

**GE - AK Connection Diagrams**

TAB #	Diagram #	Sheet #	CONTENTS
1	75A700105		AK-2A-15/25
	148A4517	(Same as - Close Circuit)	AK-2A-15/25
	148A4517		AK-2A-15/25
	148A4555		AK-2-15/25
	165A8413		AK-2A-15/25
	175L356-B	1	AK-1-15/25
	175L356-B	2	AK-1-15/25
	177L216-D	58	AK-2-15/25
	177L216-D	62	AK-2-15/25
	177L216-D	79	AK-2-15/25
	177L216-D	105	AK-2-15/25
	177L216-D	107	AK-2-15/25
	177L216-D	117	AK-2-15/25
	177L216-D	118	AK-2-15/25
	177L216-D	122	AK-2-15/25
	177L216-D	139	AK-2-15/25
	177L216-D	145	AK-2-15/25
	177L216-D	150	AK-2-15/25
	177L216-D	151	AK-2-15/25
	177L216-D	181	AK-2-15/25
	177L216-D	185	AK-2-15/25
	177L216-DW-G	107	AK-2-15/25
	177L216-DW-G	122	AK-2-15/25
	177L216-DW-G	173	AK-2-15/25
	177L216-DW-G	175	AK-2-15/25
	177L216-R	117	AK-2A-15/25
	177L216-R	137	AK-2A-15/25
	177L216-R	138	AK-2A-15/25
	177L216-R	33	AK-2A-15/25
	177L216-RW-G	117	AK-2A-15/25
	177L216-S	42	AK-2-15/25
	177L216-S	75	AK-2-15/25
	177L216-S	80	AK-2-15/25
	178A6540		AK-2A-15/25
	184L701-D	122	AK-3-15/25
	184L701-R	107	AK-3A-15/25
	184L701-R	117	AK-3A-15/25
	195A5177		AK-2A-15/25
	226A8502		AK-2A/3A-15/25

GE-AK-15/25 Conn Diag

		Enclosed or Stationary Mounted	AK-2-15/25
		Fig. 1 - Connection Diagram	AK-2A-15/25
	<b>177L216SWG53</b>	Hand sketch	
		Elementary Diagram	
		Drawout Breaker (USX)	AK-1-15/25
		Fig. 1 - Connection Diagram	AK-3 & AKU-3 Only

2 page

Attn: George

GENERAL ELECTRIC

CONT ON SHEET

SH NO.

REV NO. 0

TITLE

75A700105

AK-2A-15/25 D/O ACB

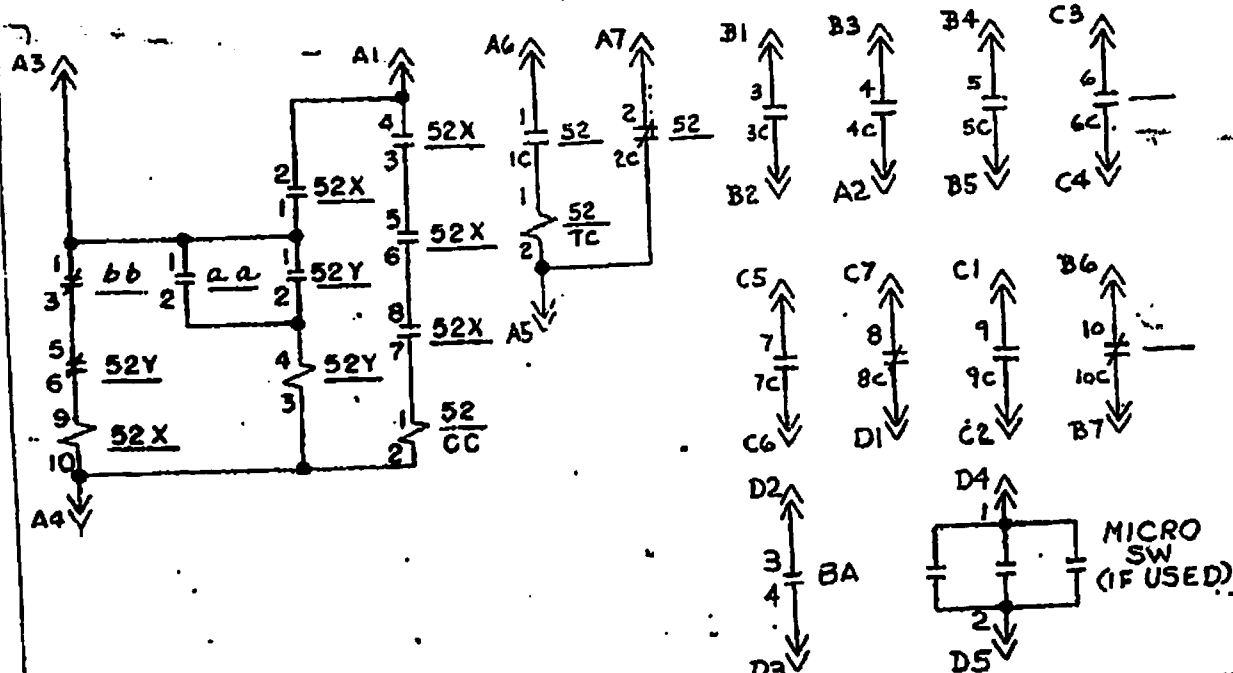
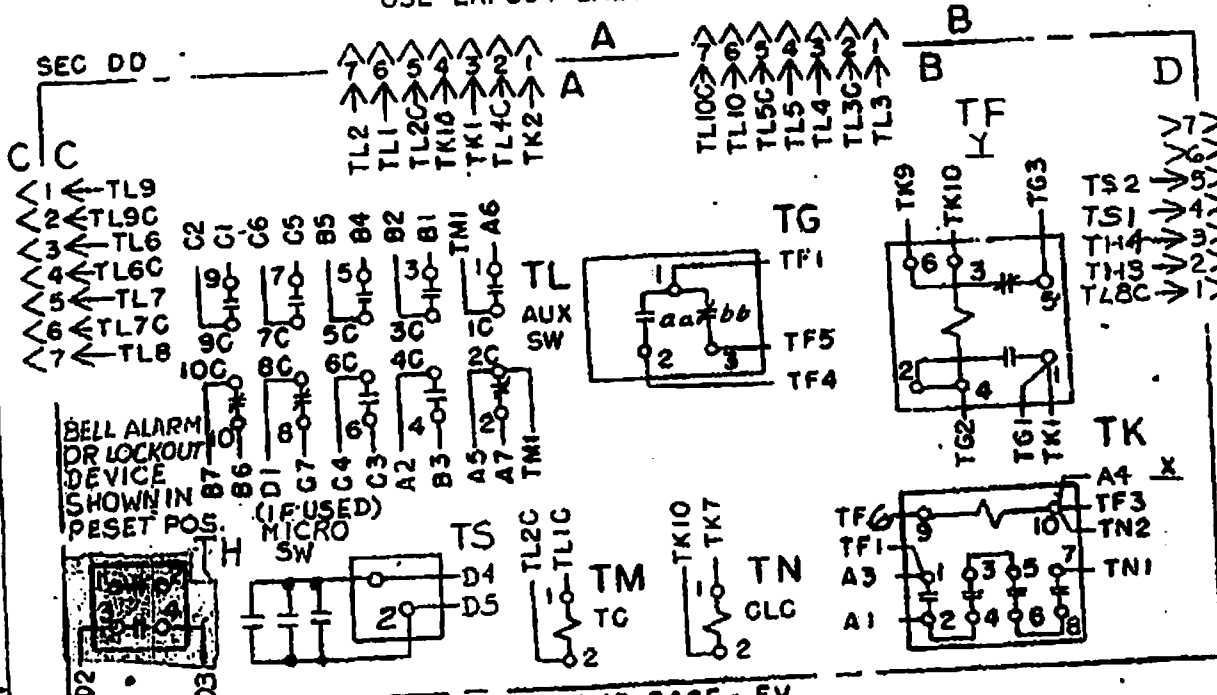
FIRST MADE FOR 413-42422 935876

CONT ON SHEET

SH NO.

USE LRP394 2A25-G117

REVISIONS



MADE BY BRB P. Morris 4/26/77

APPROVAL

SWITCHGEAR PHILADELPHIA

DIV OR DEPT. LOCATION

75A700105

CONT ON SHEET

SH NO.

LSP-EB

CODE IDENT. NO.

PP 8 - WA (9-63) PRINTED IN U.S.A.

# AK-2A-15 & 25

DRAWOUT BKR. NOTE: ALL FIG ARE FRONT VIEWS

1. THIS DRAWING SHOWS PHYSICAL CONNECTIONS EXCEPT LOCATION OF PANEL THIS UNIT IS TO BE
2. ALL CONNECTIONS ARE TO BE MADE IN ACCORDANCE WITH THE WIRING DIAGRAM
3. THE LOCATION OF CONNECTIONS OF DEVICES ARE INDICATED BY THE LETTERS AND NUMBERS
4. DEVICE LOCATION NUMBERS AND ABREVIATIONS ARE AS SHOWN IN THE DRAWING

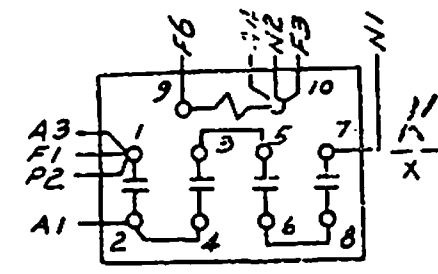
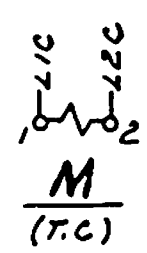
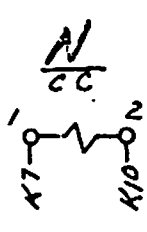
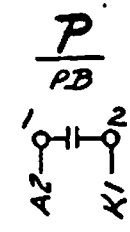
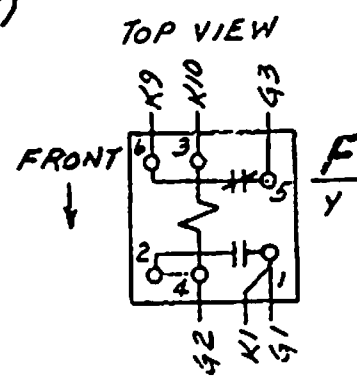
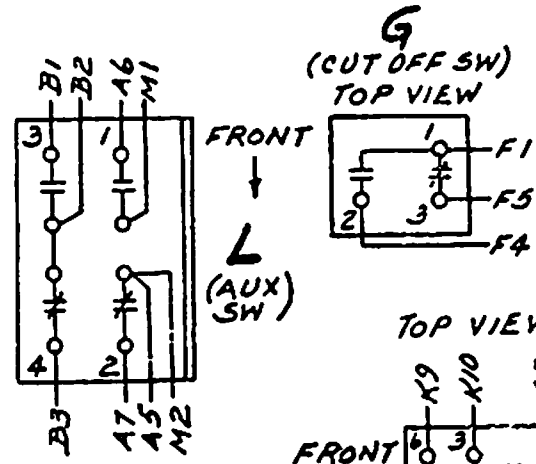
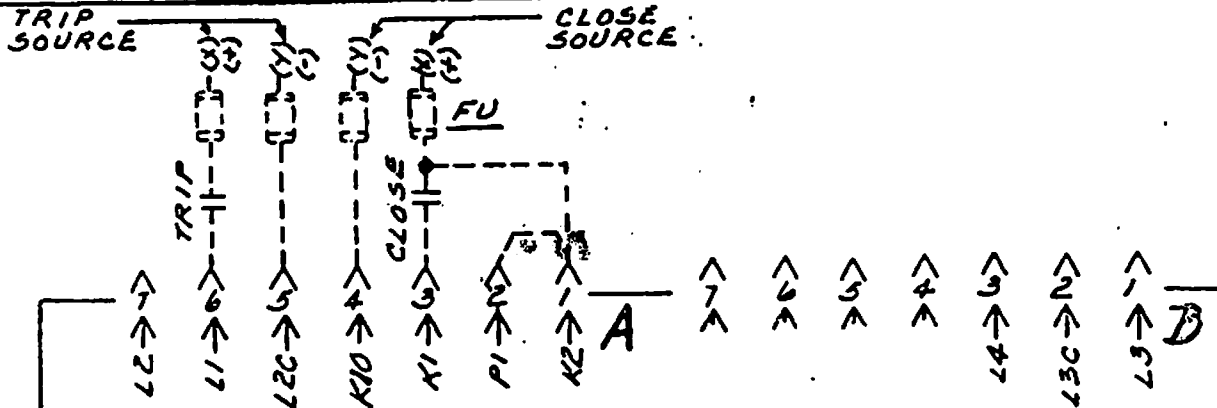


FIG-1 CONNECTION DIAGRAM

CONNECTIONS BOTH ENDS OF WIRES ARE IDENTIFIED AS TO DESTINATION. SKETCH INDICATES CONNECTION FROM DEVICE STUD 3 TO TERMINAL BOARD A TERMINAL 1.



CLOSE CIRCUIT SWITCH  
AS 148A4517

DAVE KOSSART

REV. NO. 0-1

TITLE

CONT. ON SHEET

0148A4517

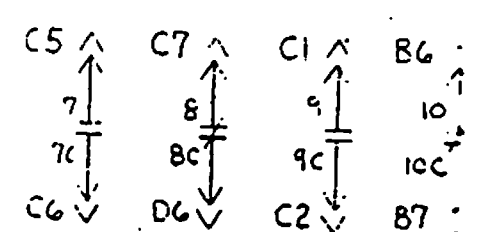
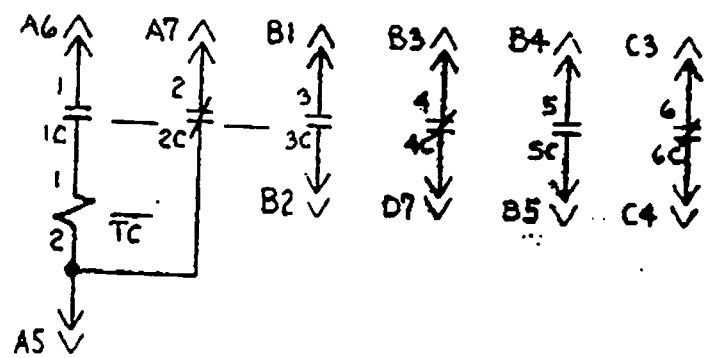
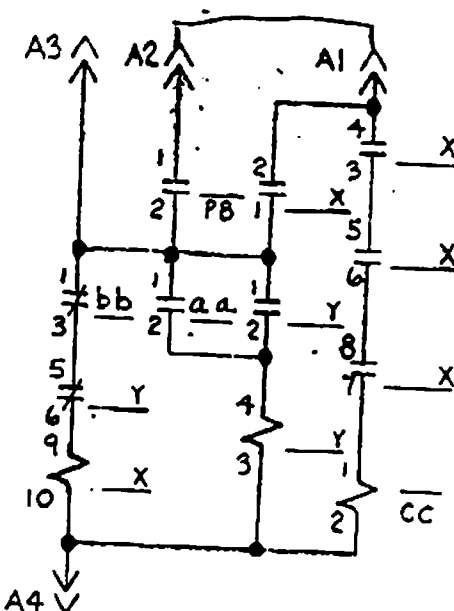
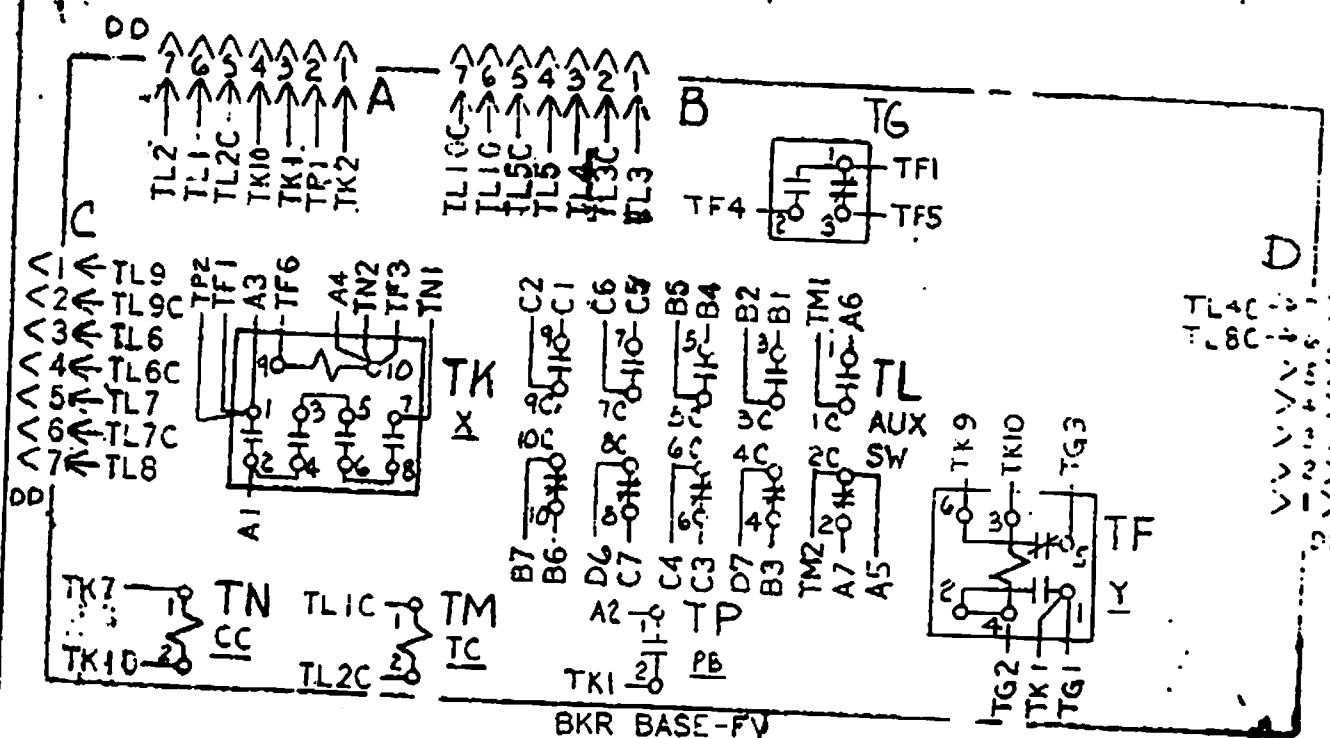
AK-2A-15/25 D/O ACB

CONT. ON SHEET

SP. NO.

