

General Electric Company

Schenectady, N.Y.

JANUARY, 1921

BULLETIN NO. 54630.1

PARTS OF TYPE B-54 FORM A CONTROLLER

Cat.No.	Description
221273	MAIN HANDLE, malleable iron, with locking wedge
189499	REVERSE HANDLE, malleable iron
FRAME AND DETAILS	
1857501G1	FRAME with supporting bracket, bearing block, bearing cap, bushing, cap screws, pivot pin and latches for cover
1886845P2	Bearing cap for main cylinder shaft
1477996	Bearing block for reverse and cutout switch cylinder shafts
1888407P1	Supporting bracket for bearing block
235501	Cap screw for fastening bearing cap to frame (3/8 in.-16, 1 5/8 in. hex.h. slot. sherardized)
149826	Cap screw for fastening bearing block to supporting bracket (5/16 in.-18, 1 3/4 in. hex.h. slot. sherardized)
1487229	Bushing for main cylinder shaft bearing
1401300	Hinge bracket for latch
234725	Latch for cover, consists of handle, compression spring, eyebolt and hinge pin
1159463P25	Handle for latch
234726	Compression spring for handle
1443140	Retainer for compression spring
1487234	Eyebolt for latch
1487236	Hinge pin for eyebolt
110774	Spring cotter for hinge pin (3/32 in. by 5/8 in. sherardized)
462600	Copper terminal for ground connection
176241	Cap screw for fastening copper terminal to frame (3/8 in.-16, 1/2 in. hex.h. slot. sherardized)
141259	Washer for No. 176241 (13/32 in. by 3/4 in. by 0.0625 in. sherardized)
154197	Spring lock washer for No. 176241 (13/32 in. by 25/32 in. by 3/32 in. thick)
1886876G1	Cap plate with bushing
112024	Bushing for main cylinder shaft bearing

NOTE:-Data subject to change without notice.

PARTS OF TYPE B-54 FORM A CONTROLLER

FRAME AND DETAILS (CONTINUED)

Cat.No.	Description
30520	Set screw for bushing (5/16 in.-18, 5/16 in. headless, pointed, sherardized)
131030	Screw for fastening cap plate to frame (3/8 in.-16, 1 in. f.h. sherardized)
127064	Water cap and pointer for main cylinder shaft, with set screw
127065	Water cap for reverse or cutout switch cylinder operating shaft, with set screw
14410	Set screw for No. 127064 or 127065 (5/16 in.-18, 5/8 in. headless, sp'1, sherardized)
1886890G1	Sheet iron cover
1656190P1	Slotted lug for cover

