

GFELLER SUBSCRIBER LINE CONCENTRATOR 49-9-2
PIECE-PART DATA, REPLACEMENT PROCEDURES
AND COMPONENT PART DATA

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1. GENERAL

1.01 This section covers the information necessary for the ordering and replacement of parts used in the maintenance of the Gfeller line concentrator. This section supersedes all previous forms of ordering information.

1.02 Part 2 of this section covers the piece-part numbers and the corresponding names of the parts that may be ordered for replacement. Part 2 also contains drawings that show the different parts. This information collectively is called Piece-Part Data.

1.03 Part 3 specifies the replacement procedure for those parts for which the method to be used is not obvious.

1.04 Part 4 covers ordering information for capacitors, resistors, rectifiers, and miscellaneous equipment.

2. PIECE-PART DATA

2.01 Figs. 1 and 2 are drawings that show the various parts of the relay and switch respectively. Each part is labelled with a number that associates the part with a parts list.

2.02 Tables A and B are parts lists, for the relay and switch respectively, that show the number relative to Fig. 1 or 2, name of part, part number, and a view of each part.

2.03 When ordering parts for replacement purposes, give the part name, the number of the part preceded by the name "Gfeller," and specify that it is for the Gfeller Line Concentrator 49-9-2. For example: Armature Angle, Gfeller K9747/3, for the Gfeller Line Concentrator 49-9-2. When the table indicates for exchange side (ES) or for subscriber side (SS), this should be specified after the part name in the ordering information. For example: Coil for relay PA, ES; see Drawing T8598-5 for Gfeller Line Concentrator.

2.04 When ordering parts do not include any of the descriptive information shown in parenthesis in the tables nor make any reference to this BSP.

TABLE A
PIECE PARTS OF LINE CONCENTRATOR LD 49-9-2

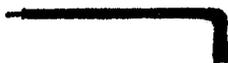
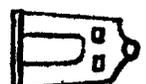
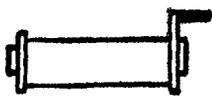
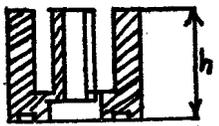
NO.	NAME (See Fig. 1)	Part No.	View
1	Yoke	K11027-2	
2	Armature (Multi purpose relays)	K11027-1	
3	Residual (For relay) .001 " " " .0039 " " " .005 " " " .007	K13650/1 K13650/2 K13650/3 K13650/4	
3a	Residual Screw	K11027-4	
3b	Nut	K11027-5	
4	Armature (drilled for residual screw) (AC relays)	K11027-3	
5	Armature angle	K9747/3	
6	Screw	K11027-6	
7			
8	Coil for Relay _____, ES or _____, SS. See Dwg. T8598-5		
9	Armature Stud	N4052	
10			
11	Armature Spring	K16111	
12	Spring assembly block H .394" " " " H .556" " " " H .866"	K9747-10 K9747-14 K9747-18	

TABLE A (Cont'd)

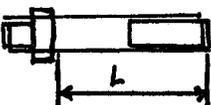
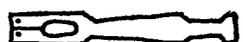
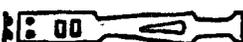
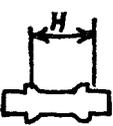
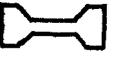
NO.	NAME (See Fig. 1)	Part No.	View
13	Spring Assembly bolt L .551 " " " L .709 " " " L .866	K9747/16-14 K9747/16-18 K9747/16-22	
14	Pressure Plate	K9747/15	
15	Spring assembly nut	K9747/30	
16	Transfer Spring	K9747/10-1	
17	Contact spring	K9747/11	
18	Tension spring	K9747/12	
19	Terminal lugs	K9747/13	
20	Contact spring	K9747/10-2	
21	Fiber separator H .0788" " " H .118" " " H .157" " " H .212"	K9747/19-2 K9747/19-3 K9747/19-4 K9747/19-5	
22	Bridge, Spring assembly	K9747/19-1	
23	Washer, spring assembly	K9747/20	
24	Fiber pilespace .0394" Fiber pilespace .0197" Metal pilespace .0394" Metal pilespace .0197" Metal pilespace .0788"	K9747/14-1 K9747/14-2 K9747/14-3 K9747/14-4 K9747/14-5	