FIRST MADE FOR

ELEM & CONN DIAG.



MADE BY W. Z.	ISSUED Oct 25 1961	APPROVALS W. H. Z. 10/26/61	LOW VOLTAGE SWITCHGEAR PHILADELPHIA	DIV OR DEPT 0148	LOCATION CONT. ON SHEET
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To Release 27.1, Remove 10-20-72





DRAWOUT BKR.  
AK-1-15825

NOTE: ALL FIGS. ARE FRONT VIEWS

GENERAL ELECTRIC

175L356-B

CONN. DIAG.

175L356-B  
REV. 2

AK-1-15825

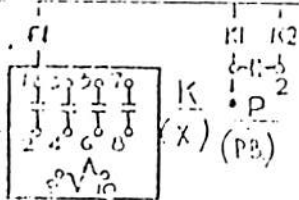


FIG. 1  
P.B. SWITCH

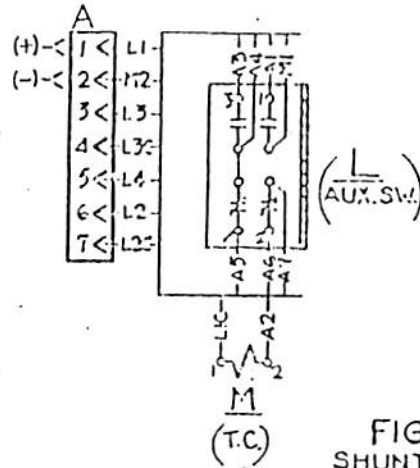


FIG. 3  
SHUNT TRIP

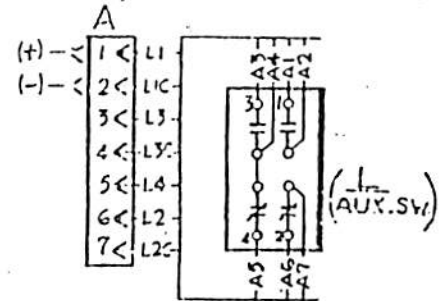
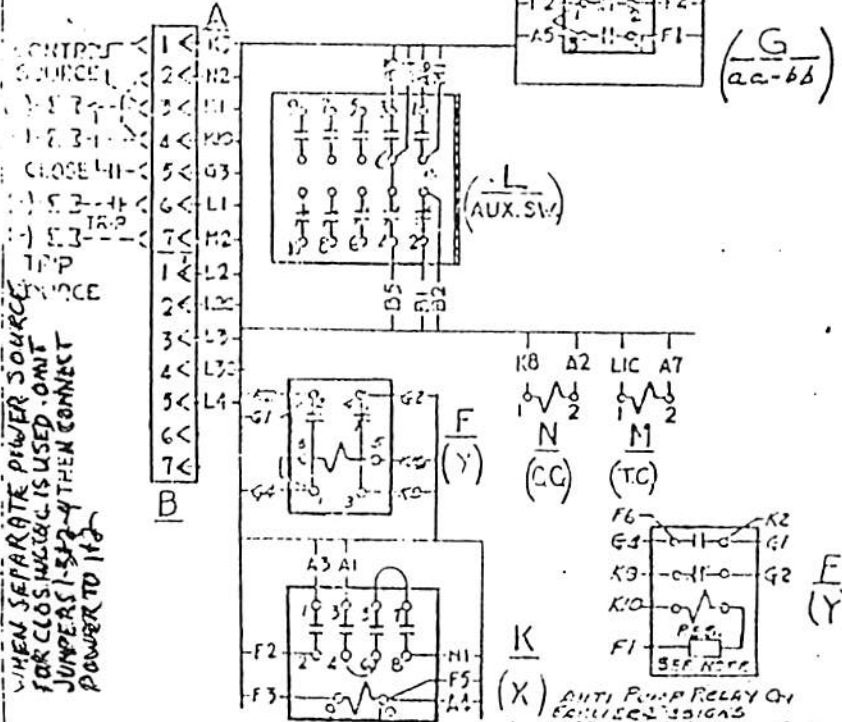


FIG. 4  
4 CIRCUIT AUX. SW.



WHEN SEPARATE POWER SOURCE FOR CLOSE/LOCK IS USED, OMIT JUMPERS 1-3 & 4 THEN CONNECT POWER TO 1 & 2

FIG. 2

ANTI PUMP RELAY ON  
CLOSED POSITIONS  
AND POSITIONS 1-2, 3-4, 5-6, 7-8  
AND POSITIONS 9-10, 11-12, 13-14  
AND POSITIONS 15-16 INCLUSIVE  
NOTE: FIELD STOP USED FOR 250V  
D.C. COILS ONLY ON AK-1-15825  
-R, -E, -F, -G, -H, -J, -K, -L, -M, -N, -O, -P, -Q, -R, -S, -T, -U, -V, -W, -X, -Y, -Z

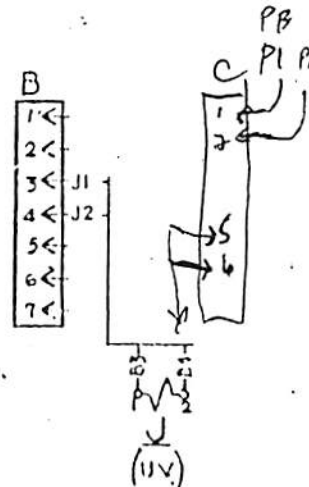


FIG. 5  
U.V. DEVICE

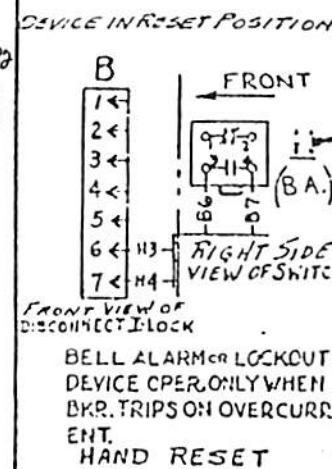


FIG. 6  
BELL ALARM "a"

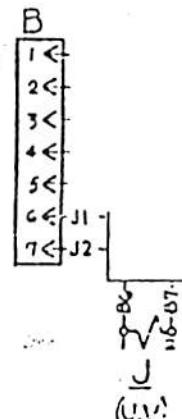


FIG. 7  
U.V. DEVICE

SEE OPER. MANUAL FOR P.B. SWITCH

410  
REV. 2

SWGR. BY  
P.H.L.A.  
LSP-A

175L356-B  
REV. 2  
RE



DRAWOUT BKR.  
AK-1-15/25

NOTE: ALL FIGS. ARE FRONT VIEWS

GENERAL ELECTRIC

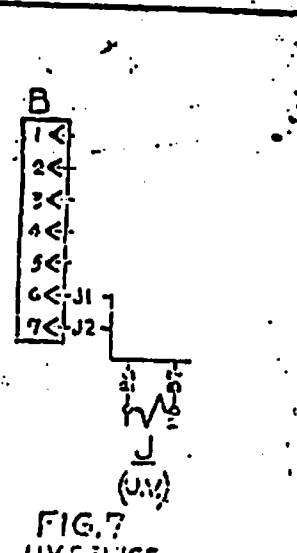
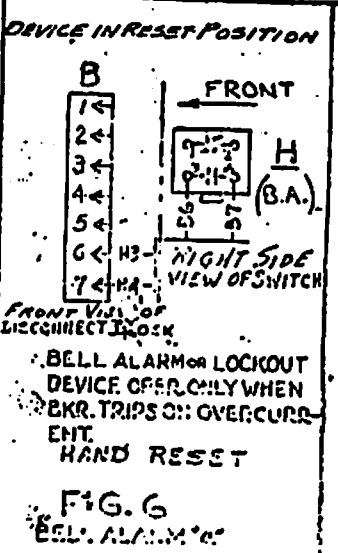
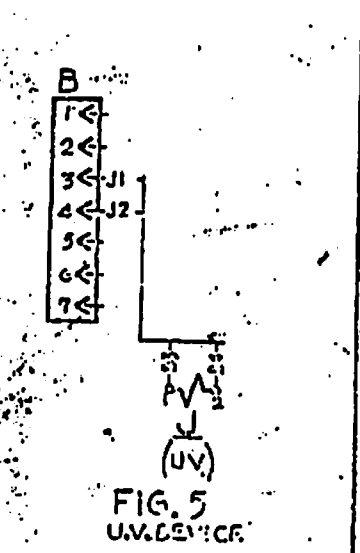
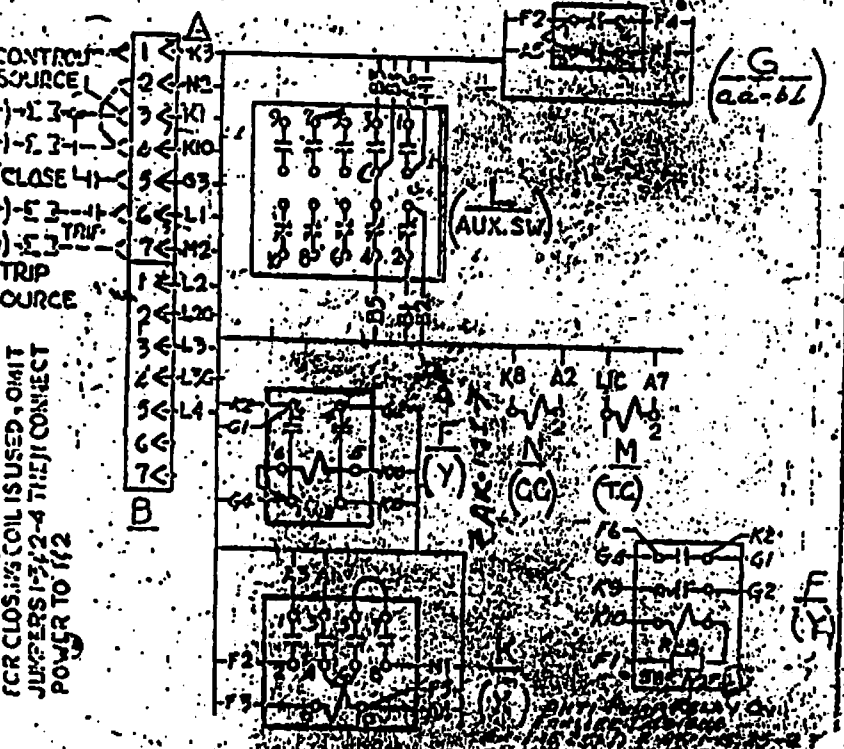
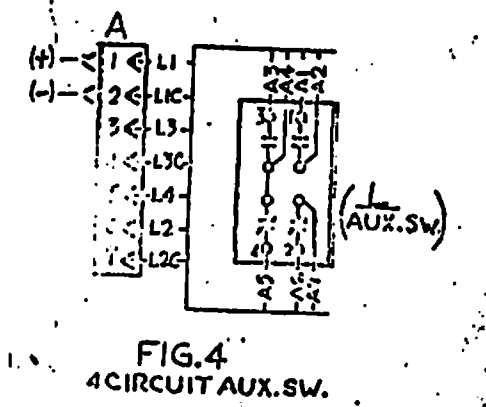
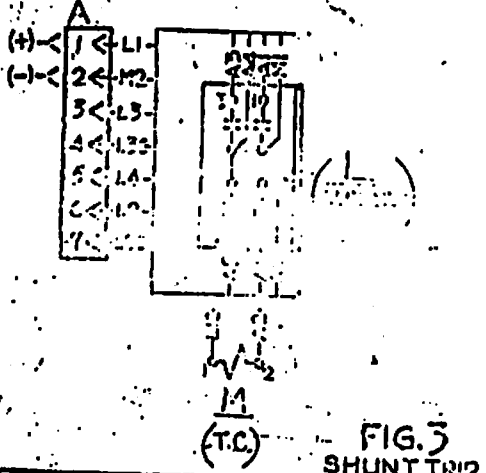
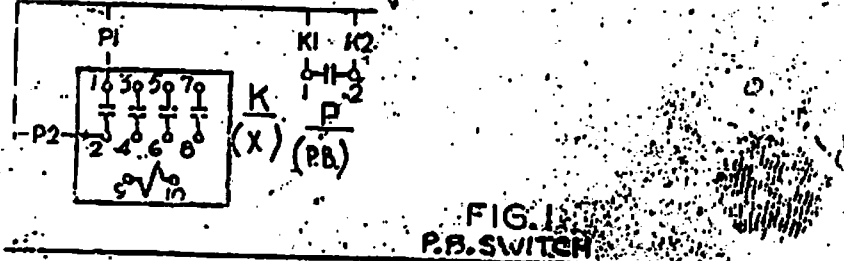
1756356-B

175 L 356-B

CONN. DIAG.

CONT. SHEET 2

SEE INSTRUCTIONS FOR BKR. AK-1-15/25



FOR CLOSING COIL USED - OMIT  
JUMPS 1-2 & 2-4 THEIR CONTACT  
POWER TO T/2

FIG. 2  
SCL. OPER. WITHOUT P.B. SWITCH

NOTE: REGISTER USER FOR 1  
D.C. FILING ENERGY RATING  
1-2-5-8-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100

SWGR.

DRAW/OUT BKR.  
AK-1-15425

NOTE: ALL FIGS. ARE F

GENERAL ELECTRIC

175L356-B  
REV. 3 NO. 2

L 356-B  
CONN. DIAG.  
AK-1-15425

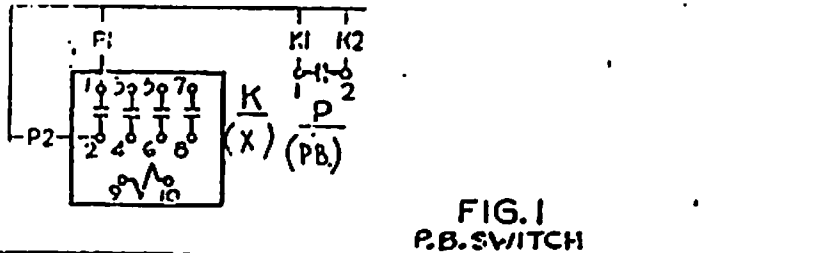


FIG. 1  
P.B. SWITCH

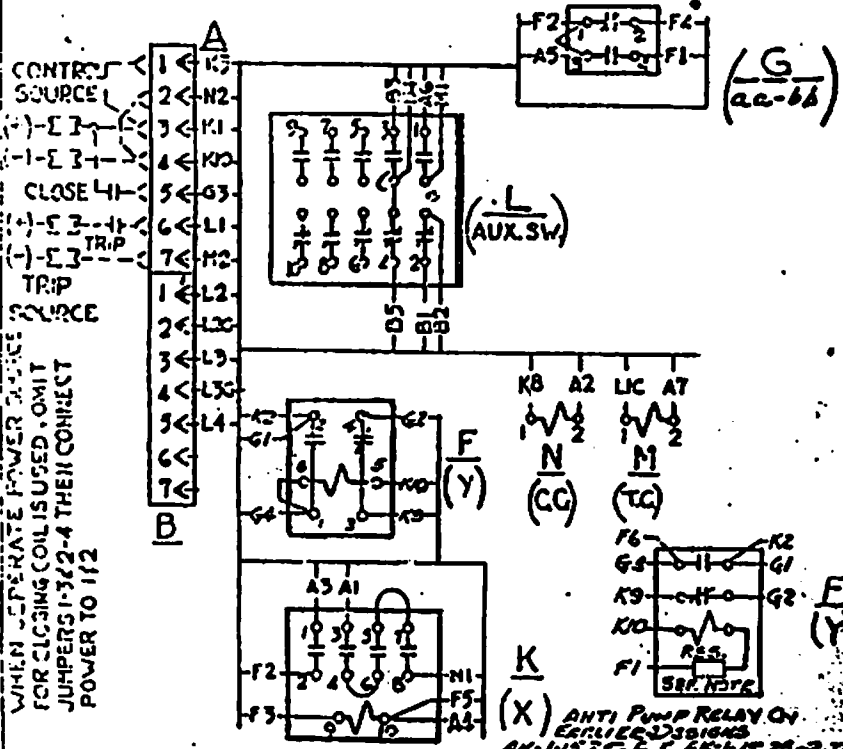


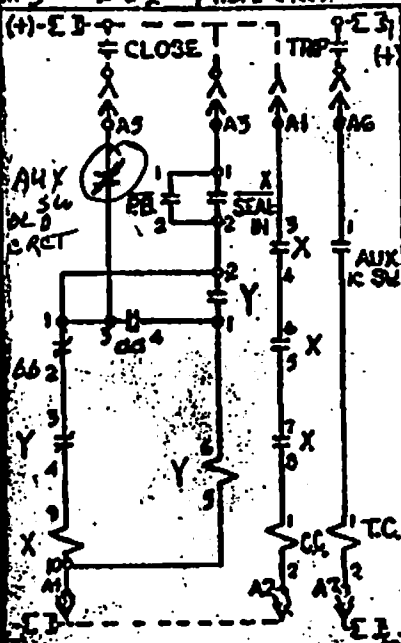
FIG. 2

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED, OMIT JUMPERS 1-3 & 2-4 THEN CONNECT POWER TO 112

SCL: COPER. W/THOUT P.B. SWITCH

ANTI PUMP RELAY ON EARLIER DESIGNS AK-1-15425-R, C, & K-1-15425-2 TO -9 INCLUSIVE; AK-1-15425-R, C & K-1-15425-2 TO -9 INCLUSIVE. NOTE: RESISTOR USED FOR 220V D.C. RELEASING ONLY ON AK-1-15425-R, C & K-1-15425-2, 2, & 3

- LIST OF ABBREVIATIONS
- A- SEC. DISC. LOCATED TOP LEFT, FT. VIEW
  - B- LOWER LEFT
  - C- TOP RIGHT
  - D- SEC. DISC. LOCATED LOWER RIGHT, FT. VIEW
  - F(Y) ANTI-PUMP, FERMISIVE RELAY
  - G-(aa-ab) MECHANISM SWITCH
  - H(B) BELL ALARM LOCKOUT DEVICE OPERATES ONLY WHEN BK. TRIPS ON OVERCURRENT-MANUAL RESET aa-bb CONTACTS
  - J(UV) UNDERVOLTAGE TRIP DEVICE - TIME DELAY INSTANTANEOUS
  - K(X) CLOSING CONTACTOR - 3 SETS OF CONTACTS IN SERIES (MAIN) 1 SET SEAL-IN.
  - L(AUX. SW.) AUX. SW. 20/2 2 1/2 CONTACTS 50/5 5 1/2 (SPECIAL)
  - M(TC) SHUNT TRIP DEVICE
  - N-(CC) SOLENOID CLOSING COIL
  - P-(PB) CLOSING SW. W/ BKR.
  - S-(RC) REVERSE CURRENT TRIP - POTENTIAL COIL



SWITCH (F) MAY BE WIRED AS SHOWN OR BROUGHT OUT TO SEPARATE DISCONNECTS OR OMITTED AS SPECIFIED

FIG. 15  
ELEMENTARY DIAGRAM

AK-2-15 & 25  
DRAWOUT BKR. NOTE: ALL FIGS. ARE FRONT VIEWS

177L216-D  
NO. 58

GENERAL ELECTRIC

HARNESSES  
CONN. & ELEM. DIAG.