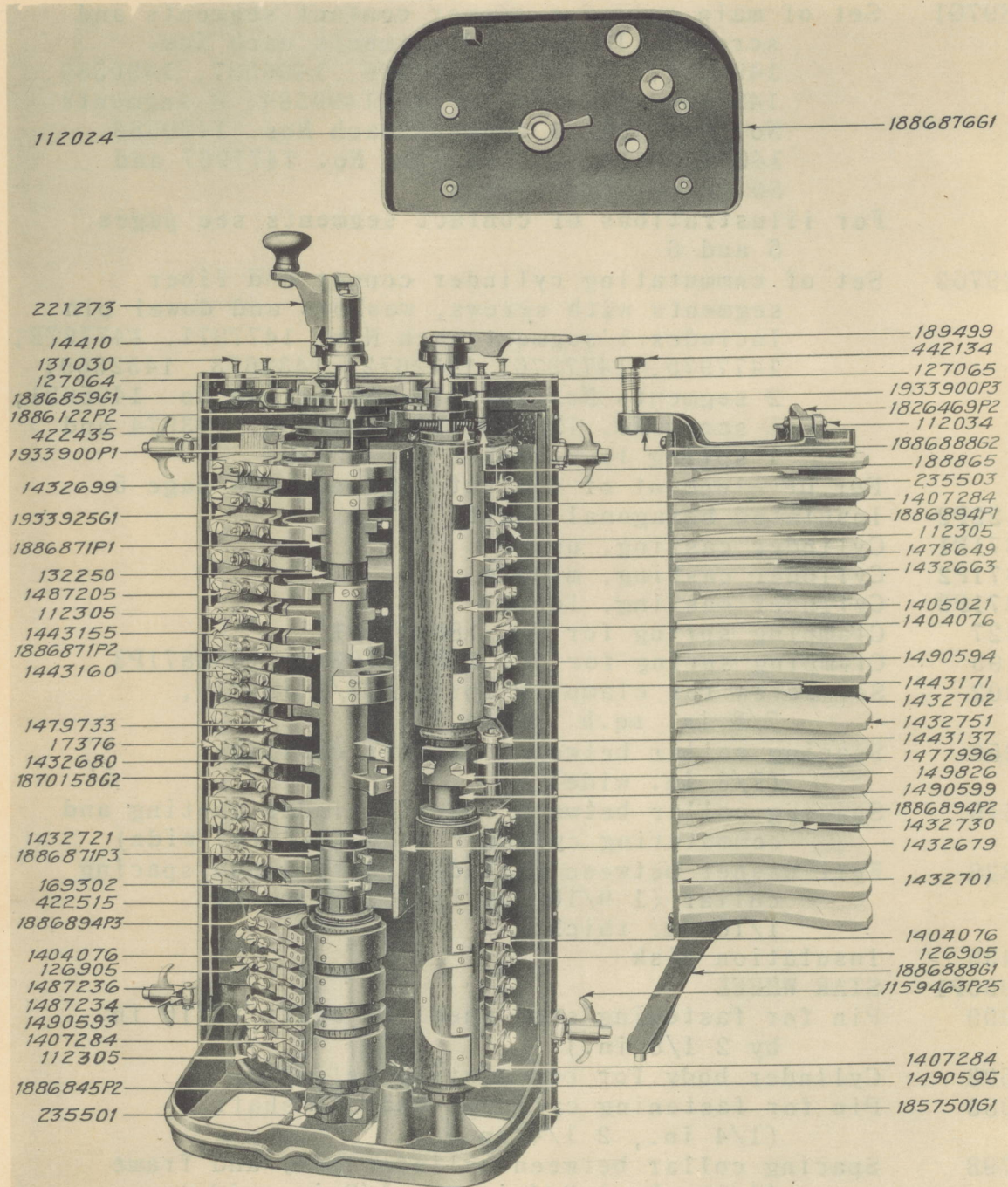
ARC DEFLECTOR AND DETAILS

1888408G1	ARC DEFLECTOR with arc suppressor plates
1432702	Wide strip for arc deflector
1432701	Narrow strip for arc deflector
1432751	Arcing plate
1432730	ARC SUPPRESSOR PLATE
127347	Screw for fastening arcing plate or arc suppressor plates to wide or narrow strip (No. 10, 3/4 in. f.h. sherardized)
1886888G2	Hinge bracket, upper, with latch
1886888G1	Hinge bracket, lower, with hinge pin
1826469P2	Latch for arc deflector
19977	Compression spring for latch
112034	Hinge pin for latch (3/8 in. by 2 in. long)
110774	Spring cotter for hinge pin (3/32 in. by 5/8 in. sherardized)
1487201	Hinge pin for lower hinge bracket
128999	Screw for fastening arc deflector to hinge bracket (5/16 in.-18, 3/4 in. r.h. sherardized)
145598	Washer for No. 128999 (21/64 in. by 5/8 in. by 0.0625 in. sherardized)
154196	Spring lock washer for No. 128999 (21/64 in. by 37/64 in. by 5/64 in. thick)
442134	Hinge bolt for arc deflector

MAIN AND COMMUTATING CYLINDERS AND DETAILS

1886122G1	MAIN CYLINDER with shaft, star wheel, insulation disk, commutating cylinder and contact segments
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PARTS OF TYPE B-54 FORM A CONTROLLER