TABLE B

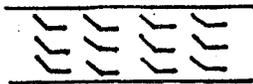
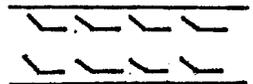
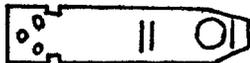
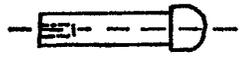
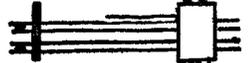
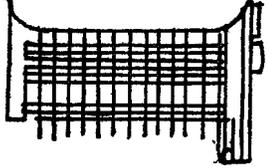
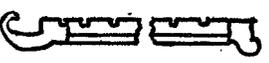
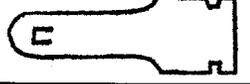
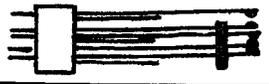
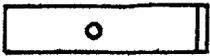
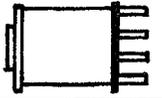
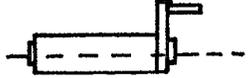
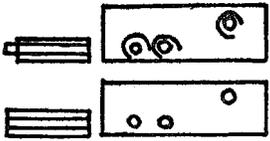
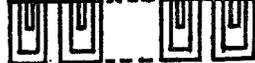
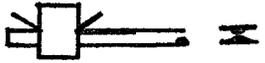
NO.	NAME (See Fig. 2)	Part No.	View
25	Vertical bar, ES	K18514-1	
26	Vertical bar, SS	K18514-2	
27	Link	K16031	
28	Link rivet	K16027	
29	Spring assembly	K20001-1	
30a 30b 30c 30d	Horizontal bar (ES odd position) Horizontal bar (ES even position) Horizontal bar (SS odd position) Horizontal bar (SS even position) Horizontal bar (ES-50 position)	K16029-1 K16029-2 K16029-3 K16029-4 K16029-5	
31	Disconnect bar	K16029-6	
32	Movable stop	K16012	
33	Reduction spring	K16019	
34	Support spring	K16708	
35	Hold spring	K16713	
36	Spring assembly	K20001-2	
37	Hinge spring with armature	K16694	
38	Hinge spring	K15999	
39	Hinge spring below	K17296	

TABLE B (Cont'd)

NO.	NAME (See Fig. 2)	Part No.	View
40	Movable stop washer	K18045	
41	Residual (vertical lift magnet)	K16699	
42a	Coil (Horizontal bar 1-49 260 ohm) Coil (Horizontal bar 50 1200 ohm)	K20002-1 K20002-2	
43	Coil (Vertical bar 1-9 56/300 ohm)	K20003	
44	Grommet	K16002	
	Subscriber Relay (ES set of 10) Subscriber Relay (SS set of 10)	K15207-1 K15207-2	
	Coil (TN Sub relay ES) Coil (TN Sub relay SS)	K15207-3 K15207-4	
	Post (New) Bracket (New) Post (Old) Bracket (Old)	K17857-1 K17857-2 K17857-3 K17857-4	
	Residual (for set of 10 sub relays)	K15207-5	
	Contact set complete for sub relay	K15207-6	
	Armature (for subscriber relay)	K15207-7	
	Kit (Nuts, bolts and screws for Gfeller relays)	K20004	
	Spring Plate indicator (sets of 10) 1-10 11-20 21-30 31-40 41-50 Specify set desired	K20005	