177L216-D  
NO. 58

FIRST MADE FOR REQ. AK-2-15 & 25 SO.

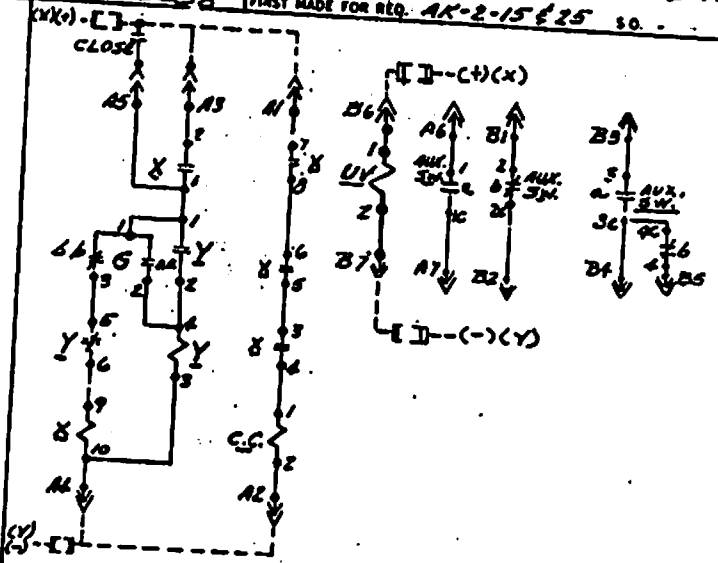
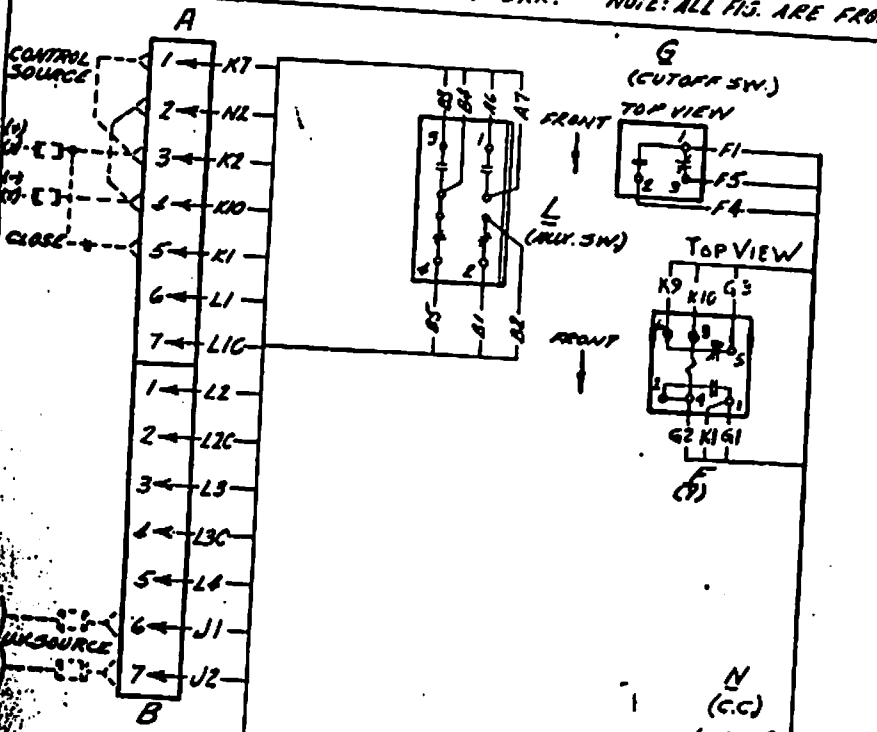


FIG-2 ELEMENTARY DIAGRAM

- LIST OF ABBREVIATIONS
- A- SEC. DISC. LOCATED TOP LEFT, FT. VIEW
  - B- SEC. DISC. LOCATED LOWER LEFT FT. VIEW
  - N-(C.C.) SOLENOID CLOSING COIL
  - F-(Y) ANTI-PUMP, PERMISSIVE RELAY
  - G-(aa-bb) CUT-OFF SW.
  - J-(U.V.) UNDERVOLTAGE TRIP DEVICE TIME DELAY OR INSTANTANEOUS
  - K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FIX SERIAL L-(AUX. SW.) 2" & 2" CONTACTS (STO)

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED OMIT JUMPERS A1-A3 A2-A4 THEN CONNECT PWR TO A1 & A2

177L216-D  
NO. 58

PRINTS TO

GENERAL ELECTRIC

1771.216-D

AK-2-15 & 25  
DRAWING BRP. NOTE: ALL FIGS. ARE FRONT VIEWS

1771.216-D

HARNESSE  
CONN. & ELEM. DIAG.

FIRST MADE FJS RLD. AK-2-15 & 25 50

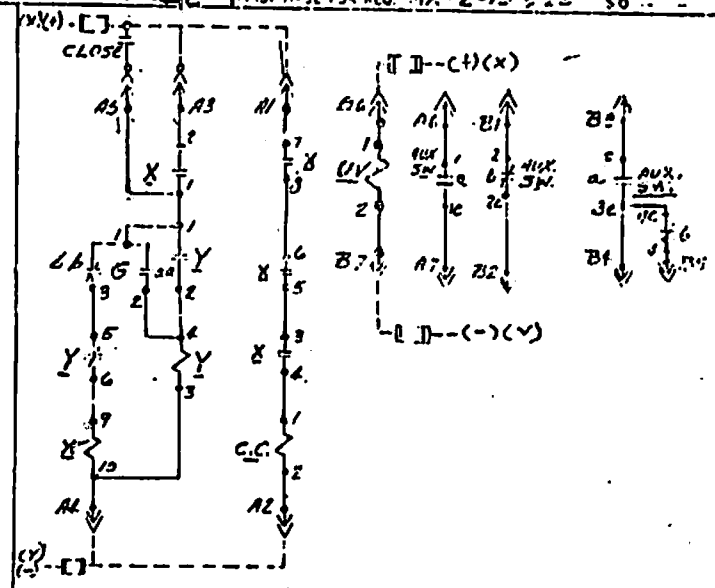
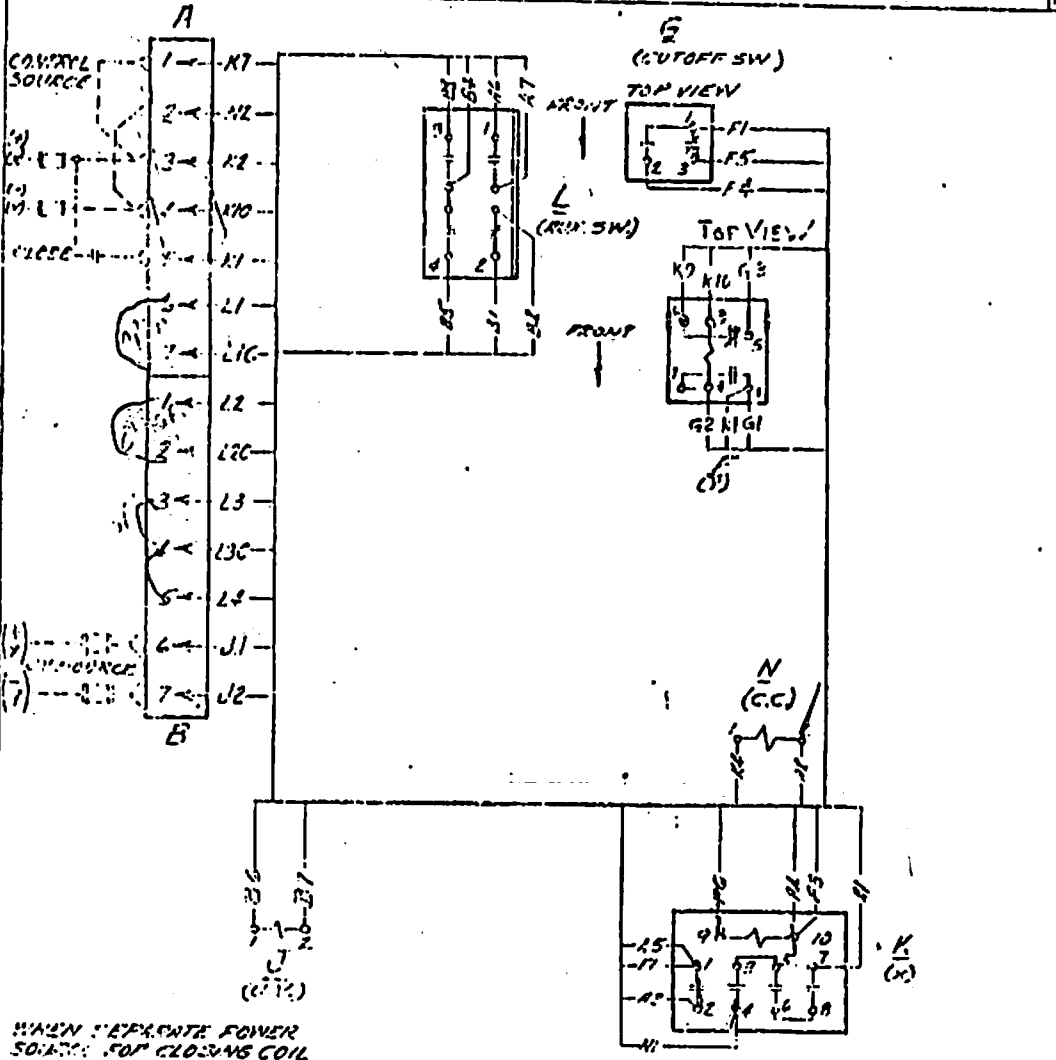


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A - SEC. DISC. LOCATED TOP LEFT, FT. VIEW
- B - SEC. DISC. LOCATED LOWER LEFT FT. VIEW
- H-(CC) SOLENOID CLOSING COIL
- F-(Y) ANTI-PUMP PERMISSIVE RELAY
- G-(F.S.-F.6) CUT-OFF SW.
- J-(M) INDU. VOLTAGE TRIP DEVICE TIME DELAY OR INSTANTANEOUS
- K-(X) CLOSING CONTACT-3 SETS OF CONTACTS IN SERIES (MIM) & 1 SET FOR SEAL-IN
- L-(M.X.S.W.) 2 & 4 CONTACTS (STD.)

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED OMIT JUMPER A-A2 AS SHOWN THEY CONNECT POWER TO A1 & A2.

FIG-1 CONNECTION DIAGRAM

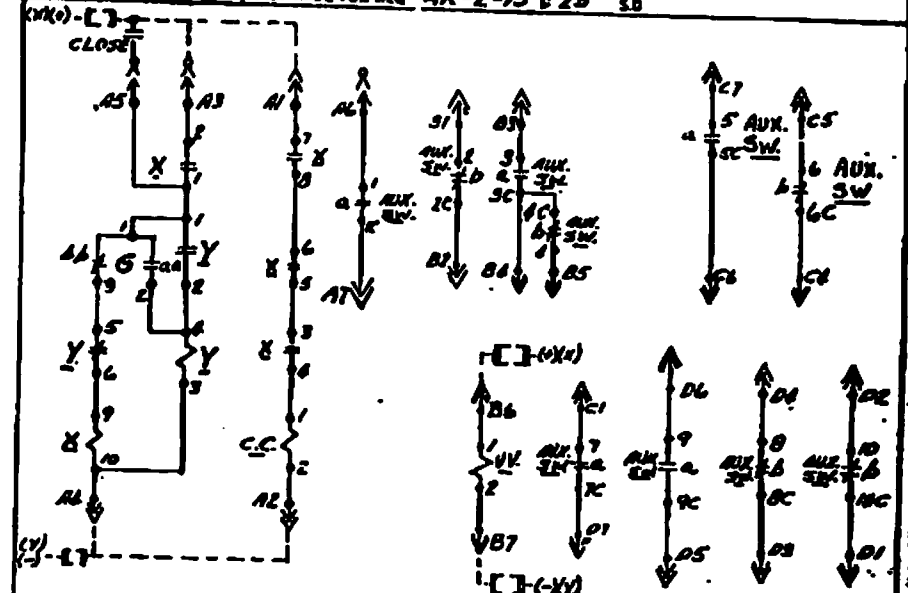
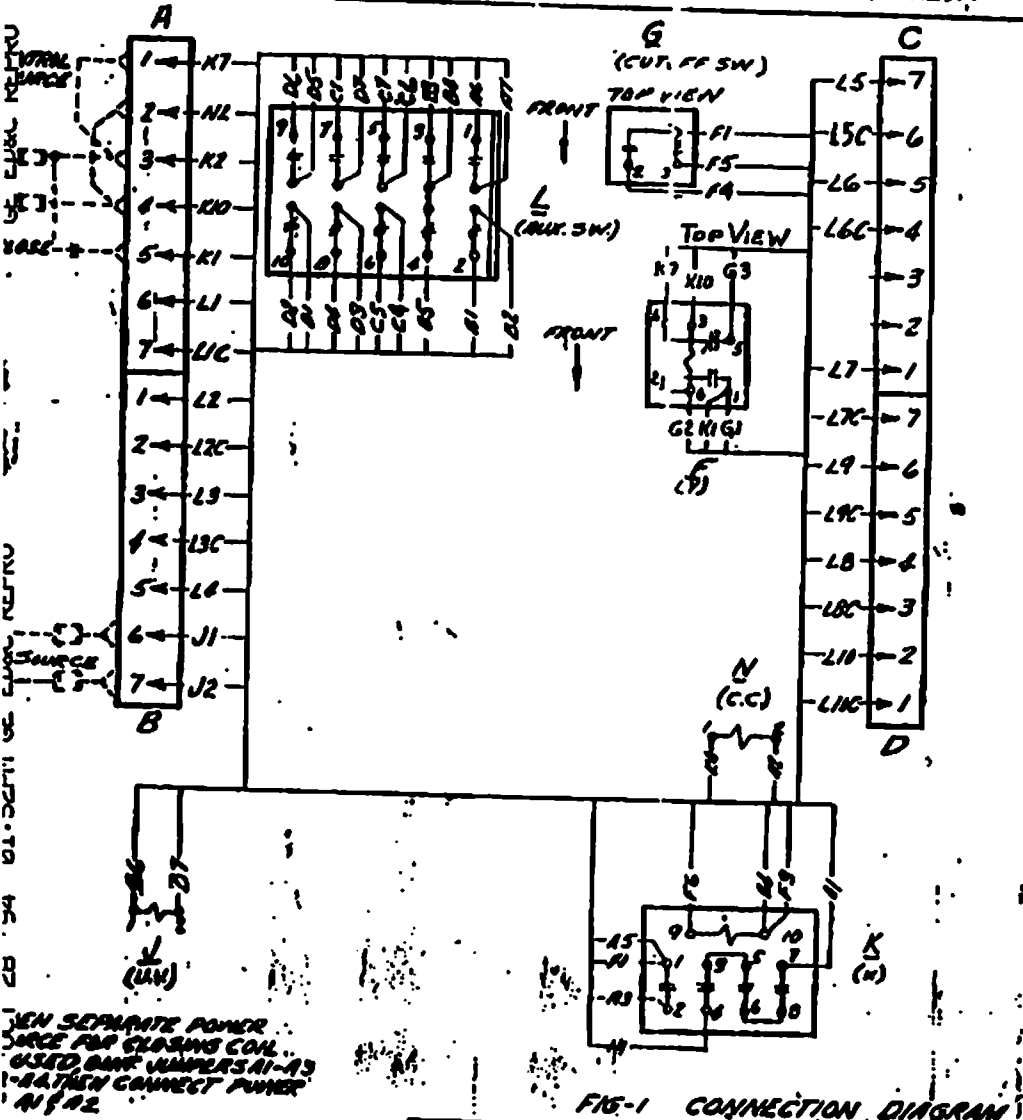
L. V. SINGH

1771.216-D

OCT 28 '94 01:43PM

AK-2-15 & 25  
 GRANTOUT BKR. NOTE: ALL FIGS. ARE FRONT VIEWS

177L216-D  
 HARNESSES  
 CONN. & ELEM. DIAG.  
 FIRST MADE FOR REQ AK-2-15 & 25 S.D.