112024

188687661

221273
 14410
 131030
 127064
 188685961
 1886122P2
 422435
 1933900P1
 1432699
 193392561
 1886871P1
 132250
 1487205
 112305
 1443155
 1886871P2
 1443160
 1479733
 17376
 1432680
 187015862
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 1886871P3
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 188865
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 1407284
 1886894P1
 112305
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 1404076
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 1443171
 1432702
 1432751
 1443137
 1477996
 149826
 1490599
 1886894P2
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 1432679
 1432701
 1404076
 126905
 188688861
 1159463P25
 1407284
 1490595
 185750161

Type B-54 Form A Controller

PARTS OF TYPE B-54 FORM A CONTROLLER

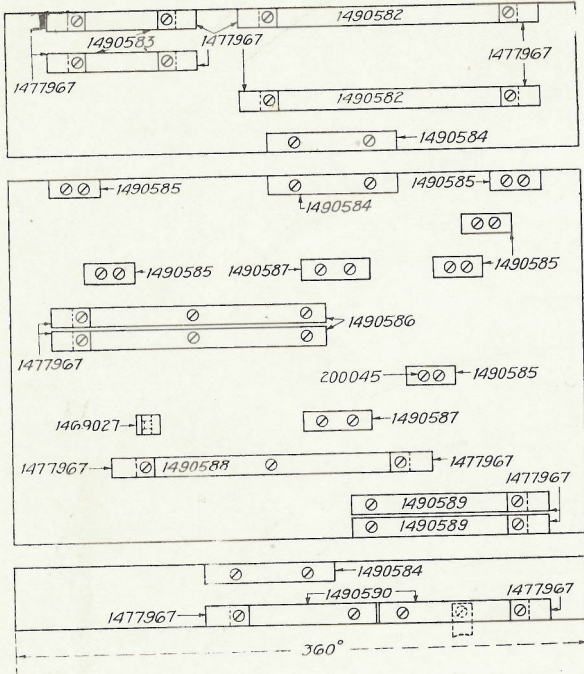
MAIN AND COMMUTATING CYLINDERS AND DETAILS (CONT NUED)

Cat.No.	Description
1618897G1	Set of main cylinder copper contact segments and screws. Includes 2 segments each Nos. 1490582, 1490583, 1490586, 1490587, 1490589, 1490590; 3 segments No. 1490584; 6 segments No. 1490585; 1 segment each Nos. 1490588, 1469027; 16 burning tips No. 1477967 and 50 screws No. 200045 For illustrations of contact segments see pages 5 and 6
1618897G2	Set of commutating cylinder copper and fiber segments with screws, washers and dowel pin. Includes 1 segment each Nos. 1477971, 1477972, 1477975, 1477976, 1432672, 1432673, 1432669; 2 segments No. 1477974; 37 screws No. 1405021; 1 screw No. 121815; 1 washer No. 143974 and 1 spring lock washer No. 154194 For development of contact segments see page 5
1886122P2	Insulated hexagonal shaft
1886871P1	Cylinder casting, upper
1886871P2	Cylinder casting, middle
1886871P3	Cylinder casting, lower
436427	Clamping spring for No. 1886871P1
113193	Clamping spring for No. 1886871P2 or 1886871P3
169302	Set screw for clamping spring (3/8 in.-16, 7/8 in. sq.h. st'd)
132250	Spacing collar between cylinder castings (7/8 in. wide)
422515	Spacing collar between lower cylinder casting and commutating cylinder body (3/4 in. wide)
460329	Felt washer between cylinder casting and spacing collar (1 9/16 in. by 2 1/8 in. by 1/16 in. thick)
422435	Insulation disk
1933900P1	STAR WHEEL
167990	Pin for fastening star wheel to shaft (5/16 in. by 2 1/8 in.)
1490593	Cylinder body for commutating cylinder
228083	Pin for fastening cylinder body to shaft (1/4 in., 2 1/4 in.)
485798	Spacing collar between cylinder body and frame (1 in. by 1 3/4 in. by 1/2 in. wide)
402113	Pin for fastening collar to shaft (1/4 in. by 1 7/8 in.)
200045	Retaining screw for oil wick (14-24, 1/2 in. f.h. sp'l, sherardized)