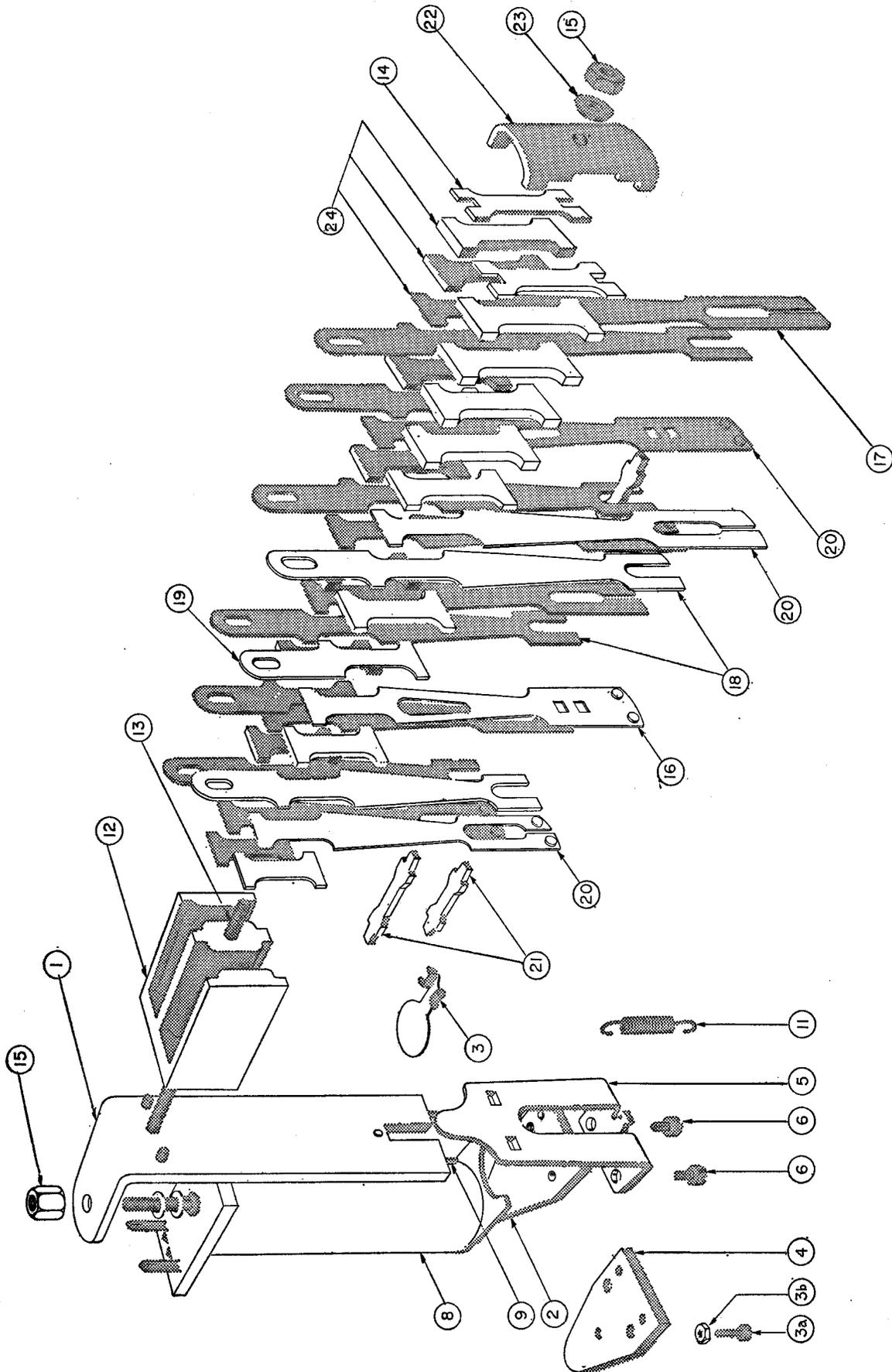


FIG. 1
GFELLER RELAY

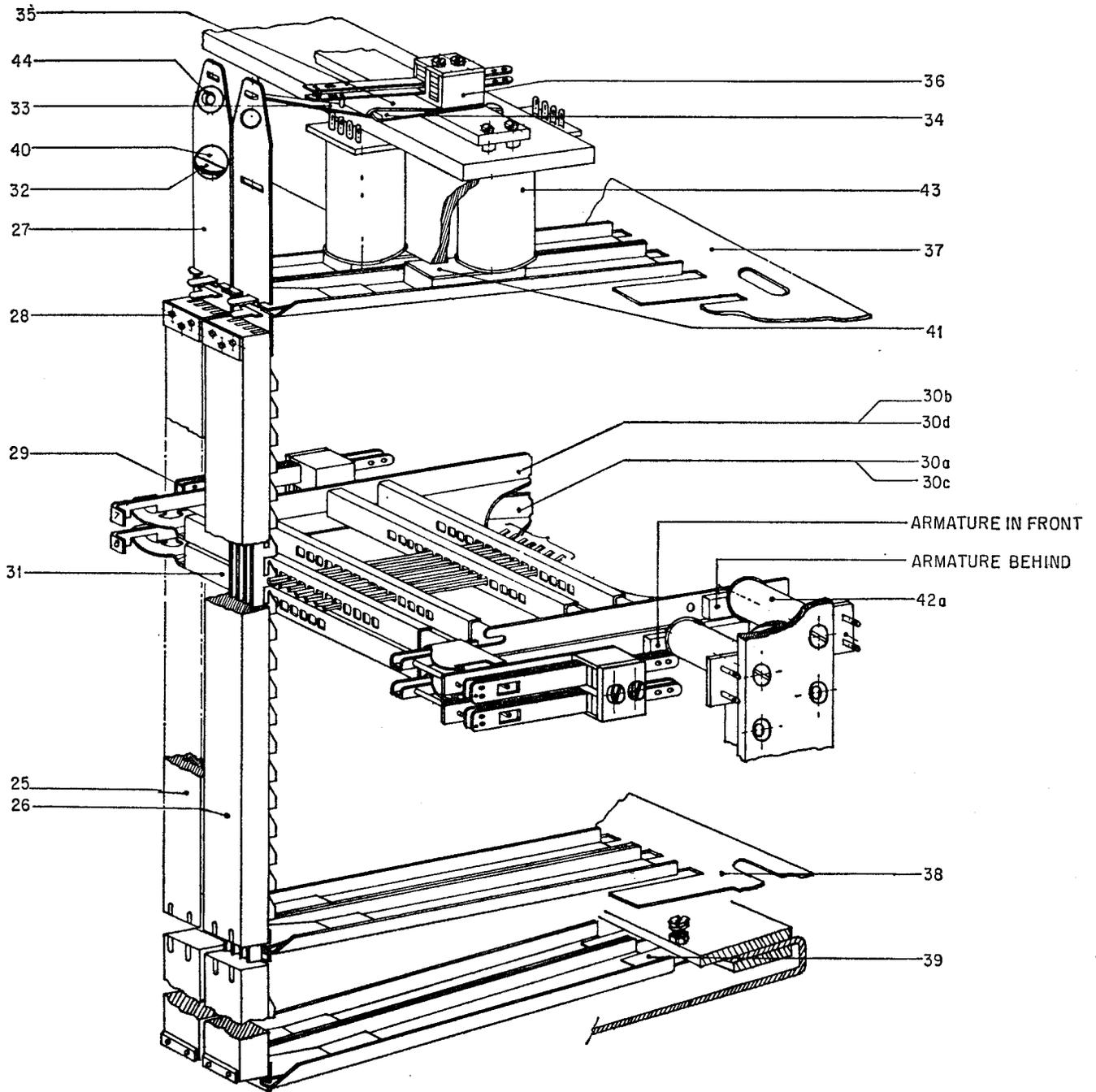


FIG. 2
GFELLER SWITCH

3. REPLACEMENT PROCEDURES

3.01 List of tools.

Code or Spec No.	Description
KS-6854	Screwdriver 3-inch cabinet screwdriver 6-1/2-inch P-long-nosed pliers Tweezers, medium size
KS-6320	Orange stick

3.02 No procedure is specified for replacement of parts where the method to be used is obvious.

3.03 After making any replacement of parts of a relay or a switch, the part or parts replaced shall meet the readjust requirements specified in Section A804.901.06; C85.010.06.

3.04 **Vertical Bar:** To remove the ES or SS vertical bar (see Fig. 3) work from the front, and proceed as follows:

- Step 1 Depress together the two tangs associated with the lower hinge spring. This will allow the vertical bar to be disengaged from the lower hinge spring.
- Steps 2, 3 Depress the two tangs as in Step 1 and disengage the vertical bar from the center and top hinge springs.
- Step 4 Disengage the movable stop bar.
- Step 5 Disengage the link from the support spring. The vertical bar is now free with the exception of the connecting wire. If the bar is to be completely removed, the wiring must be unsoldered.

To replace the vertical bar proceed in reverse order with the above steps.

3.05 **Horizontal Bar:** To remove the ES or SS horizontal bar (see Fig. 3) work from the rear of switch, and proceed as follows:

- (a) With a long-nosed pliers grasp the left corner and depress the locking pin using an orange stick.
- (b) Using the long-nosed pliers pull the bar outward.
- (c) Unhook the clip on the right-hand side of the bar and pull the bar from its mounting. The horizontal bar is now free with the exception of the connecting wire. If the bar is to be completely removed, the wiring must be unsoldered.

To replace the horizontal bar proceed in reverse order with the above steps.

4. COMPONENT PART DATA

4.01 Table C is a parts list for component parts including miscellaneous maintenance equipment. When ordering resistors and capacitors give the part name, code designation, if any, and the value. Specify that it is for the Gfeller Line Concentrator 49-9-2. For example: Resistor, P1, 9 ohm for the Gfeller Line Concentrator 49-9-2.

4.02 All other parts should be ordered as shown in the list followed by "for the Gfeller Line Concentrator 49-9-2."

4.03 When ordering a mounting strip indicate whether it is for the exchange side (ES) or subscriber side (SS). Designate the group of relays for which the strip is intended. For example: Mounting Strip for ES, relays C through PIRT for the Gfeller Line Concentrator 49-9-2.