LIST OF ABBREVIATIONS

- A- SEC. DISC. LOCATED TOP LEFT, FT. VIEW
- B- LOWER LEFT
- C- TOP RIGHT
- D- SEC. DISC. LOCATED LOWER RIGHT FT. VIEW
- F-(Y) ANTI-PUMP, PERMISSIVE RELAY
- G-(aa-bb) CUTOFF SW.
- J-(U.V.) UNDERVOLTAGE TRIP DEVICE
- K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN
- L-(AUX. SW.) 5"x6" 5"b CONTACTS (SPECIAL)
- N-(C.C.) SOLENOID CLOSING COIL

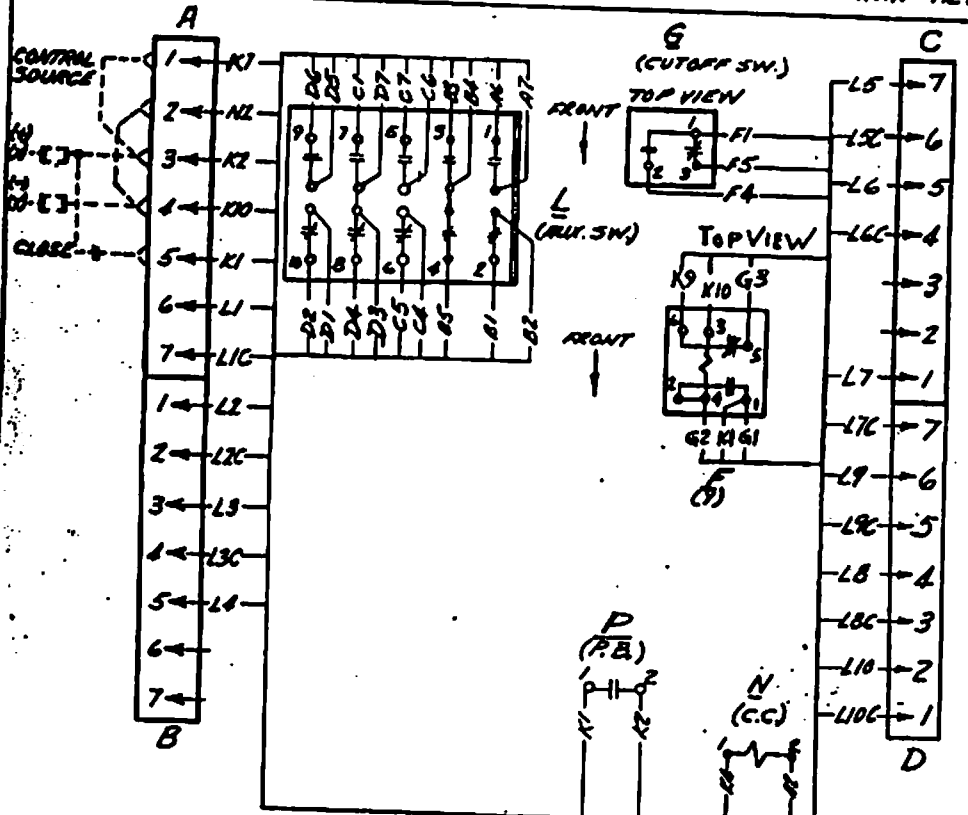
USE SEPARATE POWER SOURCE FOR CLOSING COIL. USED BMT NUMBERS A1-A3 -A4 THEN CONNECT POWER A1 & 2.

~~X~~ WILL CO. BREAKERS

AK-2-15 & 25  
DRAWOUT BKR. NOTE: ALL FIGS. ARE FRONT VIEWS

177L216-D  
FIRST MADE FOR REQ. AK-2-15 & 25 S.O.

GENERAL ELECTRIC  
177216-D  
HARNESSES  
CONN. & ELEM. DIAG.  
79



WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED OMIT JUMPERS A1-A3 L12-A4 THEN CONNECT POWER TO A1 & A2

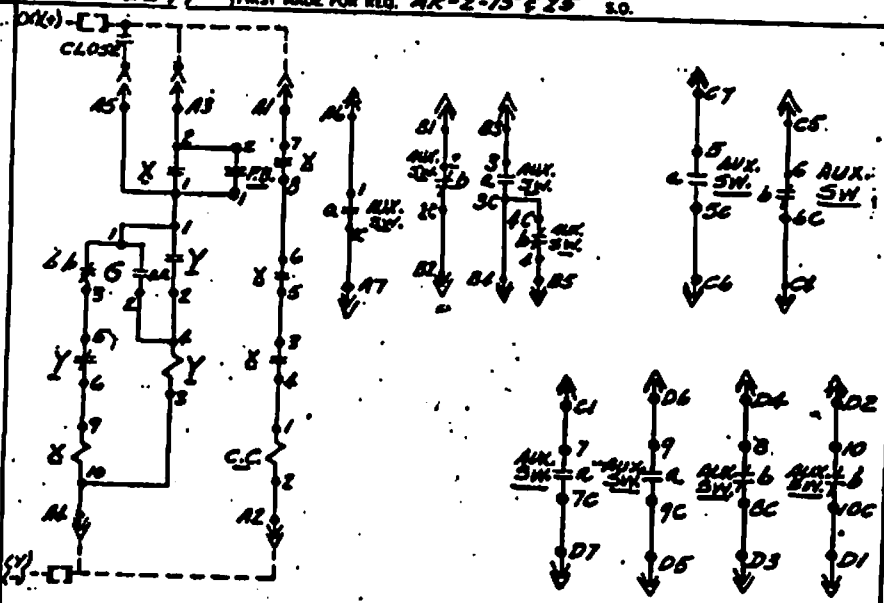


FIG-2. ELEMENTARY DIAGRAM

- LIST OF ABBREVIATIONS
- A- SEC. DISC. LOCATED TOP LEFT, FT. VIEW.
  - B- LOWER LEFT
  - C- TOP RIGHT
  - D- SEC. DISC. LOCATED LOWER RIGHT FT. VIEW
  - F-(Y) ANTI-PUMP, PERMISSIVE RELAY
  - G-(aa-ab) CUTOFF SW.
  - N-(C.C.) SOLENOID CLOSING COIL
  - P-(P.B.) CLOSING SW. ON BKR.

K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN L-(AUX. SW.) 2" & 2" CONTACTS (SPD)

177L216-D

REV. 0

DATE: March 1960

DESIGNED BY: [Signature]

DRWN. BY: [Signature]

APPROVED BY: [Signature]

PRINTS TO: [ ]

L.V. SWGR. [ ]

PNLN. [ ]

177216-D

79

LSP-A RE

GENERAL ELECTRIC

AK-2-15 & 25  
DRAWOUT BREAKER

NOTE - ALL FIGS. ARE FT. VIEWS

REV 1-2  
177L216-D  
CONT. ON SHEET 105

TITLE HARNESS  
CONN. & ELEM. DIAG.  
FIRST MADE FOR REQ. AK-2-15 & 25 S.O.

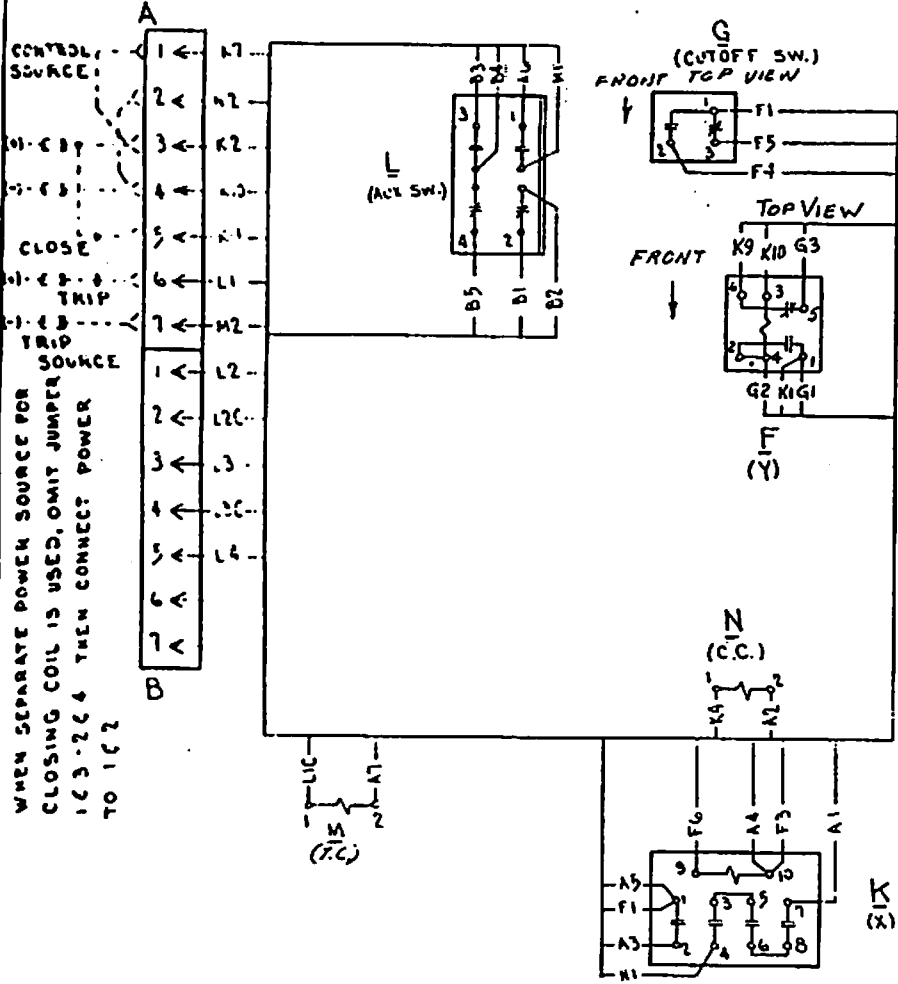


FIG. 1 - CONNECTION DIAGRAM

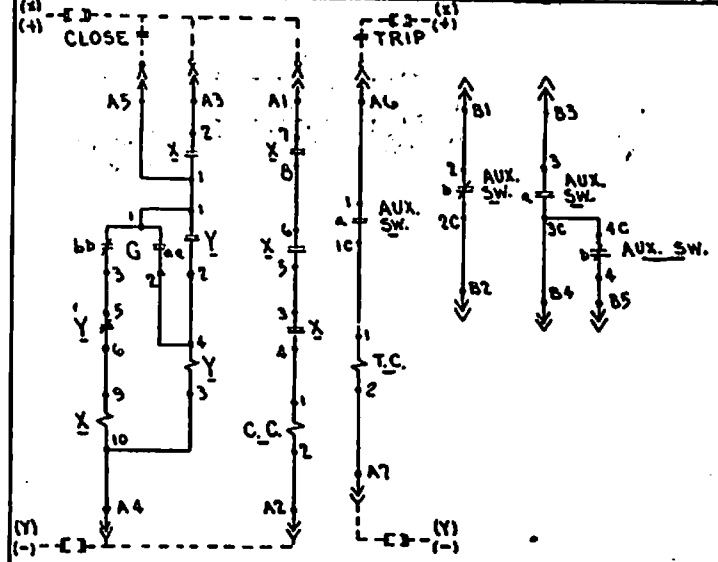


FIG. 2 - ELEMENTARY DIAGRAM

- LIST OF ABBREVIATIONS
- A - SEC. DISC. LOCATED TOP LEFT, FT VIEW
  - B - SEC. DISC. LOCATED LOWER LEFT, FT. VIEW
  - F-(Y) ANTI-PUMP PERMISSIVE RELAY
  - G-AA-BB) CUT-OFF SW.
  - K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN.
  - L-(AUX. SW.) 2" & 2 1/2" CONTACTS (STD.)
  - M-(T.C) SHUNT TRIP DEVICE
  - N-(C.C) SOLENOID CLOSING COIL

DESIGNED BY L.V. SWGR. PHILA	APPROVED BY PHILA	177L216-D CONT. ON SHEET 105
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LSP-A RD

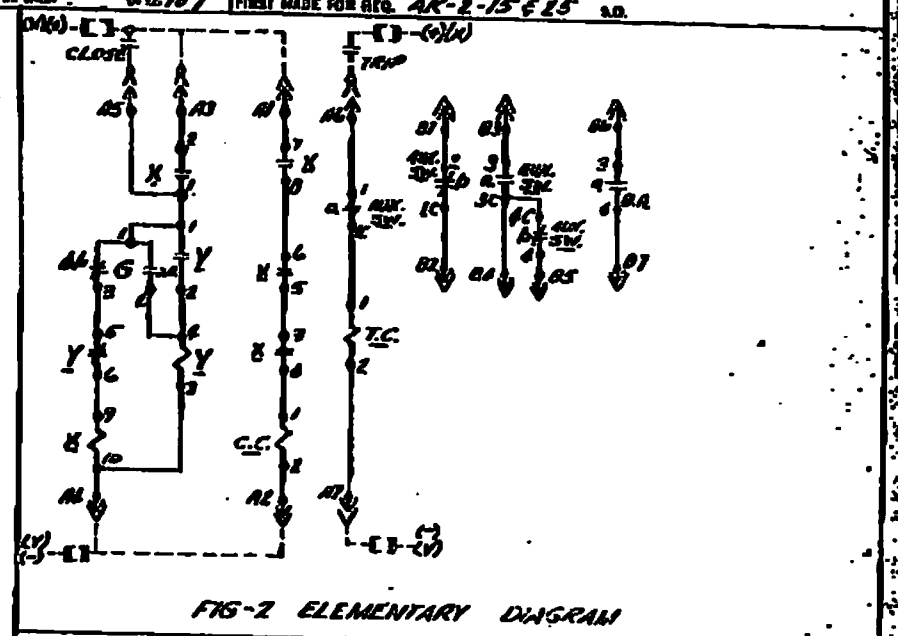
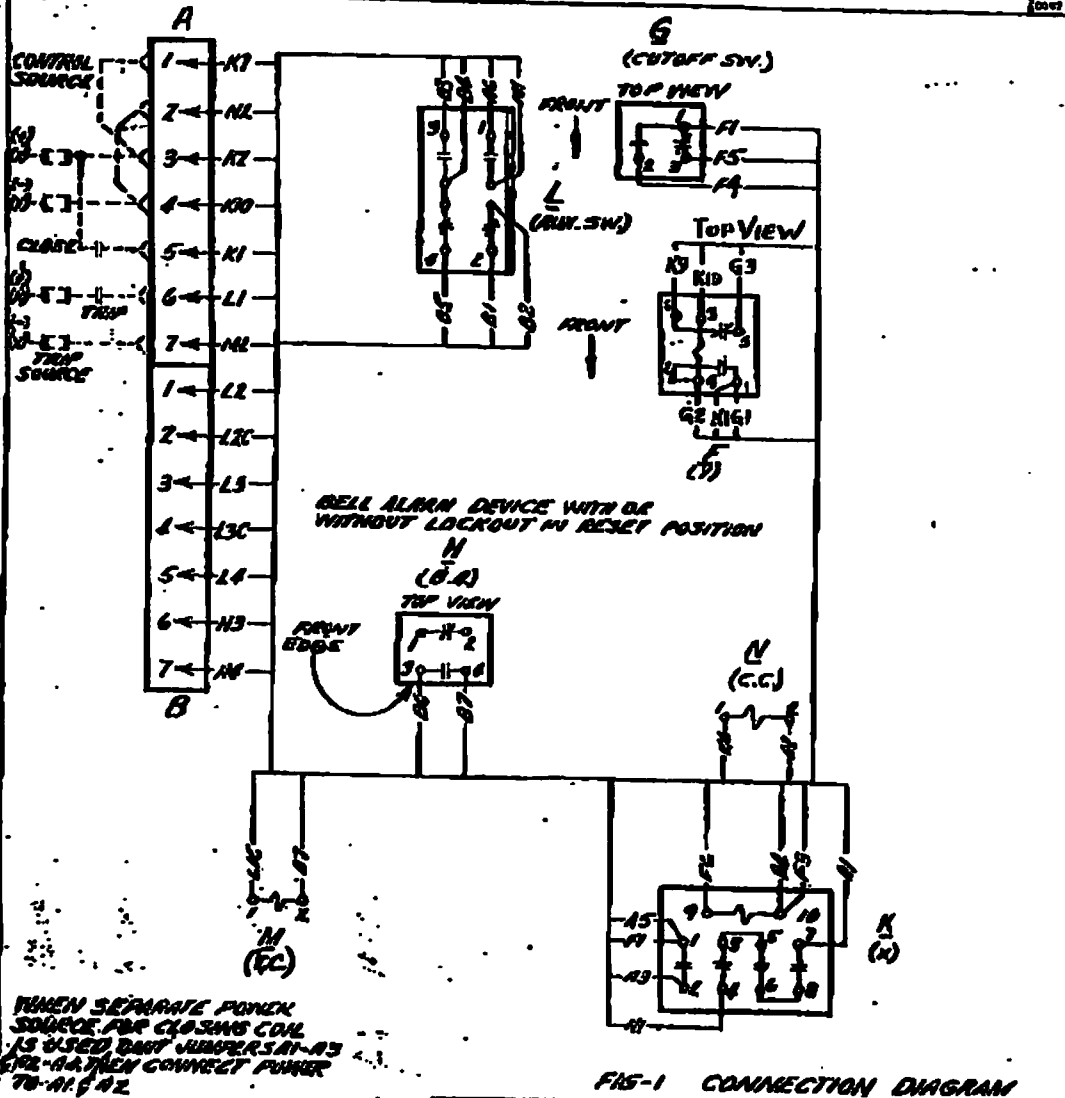
NOV 15 '94 10:09AM GE ED&C REPRO T  
 NOV 15 '94 10:09AM GE ED&C REPRO T

NOV 15 '94 10:29AM GE HAMMOND SWITCHGEAR

GENERAL ELECTRIC

AK-2-15 & 25  
 DRAWING BKR. NOTE: ALL FIG. ARE FRONT VIEWS

177L216-D  
 TITLE: HARNESS CONN. & ELEM. DIAG.  
 FIRST MADE FOR REG. AK-2-15 & 25 S.D.