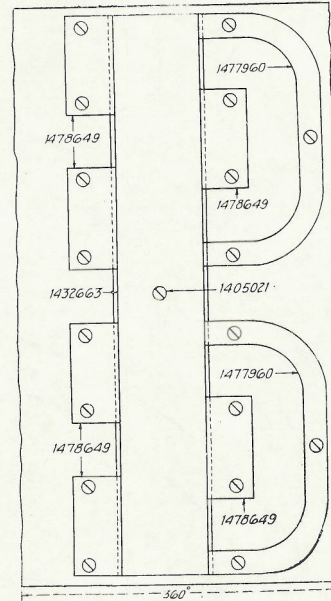
PARTS OF TYPE B-54 FORM A CONTROLLER

MAIN AND COMMUTATING CYLINDERS AND DETAILS (CONTINUED)

MAIN CYLINDER

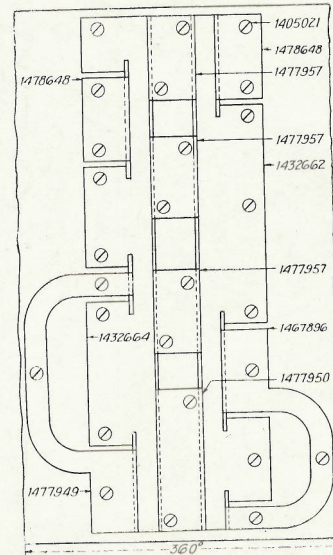
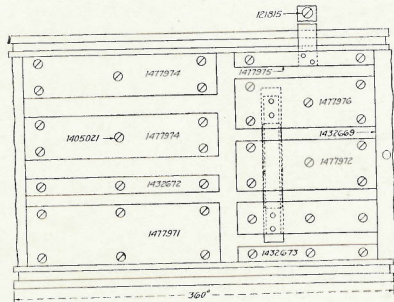


