Locking spring for cover
	139359	"	1	Spring lock washer for retaining nut ($\frac{39}{64}$ in. by $1\frac{13}{32}$ in. by 0.0625 in.)
	126931	"	2	Screw fastening supporting bracket to base (14-24, $\frac{1}{8}$ in. hex. h. slot. sherardized)
	160980	"	2	Washer for No. 126931 ($\frac{17}{64}$ in. by $\frac{3}{4}$ in. by 0.0625 in. sherardized)
	150479	"	2	Nut for No. 126931 (14-24, hex. st'd, sherardized)
	154194	"	2	Spring lock washer for No. 150479 ($\frac{17}{64}$ in. by $\frac{29}{64}$ in. by $\frac{5}{64}$ in. thick)

BASE FOR RELAY AND RESISTOR UNITS

231	1437296	All Forms	1	Base for relay and resistor units
	26C10	A5, A6, A7, A8	1	Base for two resistor units
	1401924	A1, A2, A3, A4	4	Terminal block for resistor unit
	1451409	A5, A6, A7, A8	4	Terminal block for resistor unit
	411512	A1, A2, A3, A4	4	Copper terminal for No. 1401924
	411512	A5, A6, A7, A8	6	Copper terminal for No. 1451409
	127116	All Forms	4	Screw fastening terminal block to No. 1437296 (14-24, $\frac{5}{8}$ in. r.h. sher.)
	144066	A5, A6, A7, A8	4	Screw fastening terminal block to No. 26C10 (14-24, $\frac{5}{8}$ in. f.h. sher.)
	121815	A1, A2, A3, A4	4	Screw fastening copper terminal and resistor unit to terminal block (14-24, $\frac{1}{2}$ in. r.h. sherardized)
	121815	A5, A6, A7, A8	8	Screw fastening copper terminal and resistor unit to terminal block (14-24, $\frac{1}{2}$ in. r.h. sherardized)
	143974	A1, A2, A3, A4	8	Washer for No. 127116 or 121815 ($\frac{17}{64}$ in. by $\frac{1}{2}$ in. by 0.0625 in. sher.)
	143974	A5, A6, A7, A8	12	Washer for No. 127116 or 121815 ($\frac{17}{64}$ in. by $\frac{1}{2}$ in. by 0.0625 in. sher.)
	154194	A1, A2, A3, A4	8	Spring lock washer for No. 127116 or 121815 ($\frac{17}{64}$ in. by $\frac{29}{64}$ in. by $\frac{5}{64}$ in.)
	154194	A5, A6, A7, A8	12	Spring lock washer for No. 127116 or 121815 ($\frac{17}{64}$ in. by $\frac{29}{64}$ in. by $\frac{5}{64}$ in.)
	1443109	All Forms	1	Supporting bracket for relay base
	2450690	A5, A6, A7, A8	1	Supporting bracket for resistor unit base
	30519	All Forms	3	Cap screw fastening relay base to support ($\frac{5}{16}$ in.-18, $1\frac{1}{4}$ in. hex. h. slot. sherardized)
	127116	A5, A6, A7, A8	2	Screw fastening resistor unit base to support (14-24, $\frac{5}{8}$ in. r.h. sher.)
	498560	All Forms	3	Washer for No. 30519 ($\frac{21}{64}$ in. by $\frac{5}{8}$ in. by 0.0625 in. sherardized)
	143974	A5, A6, A7, A8	2	Washer for No. 127116 ($\frac{17}{64}$ in. by $\frac{1}{2}$ in. by 0.0625 in. sherardized)
	1480733	All Forms	3	Nut for No. 30519 ($\frac{5}{16}$ in.-18, hex. st'd, sherardized)
	150479	A5, A6, A7, A8	2	Nut for No. 127116 (14-24, hex. st'd, sherardized)
	154196	All Forms	3	Spring lock washer for No. 1480733 ($\frac{21}{64}$ in. by $\frac{37}{64}$ in. by $\frac{5}{64}$ in. thick)
	154194	A5, A6, A7, A8	2	Spring lock washer for No. 150479 ($\frac{17}{64}$ in. by $\frac{29}{64}$ in. by $\frac{5}{64}$ in. thick)
	1431110	All Forms	1	Insulation shield for relay
	1419726	"	1	Spacer between base and support
232	433468	"	1	Connection strip for resistor unit
233	22X920	"	2	Resistor unit, 750 ohms
233	222857	A5, A6, A7, A8	2	Resistor unit, 1350 ohms