LIST OF ABBREVIATIONS

A - SEC. DISC. LOCATED TOP LEFT, FT. VIEW  
 B - SEC. DISC. LOCATED LOWER LEFT, FT. VIEW  
 F-(Y) ANTI-PUMP, PERMISSIVE RELAY  
 G-(a-a) CUTOFF SW.  
 K-(K) CLOSING CONTACTOR - 3 SETS OF CONTACTS  
 IN SERIES (ARM) & 1 SET FOR SEAL-IN  
 L-(MAX. SW.) 2" x 6" 2/16" CONTACTS (STD.)  
 M-(T.C.) SHUNT TRIP DEV.  
 N-(C.C.) SOLENOID CLOSING COIL  
 TRIP - POTENTIAL COIL  
 U(R.B.) RELAY BLOCK

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED ONLY WIRE NUMBERS A1-A3 ARE TO BE CONNECTED POWER TO M1 & M2

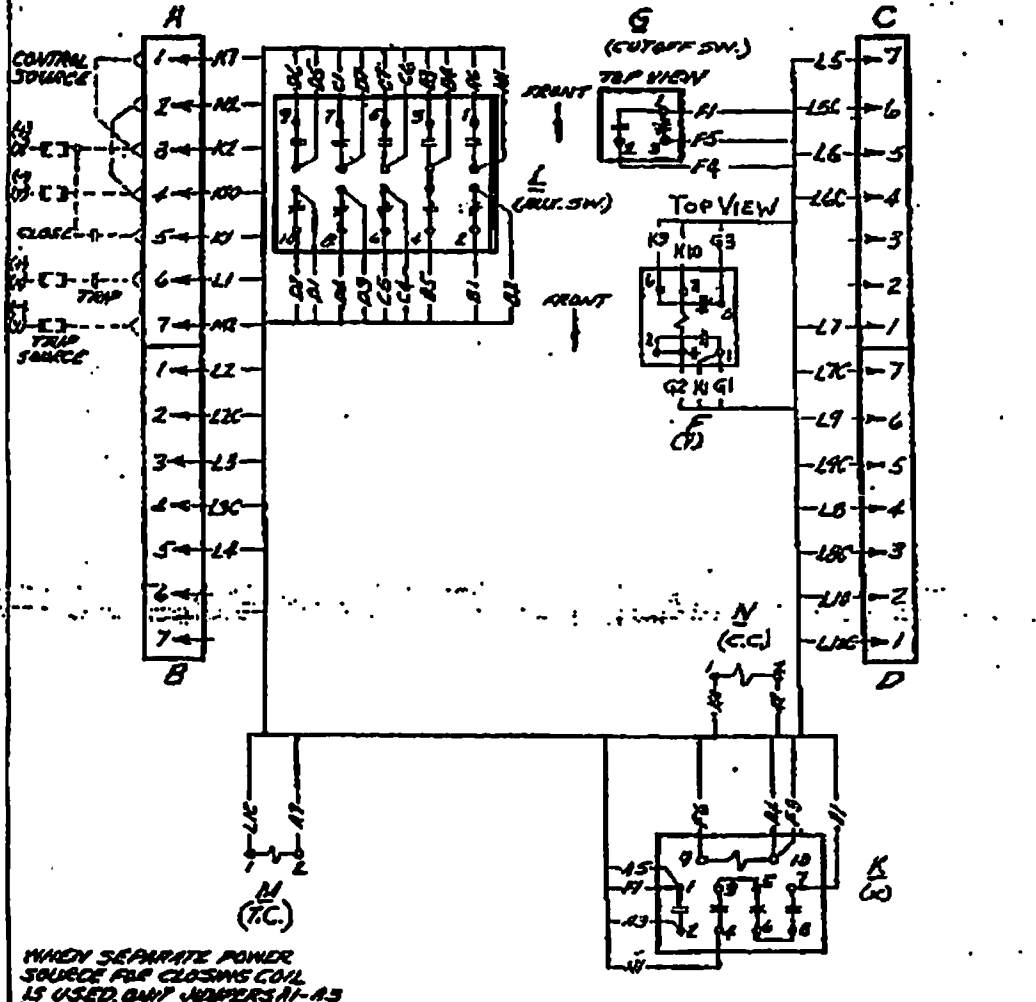
21  
 APPROVED: L.V. SWGER.  
 ENCL. A.

177L216-D

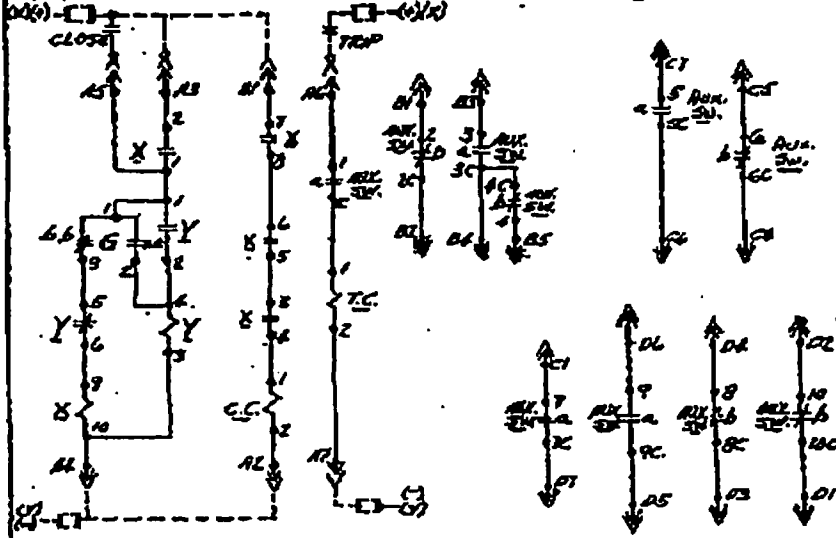


AK-2-15 & 25  
 BRANDOUT BKR. NOTE: ALL FIG. ARE FRONT VIEWS

177L216-D  
 TITLE: **HERNESS  
 CONN. & ELEM. DIAG.**  
 FIRST ISSUE FOR DES. AK-2-15 & 25 S.O.



WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED, ONLY NUMBERS M1-M3 ARE TO BE CONNECTED TO POWER TO M1 & M2.



- LIST OF ABBREVIATIONS:
- A - SEC. DISC. LOCATED TOP LEFT, FT. VIEW
  - B - LOWER LEFT
  - C - TOP RIGHT
  - D - SEC. DISC. LOCATED LOWER RIGHT FT. VIEW
  - F-(1) ANTI-PUMP, PERMISSIVE RELAY
  - G-(aa-bb) CUTOFF SW.
  - K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEQU. IN L-(ADJ. SW.) 5"x5" CONTACTS (SPECIAL)
  - M-(T.C.) SHUNT TRIP DEV.
  - N-(C.C.) SOLENOID CLOSING COIL

TOTAL P. 10

177L216-D	1	5/1957	APPROVED	L.V. SWGR.	177L216-D
177L216-D	2	5/1957		PHLA.	177L216-D
				LSP-A	RD

CONN. ELEM. DIAG

GENERAL ELECTRIC

177216-D

AK-2-15 #25  
DRAWING BKR. NOTE: ALL FIG. ARE FRONT VIEWS

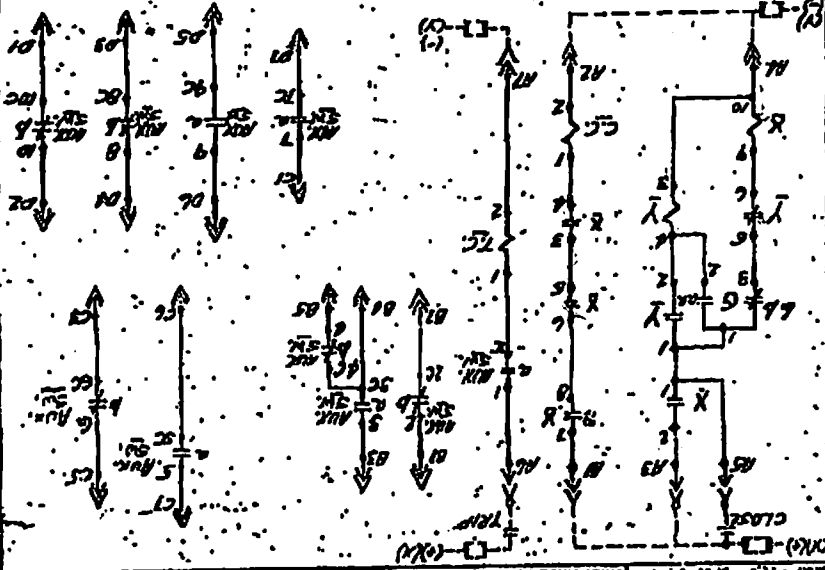


FIG-2 ELEMENTARY DIAGRAM

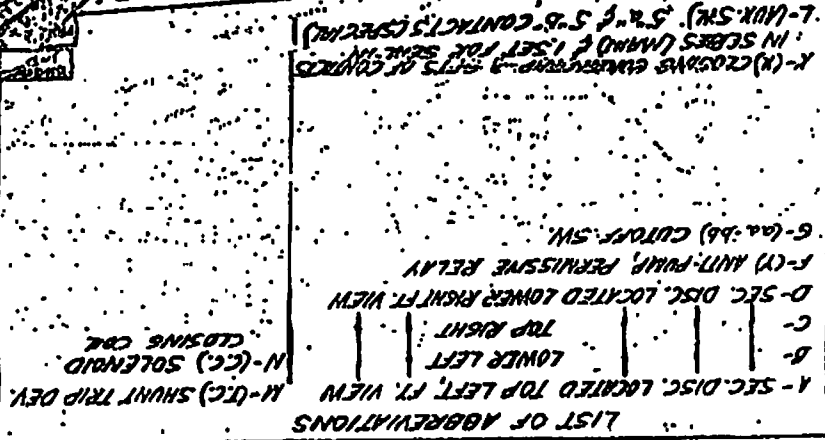


FIG-1 CONNECTION DIAGRAM

7-(AUX SW) 5.2 & 5-B CONTACT'S (SPECIAL)  
 IN SEETS (LAMP) & 1-SET FOR SCHEMATIC  
 X-(N) CLOSING ELEMENTS - SETS OF CONTACTS

177216

177L216-D

TITLE: **CONN. & ELEM. DIAG.**

FIRST MADE FOR REQ. **AK-2-15 & 25** S.O.

A. W. Paul Keid

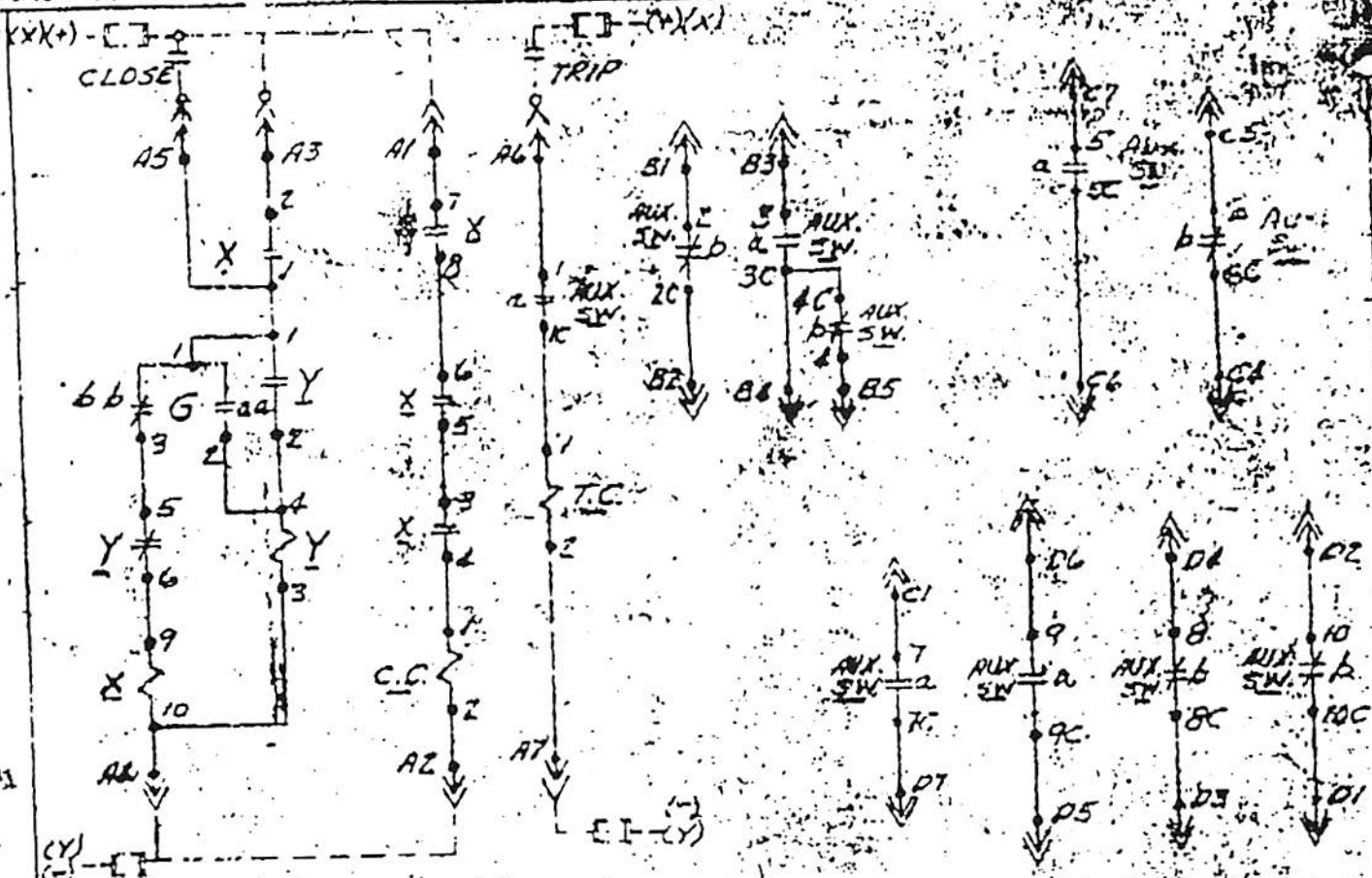


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A- SEC. DISC. LOCATED TOP LEFT, FT. VIEW
- B- " " " " " " " " LOWER LEFT
- C- " " " " " " " " TOP RIGHT
- D- SEC. DISC. LOCATED LOWER RIGHT FT. VIEW
- F-(Y) ANTI-PUMP, PERMISSIVE RELAY
- G-(aa-bb) CUTOFF SW.

- M-(T.C.) SHUNT TRIP DEV.
- N-(C.C.) SOLENOID CLOSING COIL

X-(X) CLOSING CONTACTOR: 3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SERIAL IN L-(AUX SW.) 5 'a' & 5 'b' CONTACT (SEE IN)

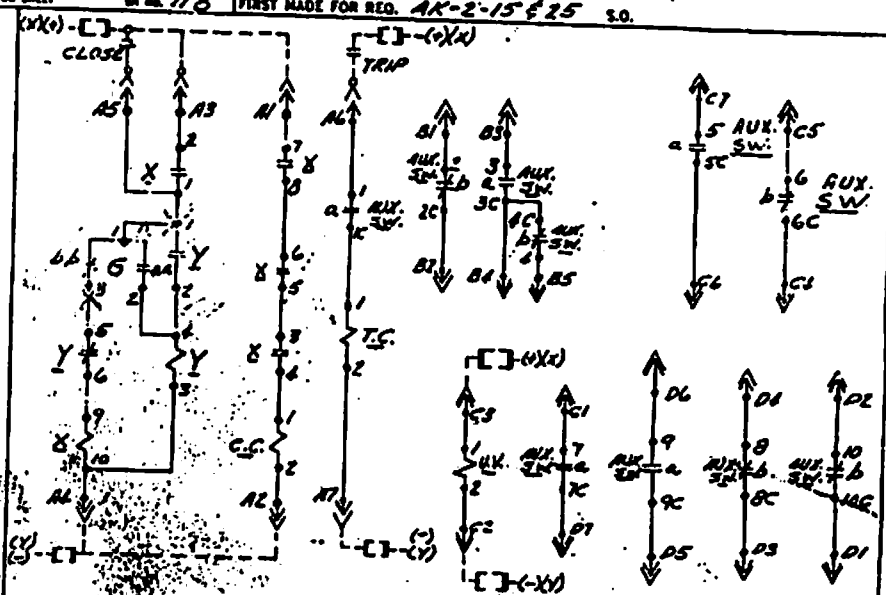
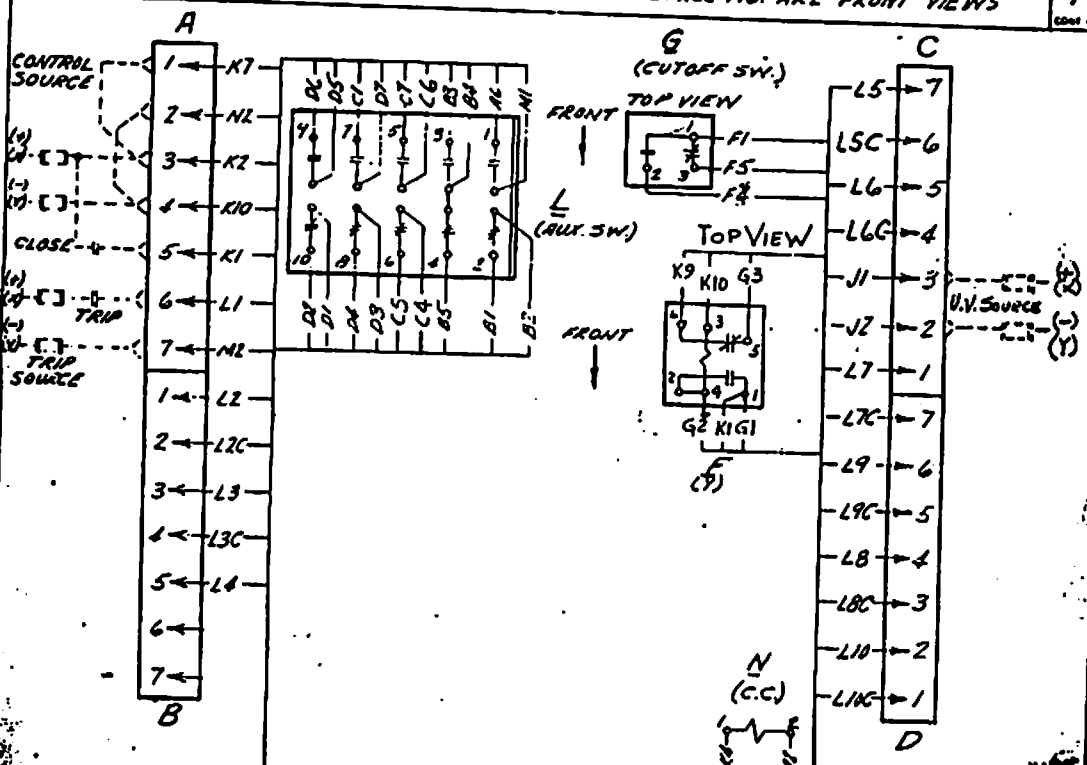
GENERAL ELECTRIC

177L216-D

AK-2-15 & 25  
DRAWOUT BKR. NOTE: ALL FIG. ARE FRONT VIEWS

177L216-D  
CONT. ON SHEET NO. 118

TITLE HARNESS  
CONN. & ELEM. DIAG.  
FIRST MADE FOR REQ. AK-2-15 & 25 S.O.