REVERSE CYLINDER



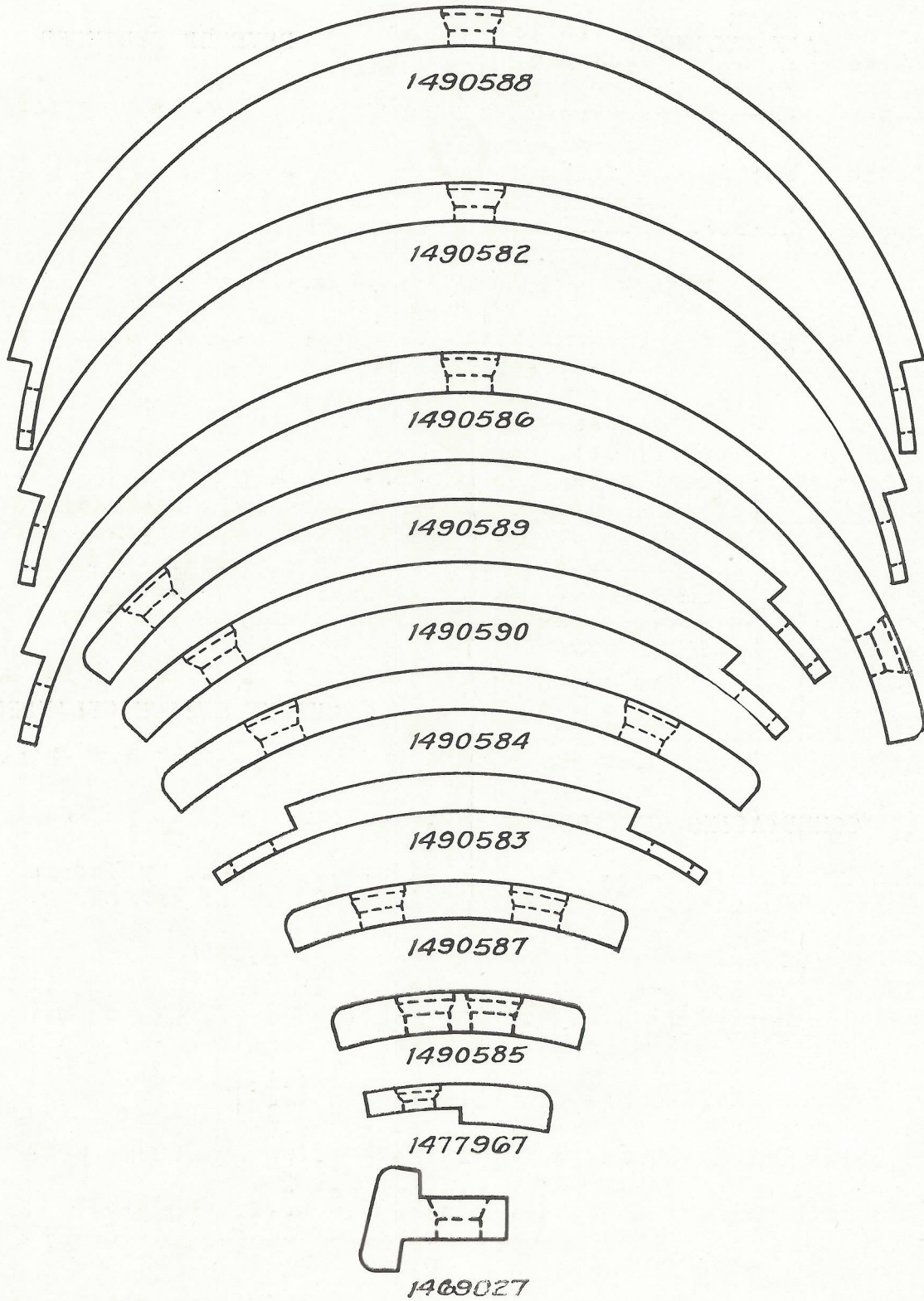
CUTOUT SWITCH CYLINDER

COMMUTATING CYLINDER



PARTS OF TYPE B-54 FORM A CONTROLLER

MAIN CYLINDER SEGMENTS



PARTS OF TYPE B-54 FORM A CONTROLLER

MAIN AND COMMUTATING CYLINDERS AND DETAILS (CONTINUED)

Cat.No.	Description
1886859G1	Check pawl with roller, for main cylinder shaft
204123	Roller with pin
476469	Pivot pin for check pawl
149806	Washer for pivot pin (17/32 in. by 1 in. by 0.0625 in. sherardized)
133468	Spring cotter for pivot pin (1/8 in. by 3/4 in. sherardized)
235502	Compression spring for check pawl

REVERSE CYLINDER AND DETAILS

1886893G1	REVERSE CYLINDER with shaft, star wheel, collar and contact segments
1477960	Long copper contact segment
1478649	Short copper contact segment
1432663	Fiber filler segment
1405021	Segment screw (No. 8, 3/4 in. f.h. sp'1)
1886862G2	Set of reverse cylinder copper and fiber segments with screws. Includes 2 segments No. 1477960; 6 segments No. 1478649; 1 segment No. 1432663 and 19 screws No. 1405021. For development of contact segments see Page 5
1490594	Cylinder body
228083	Pin for fastening cylinder body to shaft (1/4 in. by 2 1/4 in.)
1933900P3	STAR WHEEL
401595	Collar for shaft (3/4 in. by 1 1/2 in. by 1/2 in. thick)
29073	Pin for fastening star wheel or collar to shaft (1/4 in. by 1 5/8 in.)
1886859P3	Interlocking pawl for main and reverse cylinders
1487228	Hinge pin for interlocking and cutout switch cylinder pawls
235503	Tension spring for interlocking pawl
188865	Spring post for tension spring
154196	Spring lock washer for No. 188865 (21/64 in. by 37/64 in. by 5/64 in. thick)