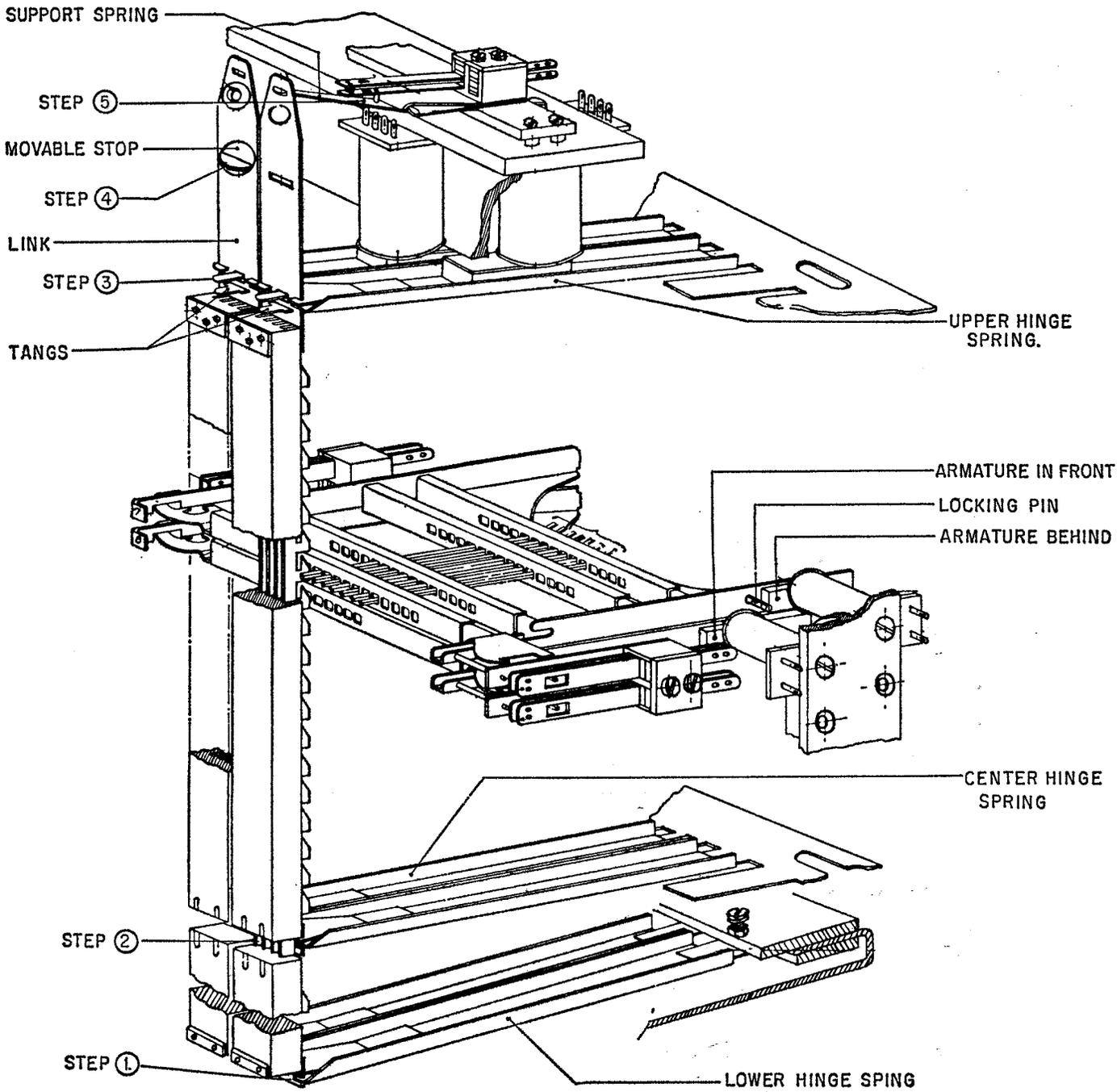


FIG. 3

GFELLER SWITCH

TABLE C

Description			Description	
Resistor	P1	9 ohms	Capacitor	0.1MF
"	P1	20 ohms	"	2MF
"	P1	50 ohms	"	3MF
"	P1	150 ohms	"	6MF
"	P1	250 ohms	"	15MF
"	P1	400 ohms	"	30MF
"	P2	450 ohms	"	45MF
"	P1	500 ohms	"	100MF
"	P2	500 ohms	"	1750MF
"	P2	600 ohms		
"	P2	2000 ohms	Fuse, Number 55, 1 amp	
"	—	20-2540 ohms	Test Leads, pair	
Rectifier, V27931			Feeler gauge, 0.10mm	
Short Circuit Plug, Red			Stop Gate, K19092	
" " " , Yellow			Mounting Strip — See 4.03	
" " " , Green				