- LIST OF ABBREVIATIONS
- A - SEC. DISC. LOCATED TOP LEFT, FT. VIEW
  - B - SEC. DISC. LOCATED LOWER LEFT, FT. VIEW
  - C - SEC. DISC. LOCATED TOP RIGHT, FT. VIEW
  - D - SEC. DISC. LOCATED LOWER RIGHT, FT. VIEW
  - F-(Y) ANTI-PUMP, PERMISSIVE RELAY
  - G-(aa-bb) CUTOFF SW.
  - J-(UV) UNDERVOLTAGE TRIP DEVICE, TIME DELAY, OR INSTANTANEOUS
  - K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAND) & 1 SET FOR SEAL-IN
  - L-AUX. SW. 5"x6" 5"x8" CONTACTS (SPECIAL)
  - M-(T.C.) SHUNT TRIP DEV.
  - N-(C.C.) SOLENOID CLOSING COIL

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED, OMIT JUMPERS A1-A3 & A2-A4. THEN CONNECT PUMPER TO A1 & A2.

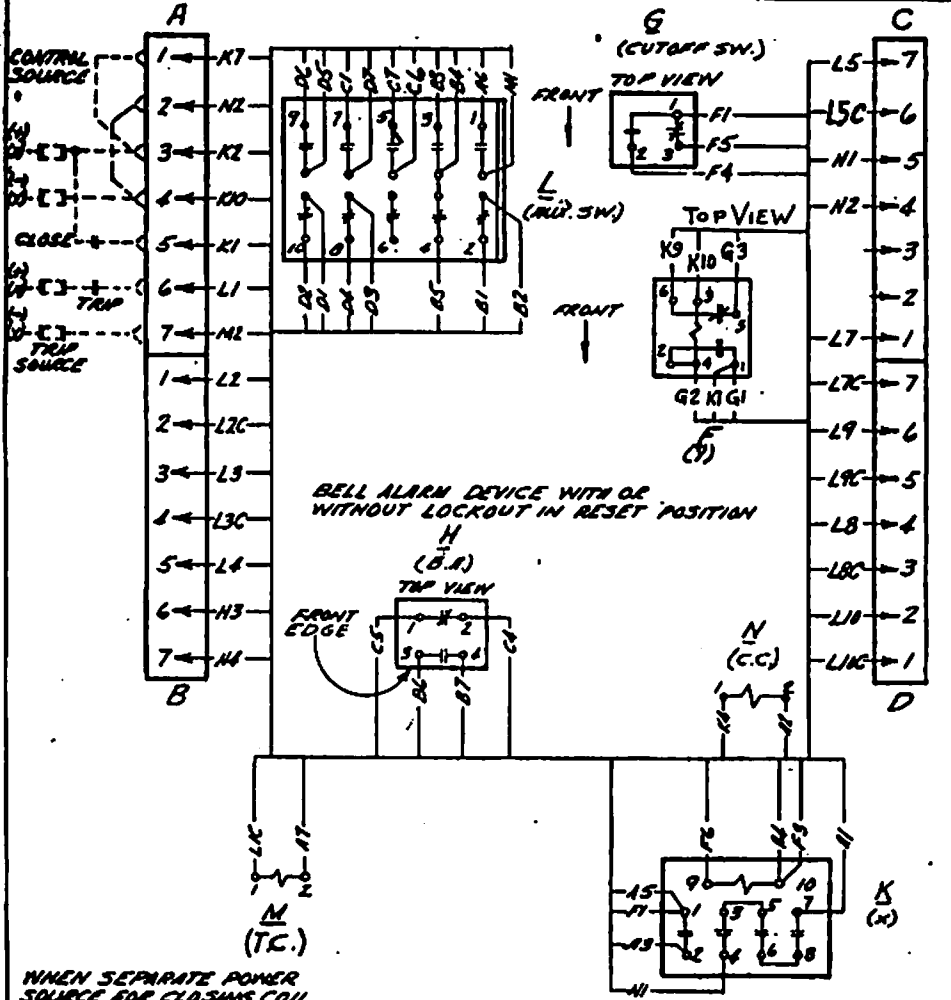
FIG-1 CONNECTION DIAGRAM

GENERAL ELECTRIC

AK-2-15 # 25  
DRAWOUT BKR. NOTE: ALL FIG. ARE FRONT VIEWS

177L216-D  
FIRST MADE FOR REQ. AK-2-15 # 25 S.O.

HARNESS  
CONN. & ELEM. DIAG.



WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED OMIT JUMPERS A1-A3 & A2-A4 THEN CONNECT POWER TO A1 & A2

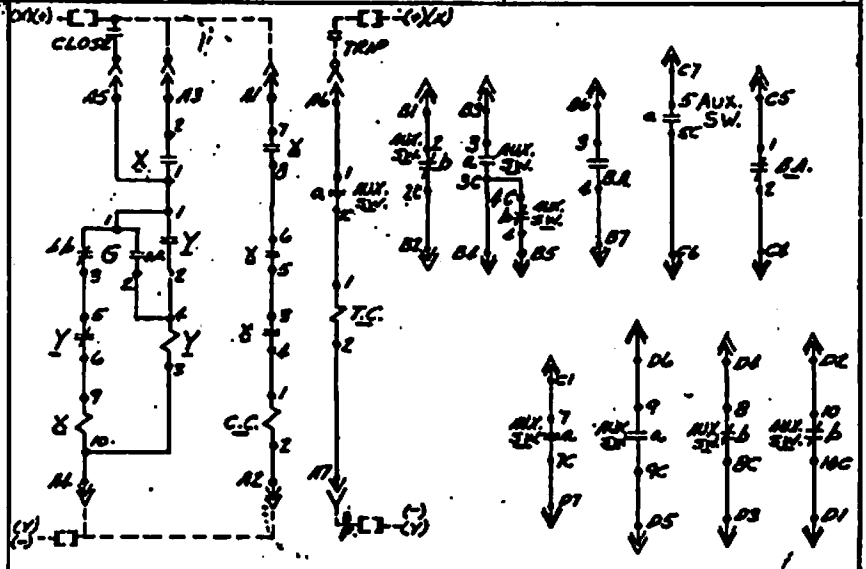


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A - SEC. DISC. LOCATED TOP LEFT, FT. VIEW
- B - LOWER LEFT
- C - TOP RIGHT
- D - SEC. DISC. LOCATED LOWER RIGHT FT. VIEW
- F-(Y) ANTI-PUMP, PERMISSIVE RELAY
- G-(aa-bb) CUTOFF SW.
- H-(BA) (1) BELL ALARM DEVICE-MAN. OR AUTO. RESET  
(2) BELL ALARM DEVICE WITH LOCKOUT - MAN. RESET
- K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAN) & 1 SET FOR SEAL-IN
- L-(AUX. SW.) 5"x5" & 5"x6" CONTACTS (SPECIAL)
- M-(TC) SHUNT TRIP DEV.
- N-(C.C.) SOLENOID CLOSING COIL

REV. NO.	DATE	BY	CHKD.	APPROVED	DATE	BY
1	7/57					
2	11/57					

MADE IN U.S.A.

L.V. SWGR. PHIL. 177L216-D

LSP-A RD

AK-2-15 & 25  
DRAWOUT BKR. NOTE: ALL FIG ARE FRONT VIEWS

177L216-D  
FIRST MADE FOR REQ. AK-2-15 & 25 S.O.

HARNESSE  
CONN. & ELEM. DIAG.

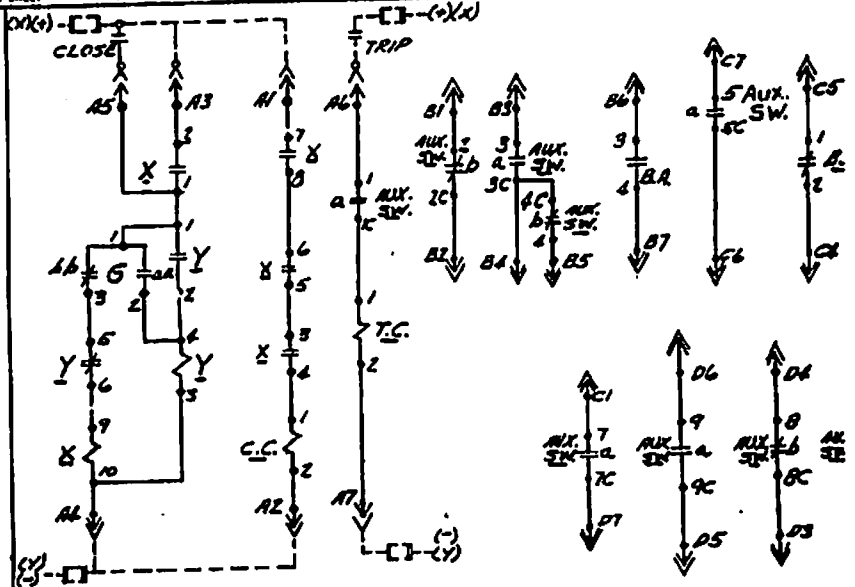
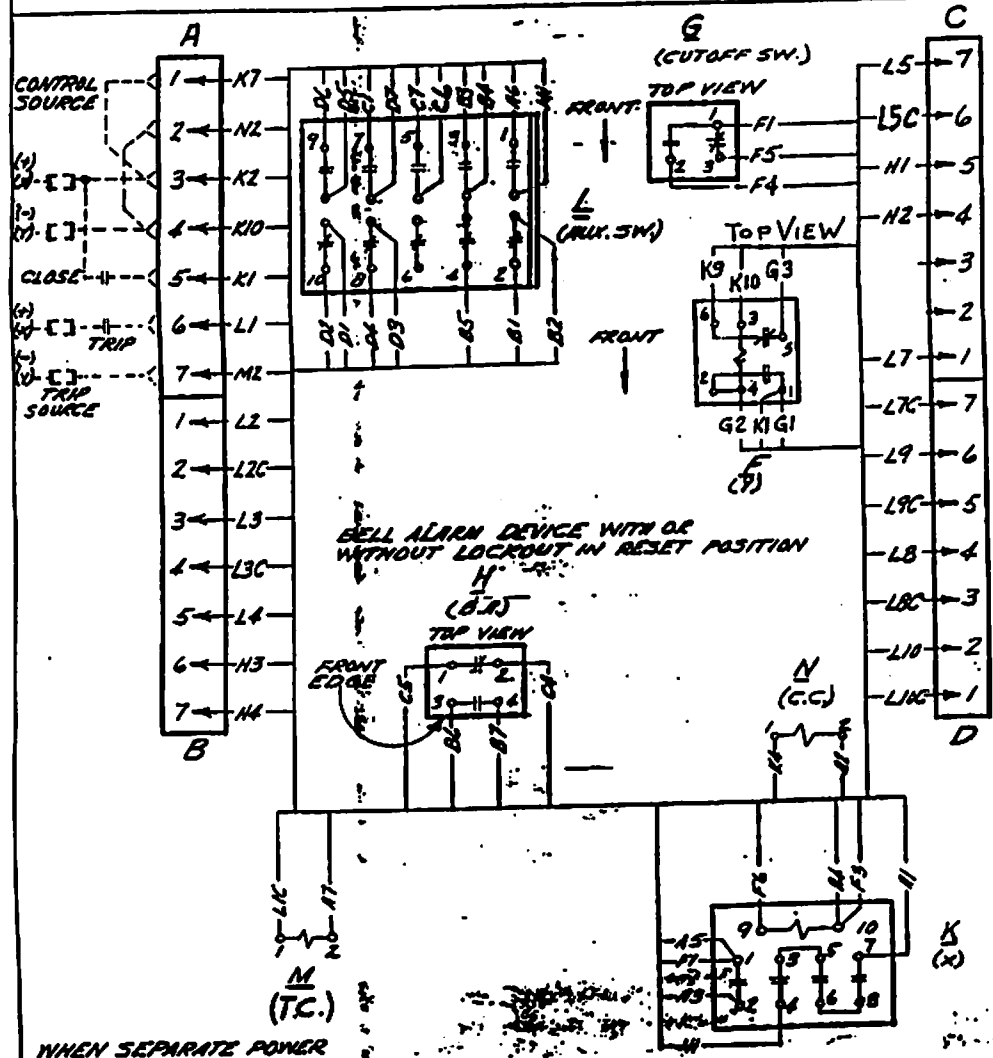


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A - SEC. DISC. LOCATED TOP LEFT, FT. VIEW
- B - LOWER LEFT
- C - TOP RIGHT
- D - SEC. DISC. LOCATED LOWER RIGHT FT. VIEW
- F-(Y) ANTI-PUMP, PERMISSIVE RELAY
- G-(aa-bb) CUTOFF SW.
- H-(BA) (1) BELL ALARM DEVICE-MAN. OR AUTO. RESET  
(2) BELL ALARM DEVICE WITH LOCKOUT - MAN. RESET
- K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SERIAL IN
- L-(AUX. SW.) 5" & 5" CONTACTS (SPECIAL)
- M-(T.C.) SHUNT TRIP
- N-(G.C.) SOLENOID CLOSING COIL

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED, OMIT JUMPERS AT P2, P2-14, THEN C...

CONNECTION DIAGRAM

L.V. SWG. 17 EN. 511

AK-2-15 & 25  
DRAWOUT BREAKER

NOTE - ALL FIGS. ARE FT. VIEWS

177L216-D  
FIRST MADE FOR REQ. AK-2-15 & 25 S.O.

HARNESSES  
CONN. & ELEM. DIAG.

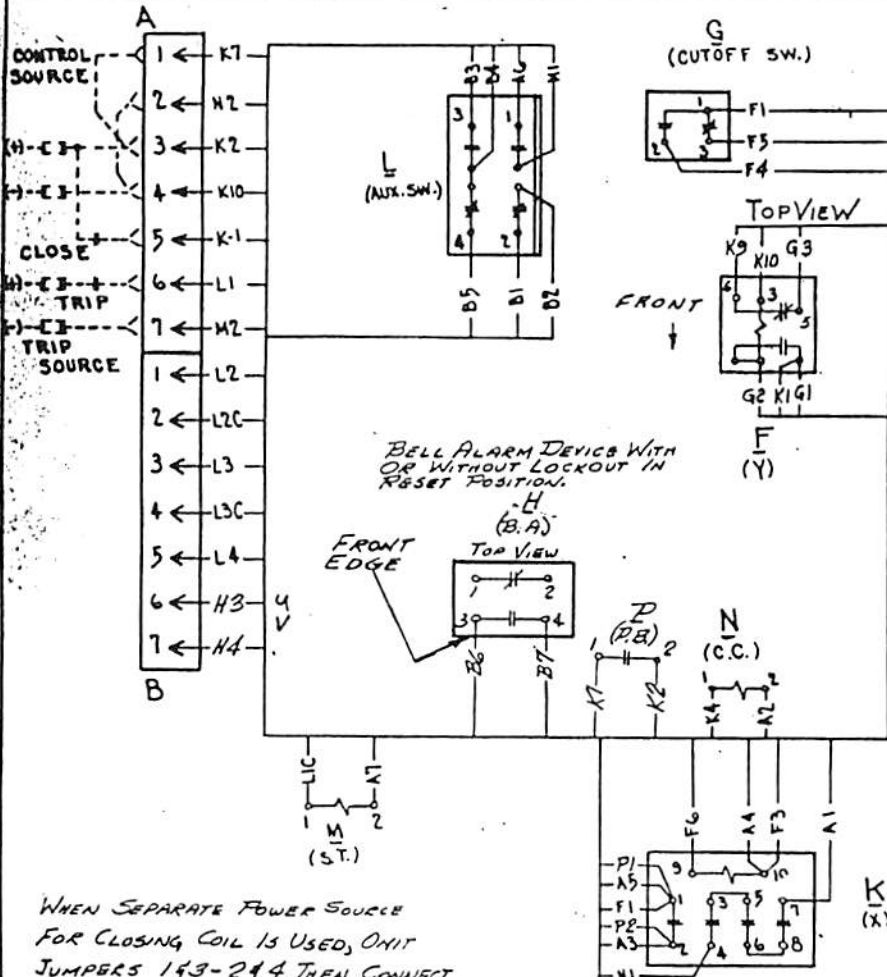


FIG. 1 - CONNECTION DIAGRAM

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED, OMIT JUMPERS 143-244, THEN CONNECT POWER TO 1 & 2.

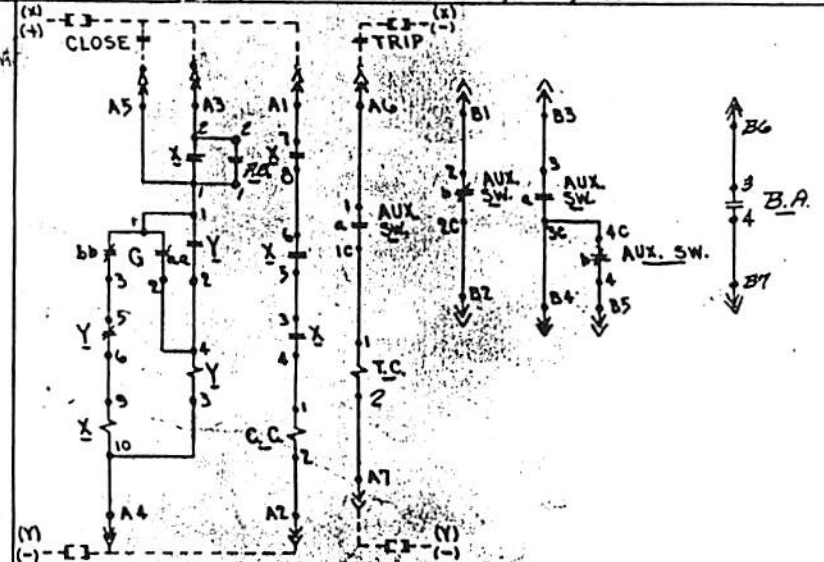


FIG. 2 - ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS.

- A-SEC. DISC. LOCATED TOP LEFT, FT. VIEW
- B-SEC. DISC. LOCATED LOWER LEFT, FT. VIEW
- F-(Y) ANTI-PUMP PERMISSIVE RELAY
- G-(aa-bb) CUTOFF SW.
- H-(B.A.) BELL ALARM OR LOCKOUT DEVICE OPERATES ONLY WHEN BKR TRIPS ON OVERCURRENT, MANUAL RESET 'a' OR 'b' CONTACTS
- K-(X) CLOSING CONTACTOR - 3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN
- L-(AUX. SW.) 2 "4" & 2 "b" CONTACTS (STD)
- M-(T.C.) SHUNT TRIP DEVICE
- N-(C.C.) SOLENOID CLOSING COIL
- P-(P.B.) CLOSING SW. ON BKR.