CUTOUT SWITCH CYLINDER AND DETAILS

1930591G1	OPERATING SHAFT for cutout switch cylinder, with star wheel and operating arm
1930591P10	Fiber insulation sleeve for operating shaft (3/4 in. by 7/8 in. by 14 3/4 in. long)
1933900P2	STAR WHEEL

PARTS OF TYPE B-54 FORM A CONTROLLER

CUTOUT SWITCH CYLINDER AND DETAILS (CONTINUED)

Cat.No.	Description
1491100	Operating arm with pivot pin
161261	Washer for pivot pin (15/32 in. by 7/8 in. by 0.0625 in. sherardized)
110774	Spring cotter for pivot pin (3/32 in. by 5/8 in. sherardized)
402113	Pin for fastening star wheel or operating arm to shaft (1/4 in. by 1 7/8 in.)
1886895G1	CUTOUT SWITCH CYLINDER with shaft, operating arm, collar and contact segments
1886862G1	Set of cutout switch copper and fiber segments. Includes 3 segments No. 1477957; 2 segments No. 1478648; 1 segment each Nos. 1467896, 1477949, 1477950, 1432662, 1432664, and 27 screws No. 1405021 For development of contact segments see Page 5
1490595	Cylinder body
228083	Pin for fastening cylinder body to shaft (1/4 in. by 2 1/4 in.)
1490599	Operating arm with pivot pin
161261	Washer for pivot pin (15/32 in. by 7/8 in. by 0.0625 in. sherardized)
110774	Spring cotter for pivot pin (3/32 in. by 5/8 in. sherardized)
401595	Collar for shaft (3/4 in. by 1 1/2 in. by 1/2 in. thick)
29073	Pin for fastening operating arm or collar to shaft (1/4 in. by 1 5/8 in.)
1443137	Connection link for operating arms
1886859P1	Pawl for cutout switch cylinder
235504	Compression spring for pawl

INSULATION TROUGH AND DETAILS

1886897G1	INSULATION TROUGH for main cylinder
1432678	Back plate for trough
1432679	Side plate for trough, right-hand
1432659	Side plate for trough, left-hand
1432680	Finger shield for main contact finger
1432721	Arcing plate
194951	Screw for fastening side plate, back plate or finger shield to arcing plate (10-30, 5/8 in. f.h. sherardized)
126912	Screw for fastening insulation trough to frame (14-24, 3/4 in. r.h. sherardized)
143974	Washer for No. 126912 (17/64 in. by 1/2 in. by 0.0625 in. sherardized)
154194	Spring lock washer for No. 126912 (17/64 in. by 29/64 in. by 5/64 in. thick)

PARTS OF TYPE B-54 FORM A CONTROLLER

MAIN FINGER BLOCK AND DETAILS

Cat.No.	Description
1888411G1	MAIN FINGER BLOCK with blowout coils, finger bases and contact fingers
235505	Main finger block with blowout coils and finger bases, without fingers
1432699	Finger block
1933925G1	Blowout coil with pole pieces, terminal block and finger base
133475	Screw for fastening blowout coil to finger block (14-24, 1 1/8 in. r.h. sherardized)
143974	Washer for No. 133475 (17/64 in. by 1/2 in. by 0.0625 in. sherardized)
154194	Spring lock washer for No. 133475 (17/64 in. by 29/64 in. by 5/64 in. thick)
1443170	Large copper terminal for blowout coil
1443171	Small copper terminal for blowout coil
126905	Cap screw for fastening copper terminal to blowout coil (14-24, 5/8 in. hex.h. slot. sherardized)
143974	Washer for No. 126905 (17/64 in. by 1/2 in. by 0.0625 in. sherardized)
154194	Spring lock washer for No. 126905 (17/64 in. by 29/64 in. by 5/64 in. thick)
1870158G2	Main contact finger. Per set of 16. Cat.No. is for one finger
1479733	Contact tip
112305	Cap screw for fastening contact tip to finger (14-24, 1/2 in. hex.h. slot. sherardized)
143974	Washer for No. 112305 (17/64 in. by 1/2 in. by 0.0625 in. sherardized)
154194	Spring lock washer for No. 112305 (17/64 in. by 29/64 in. by 5/64 in. thick)
1487205	Adjusting screw
234753	Compression spring
1443160	Retainer for compression spring
1443155	Locking spring for adjusting screw
143497	Spring cotter for adjusting screw (1/16 in. by 1/2 in. sherardized)
17376	Cap screw for fastening contact finger to finger base (5/16 in.-18, 3/4 in. hex.h. slot. sherardized)
145598	Washer for No. 17376 (21/64 in. by 5/8 in. by 0.0625 in. sherardized)
154196	Spring lock washer for No. 17376 (21/64 in. by 37/64 in. by 5/64 in. thick)
1443161	Copper connection strip for two contact fingers
1443143	Copper connection strip for three contact fingers
1432725	Fiber stop block for arc deflector

PARTS OF TYPE B-54 FORM A CONTROLLER

MAIN FINGER BLOCK AND DETAILS (CONTINUED)

Cat.No.	Description
189820	Screw for fastening stop block to finger block (No. 6, 7/8 in. f.h. sherardized)
141224	Screw for fastening finger block to frame (5/16 in.-18, 1 1/4 in. r.h. sherardized)
145598	Washer for No. 141224 (21/64 in. by 5/8 in. by 0.0625 in. sherardized)
154196	Spring lock washer for No. 141224 (21/64 in. by 37/64 in. by 5/64 in. thick)

COMMUTATING, REVERSE OR CUTOUT SWITCH FINGER BLOCKS AND DETAILS

1886860G3	COMMUTATING FINGER BLOCK with finger bases and contact fingers
1886860G1	REVERSE FINGER BLOCK with finger bases and contact fingers
1886860G2	CUTOUT SWITCH FINGER BLOCK with finger bases and contact fingers
235507	Commutating finger block with finger bases, without fingers
235508	Reverse finger block with finger bases, without fingers
235509	Cutout switch finger block with finger bases, without fingers
1886894P3	Commutating finger block
1886894P1	Reverse finger block
1886894P2	Cutout switch finger block
1404076	Finger base
121834	Screw for fastening finger base to block (No. 10, 7/8 in. f.h. sherardized)
1407284	#COMMUTATING, REVERSE OR CUTOUT SWITCH CONTACT Δ FINGER. Cat.No. is for one finger.
1460080	Contact tip
1443171	Copper terminal for contact finger
1445988	Copper connection strip for commutating contact finger
126905	Cap screw for fastening copper terminal and contact finger to finger base (14-24, 5/8 in. hex.h. slot. sherardized)
112305	Cap screw for fastening contact finger to finger base (14-24, 1/2 in. hex.h. slot. sherardized)
143974	Washer for No. 126905 or 112305 (17/64 in. by 1/2 in. by 0.0625 in. sherardized)
154194	Spring lock washer for No. 126905 or 112305 (17/64 in. by 29/64 in. by 5/64 in. thick)
171415	Screw for fastening commutating finger block to frame (5/16 in.-18, 1 5/8 in. r.h. sherardized)

PARTS OF TYPE B-54 FORM A CONTROLLER
COMMUTATING REVERSE OR CUTOUT SWITCH FINGER
BLOCKS AND DETAILS (CONTINUED)

Cat.No.	Description
131044	Screw for fastening reverse or cutout switch finger block to frame (5/16 in.-18, 1 1/2 in. r.h. sherardized)
145598	Washer for No. 171415 or 131044 (21/64 in. by 5/8 in. by 0.0625 in. sherardized)
154196	Spring lock washer for No. 171415 or 131044 (21/64 in. by 37/64 in. by 5/64 in. thick)
1432711	Fiber insulation plate between finger blocks and frame

#Per set of 8 for commutating or reverse finger block

ΔPer set of 9 for cutout switch finger block

PARTS OF TYPE B-54 FORM A CONTROLLER

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General Electric Company

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