REV. NO.	DATE	BY	DESCRIPTION
1	11/1957	H. Knapp	SWGR. PHILA.
2	11/1957	H. Knapp	PHILA.

177L216-D





GENERAL ELECTRIC

177L216-D  
REV. 150

AK-2-15 & 25  
DRAWING BR. NOTE: ALL FIG. ARE FRONT VIEWS

177L216-D

HARNESS  
CONN. & ELEM. DIAG.

FIRST MADE FOR REG. AK-2-15 & 25 E.O.

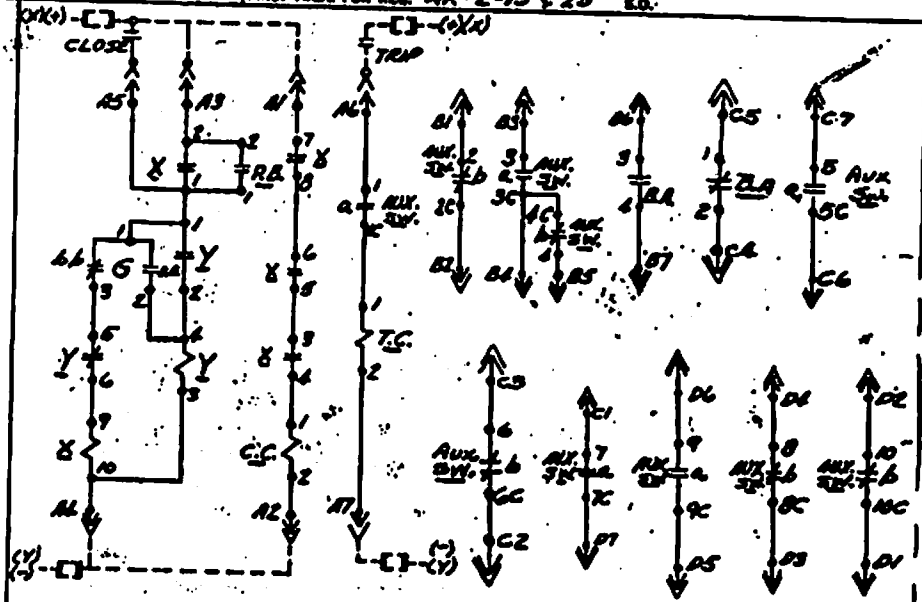
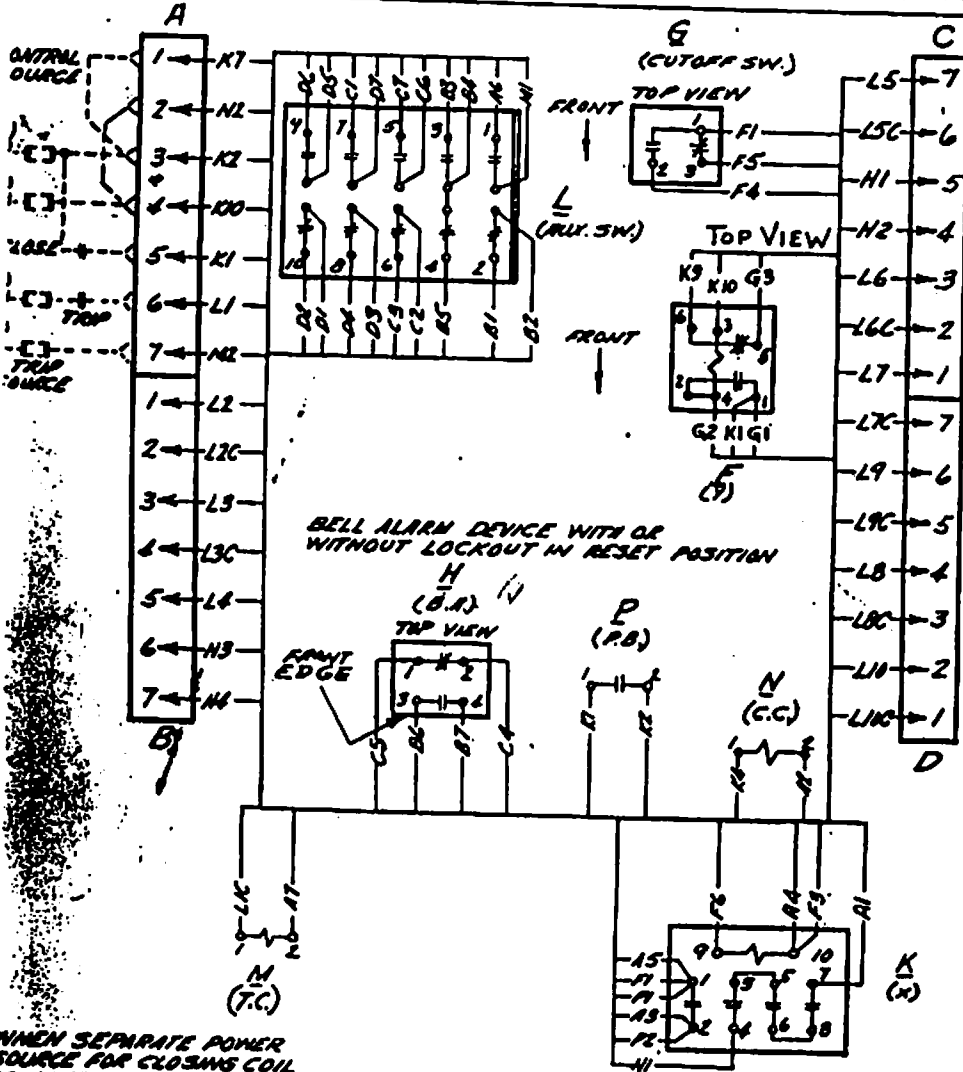


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A - SEC. DISC. LOCATED TOP LEFT, FT. VIEW
- B - LOWER LEFT
- C - TOP RIGHT
- D - SEC. DISC. LOCATED LOWER RIGHT FT. VIEW
- F-(Y) ANTI-PUMP, PERMISSIVE RELAY
- G-(aa-bb) CUTOFF SW.
- H-(BA) (1) BELL ALARM DEVICE-MAN. OR AUTO. RESET  
(2) BELL ALARM DEVICE WITH LOCKOUT - MAN. RESET
- K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAN) & 1 SET FOR SER. SW. L-(AUX. SW.) 5" & 5" CONTACTS (SPECIAL)
- M-(T.C.) SHUNT TRIP DEV
- N-(C.C.) SOLENOID CLOSING COIL
- P-(P.B.) CLOSING SW. ON BRK.

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED OMIT NUMBERS A1-A3 & 12-14 THEN CONNECT POWER TO A1 & A2.

FIG-1 CONNECTION DIAGRAM

DATE	BY	APPROVED	REV.	177L216-D
	2/18/40	A.P.		
L.V. SWGR.			177L216-D	
P.W.K.			REV. 150	

LSP-A RE

AK-2-15 & 25  
DRAWOUT BKR. NOTE: ALL FIG. ARE FRONT VIEWS

AK-2-1-2

177L216-D

HARNASS  
CONN. & ELEM. DIAG.

FIRST MADE FOR REQ. AK-2-15 & 25, S.D.

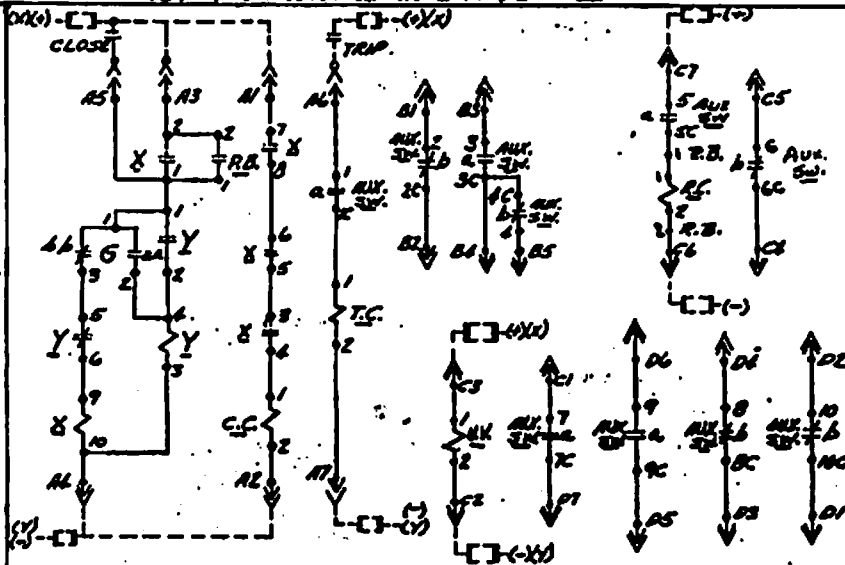
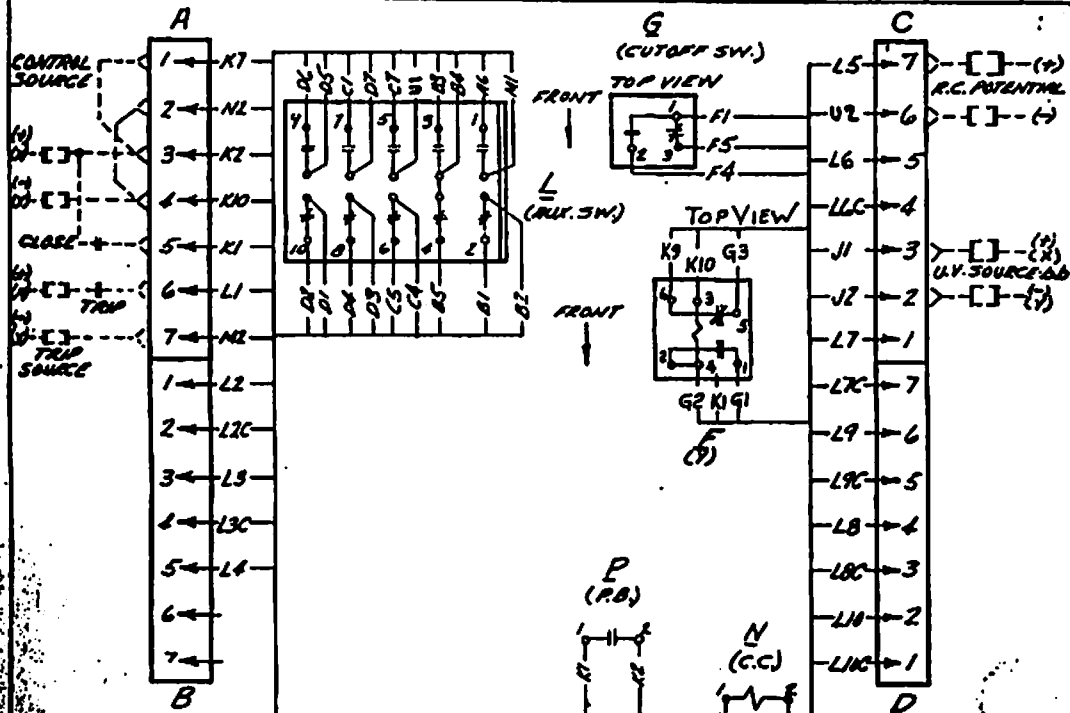


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A- SEC. DISC. LOCATED TOP LEFT, FT. VIEW
- B- LOWER LEFT
- C- TOP RIGHT
- D- SEC. DISC. LOCATED LOWER RIGHT FT. VIEW
- F-(Y) ANTI-PUMP, PERMISSIVE RELAY
- G-(aa-bb) CUTOFF SW.
- J-(U.V.) UNDERVOLTAGE TRIP DEVICE TIME DELAY OR INSTANTANEOUS
- K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SOLENOID
- L-(AUX. SW.) 5" & 5" CONTACTS (SPECIAL)
- M-(T.C.) SHUNT TRIP DEV.
- N-(C.C.) SOLENOID CLOSING COIL
- P-(P.R.) CLOSING SW. ON BKR.
- S-(R.C.) REVERSE CURRENT TRIP - POTENTIAL COIL
- U-(R.B.) RELAY BLOCK

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED, OMIT JUMPERS A1-A5 & A2-A4, THEN CONNECT POWER TO A1 & A2

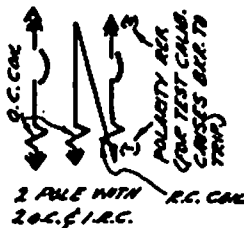
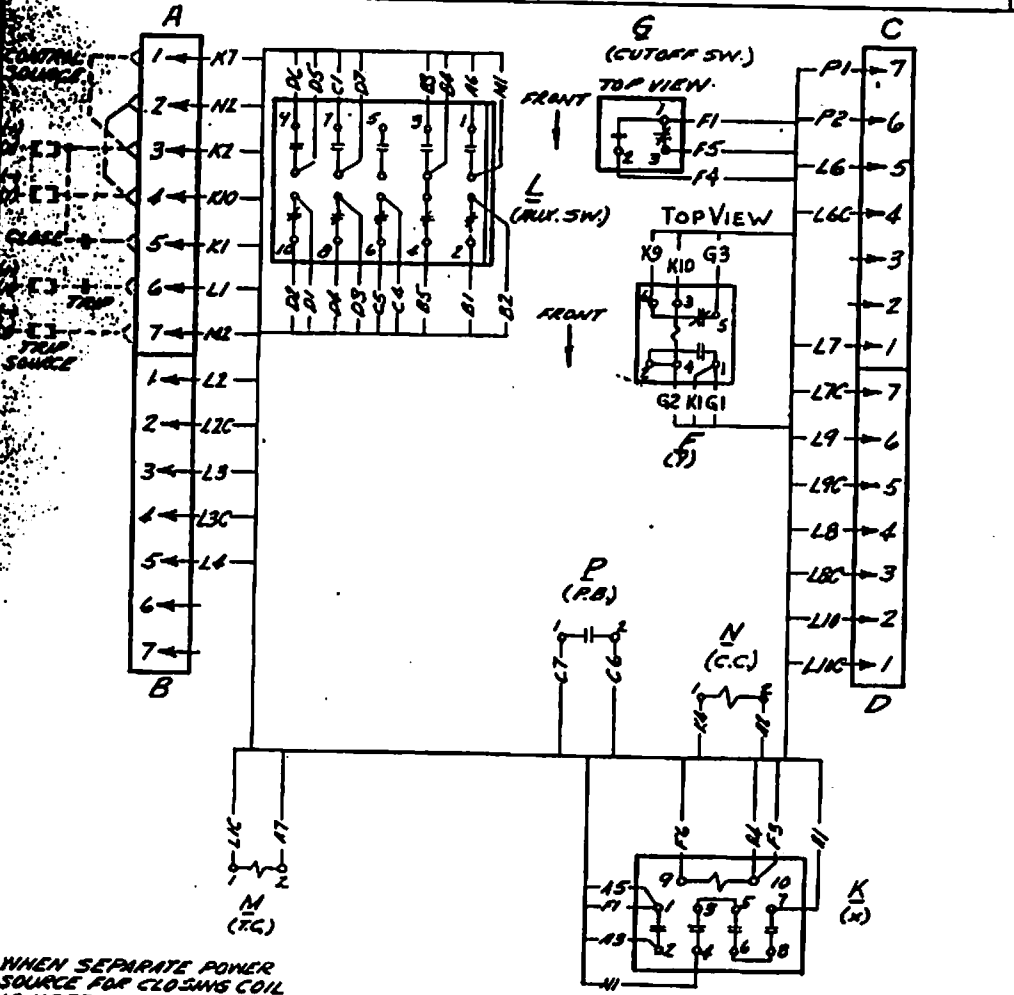


FIG-1 CONNECTION DIAGRAM

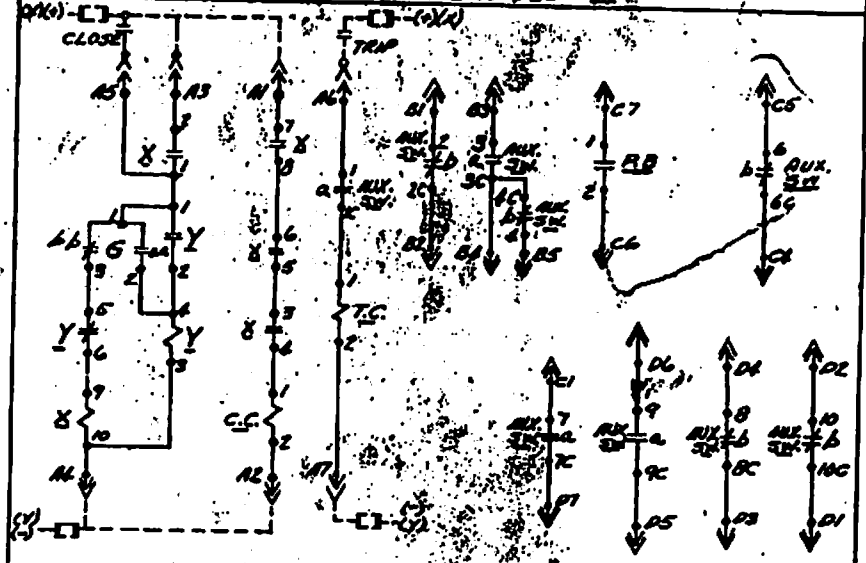
Checked by	11/13/54	1	11/13/54	C.V. SWGR.	177L216-D
Designed by	11/13/54	1	11/13/54	PNLR.	151
Revised by	11/13/54	2	11/13/54		

AK-2-15 & 25  
DRAWOUT BKR. NOTE: ALL FIG. ARE FRONT VIEWS

177L216-D  
HARNESSES  
CONN & ELEM. DIAG.



WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED, OMIT JUMPERS A1-A3 AND A4. THEN CONNECT POWER TO A1 & A2



LIST OF ABBREVIATIONS

A- SEC. DISC. LOCATED TOP-LEFT, FT. VIEW  
 B- LOWER LEFT  
 C- TOP RIGHT  
 D- SEC. DISC. LOCATED LOWER RIGHT FT. VIEW  
 F-(Y) ANTI-PUMP, PERMISSIVE RELAY  
 G-(aa-bb) CUTOFF SW.  
 K-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SOLENOID  
 L-(AUX.SW.) 5" & 5" CONTACTS (SPECIAL)  
 M-(T.C.) SHUNT TRIP DEV.  
 N-(C.C.) SOLENOID CLOSING COIL  
 P-(P.B.) CLOSING SW. ON BKR.

177L216-D	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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DAVE KOSSART

GENERAL ELECTRIC

177L216

AK-2-15 & 25

DRAINOUT BKR. NOTE: ALL FIG. ARE FRONT VIEWS

177L216-D

HARNESS  
CONN. & ELEM. DIAG.

FIRST MADE FOR REQ. AK-2-15 & 25 SO.

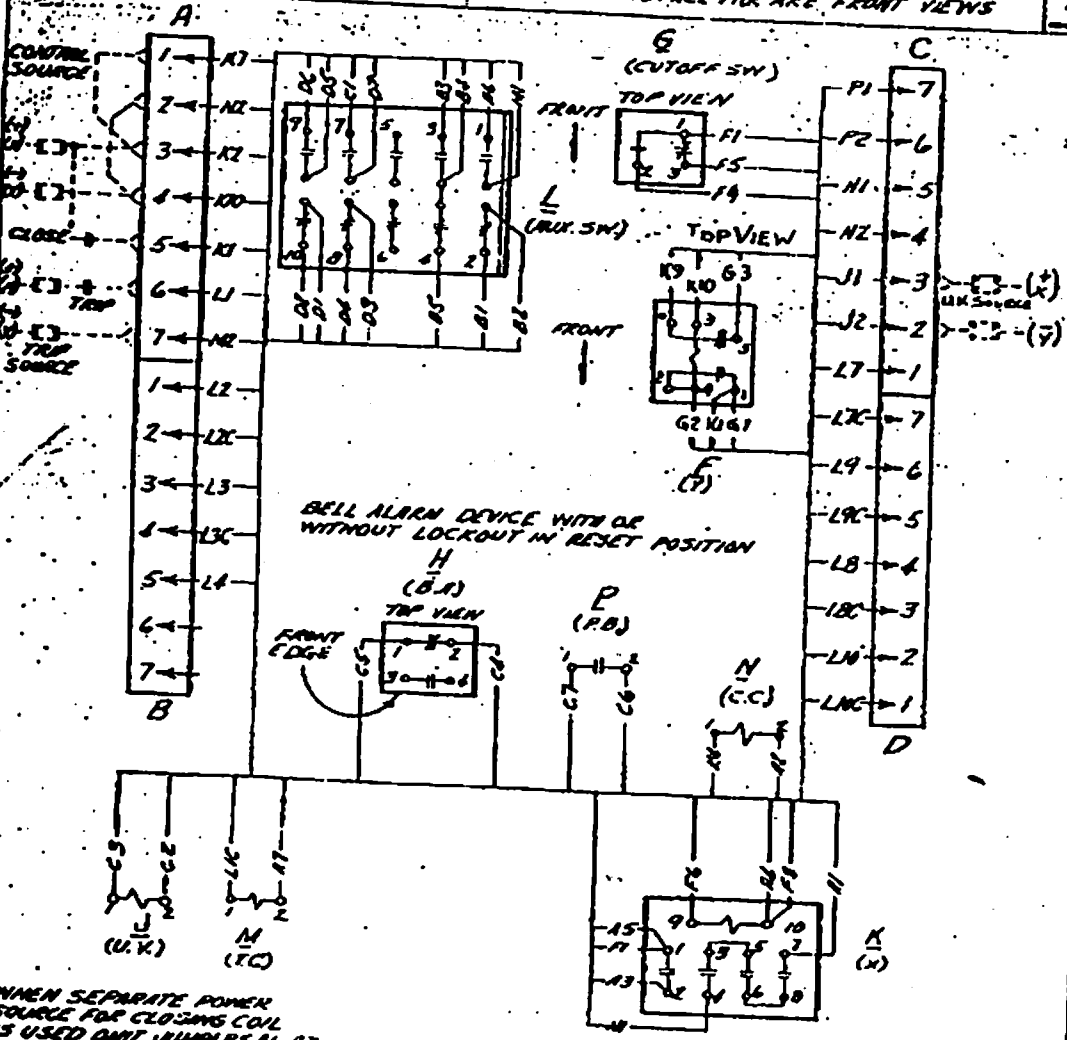


FIG-1 CONNECTION DIAGRAM

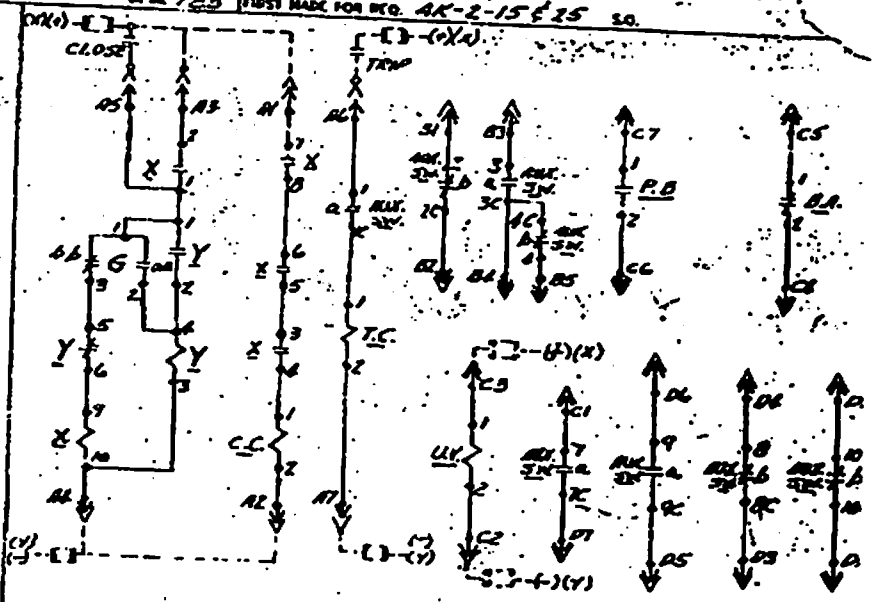


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A- SEC. DISC. LOCATED TOP LEFT, FT. VIEW
- B- LOWER LEFT
- C- TOP RIGHT
- D- SEC. DISC. LOCATED LOWER RIGHT FT. VIEW
- F-(1) ANTI-PUMP, PERMISSIVE RELAY
- G-(aa-bb) CUTOFF SW.
- H-(BA) (1) BELL ALARM DEVICE-MAN. OR AUTO. RESET
- (2) BELL ALARM DEVICE WITH LOCKOUT - MAN. RESET
- J-(U,V)-UNDERVOLTAGE TRIP DEVICE TIME DELAY OR INSTANTANEOUS
- X-(X) CLOSING CONTACTOR-3 SETS OF CONTACTS IN SECS (MAN) & 1 SET FOR SEAL-IN
- L-(LUX-SW) 5" x 5" CONTACTS (SPECIAL)
- M-(U.C.) SHUNT TRIP DEV. CLOSING COIL
- N-(C.C.) SOLENOID CLOSING COIL
- P-(PB) CLOSING SW. ON BKR.

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED OMT JUMPS A1-A3 CAL-A1 THEN CONNECT POWER TO A1 & A2

L.V. SWGE. PHILA.

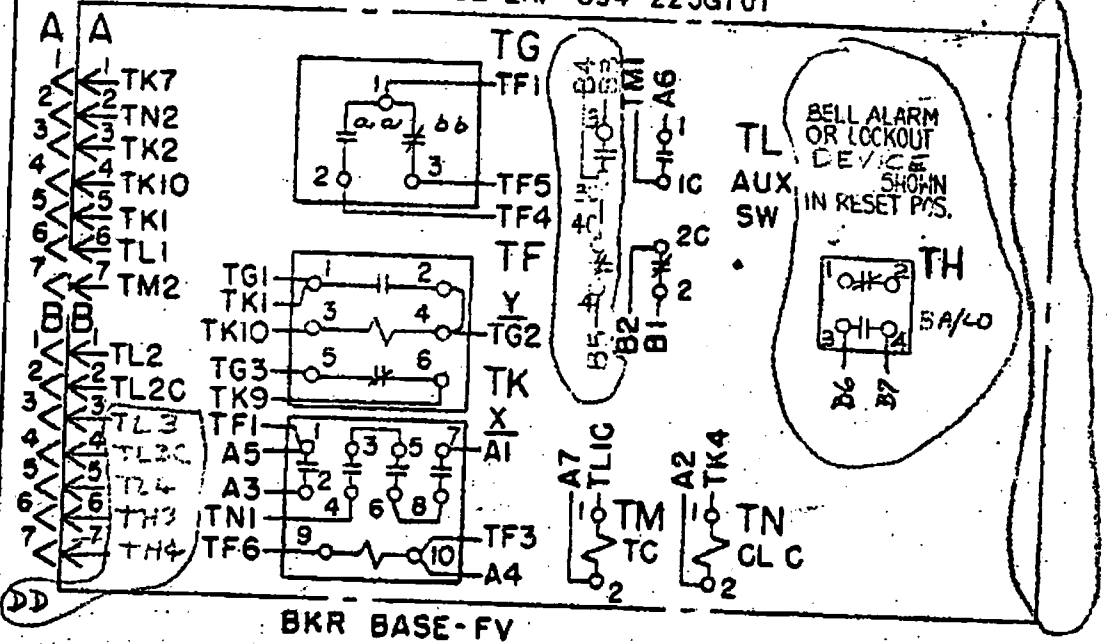
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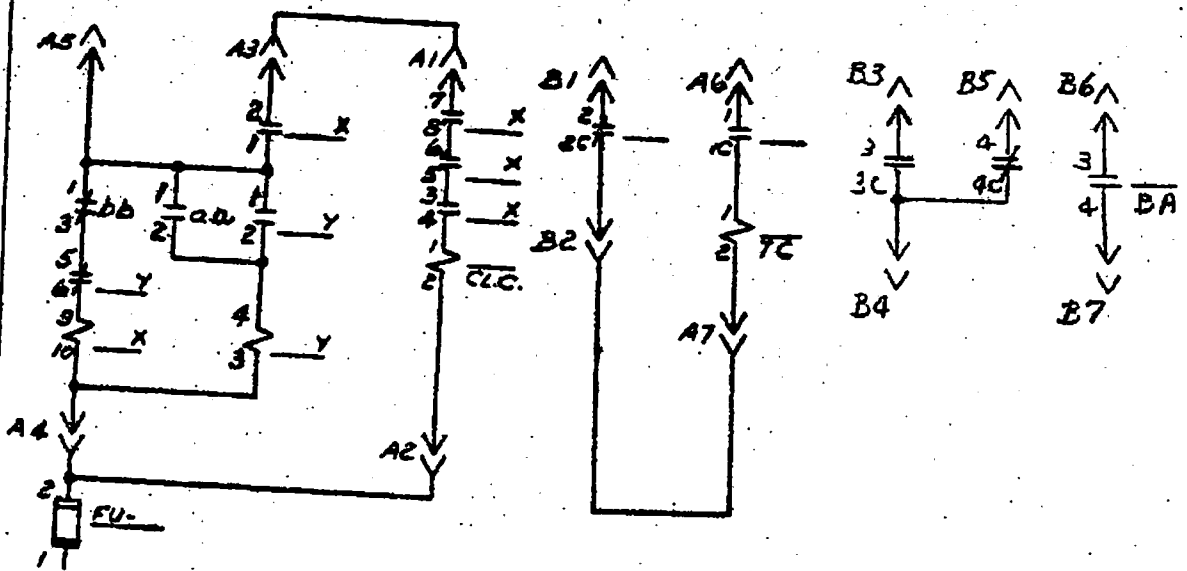
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REV NO.	TITLE	CONT ON SHEET	SH NO.
	177L216-DW-G 107		
CONT ON SHEET	SH NO.	FIRST MADE FOR	
		AK 2-15/25 D/O ACB	

USE LRP-394 225G101



BKR BASE-FV



MADE BY	APPROVALS	DIV OR DEPT.
ISSUED		

NO. 0725-1 P. 3V-508-44

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TITLE

177L216-DW-G122

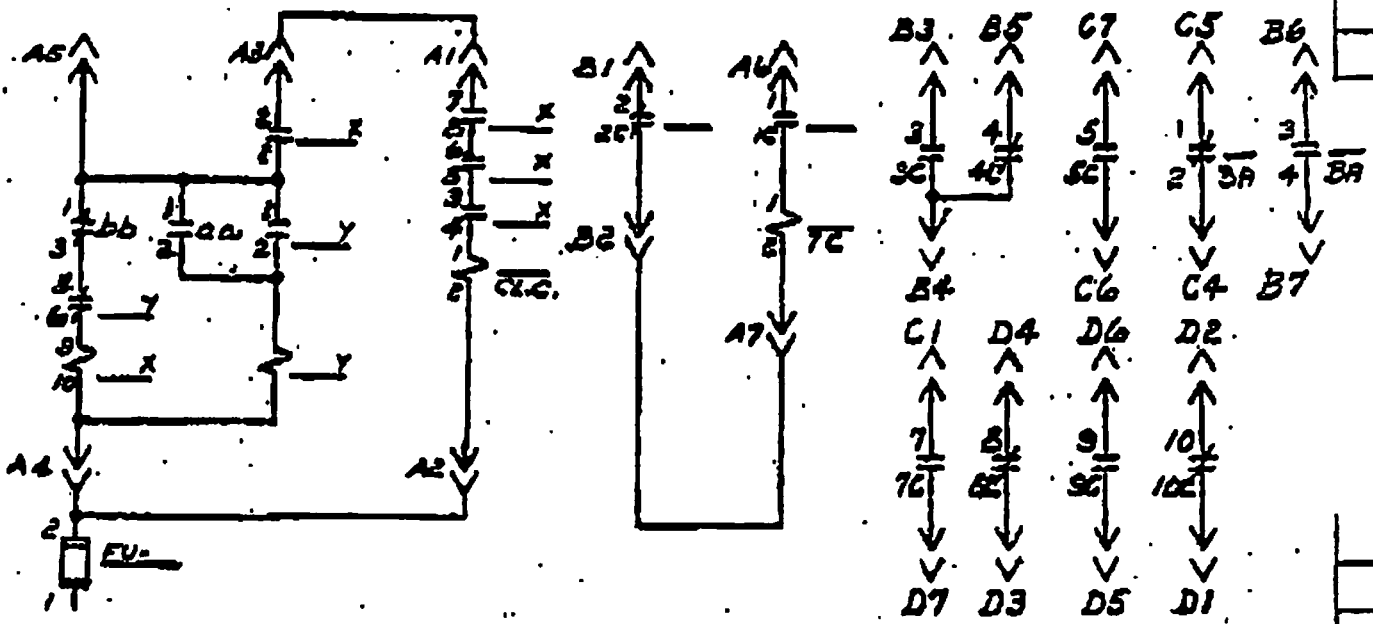
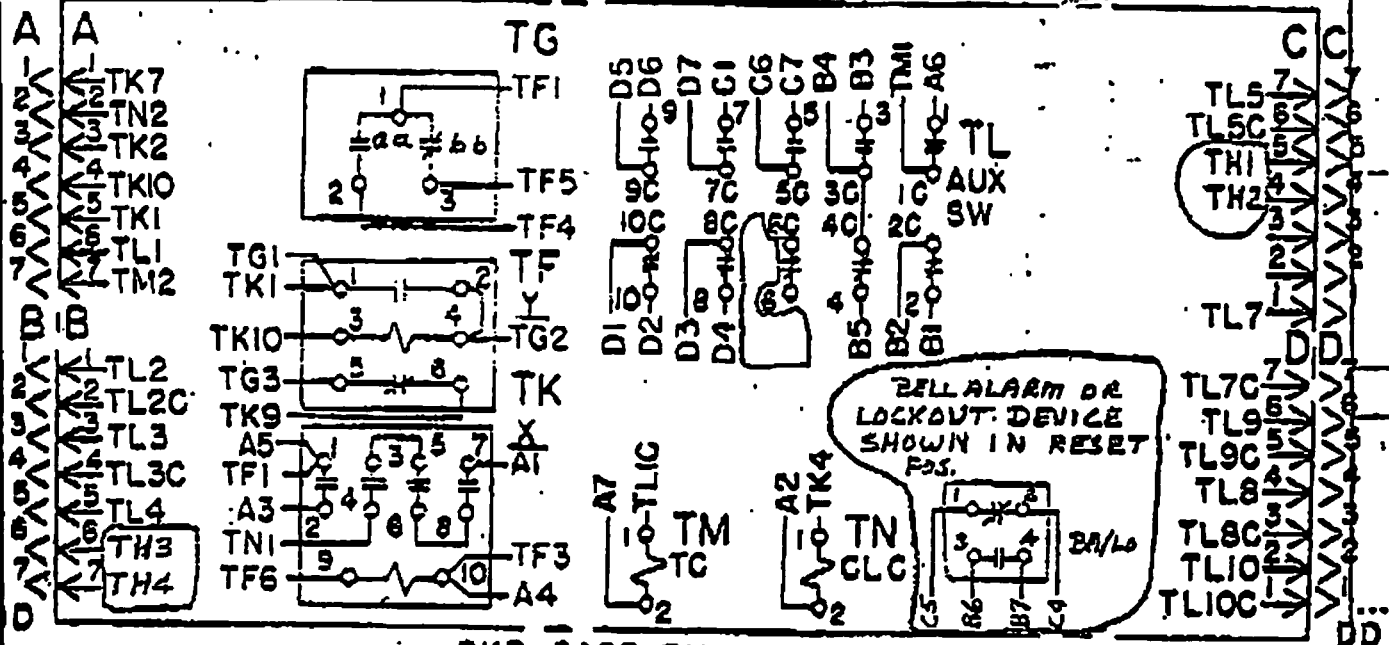
CONT ON SHEET

SH NO.

FIRST MADE FOR AK2-15/25 D10 ACB

USE LRP-394 225G117

REVISIONS



MADE BY

APPROVALS

DIV OR SEPT.

TESTED

LOCATION CONT ON SHEET

SH NO.

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TITLE

177L216-DW-G 173

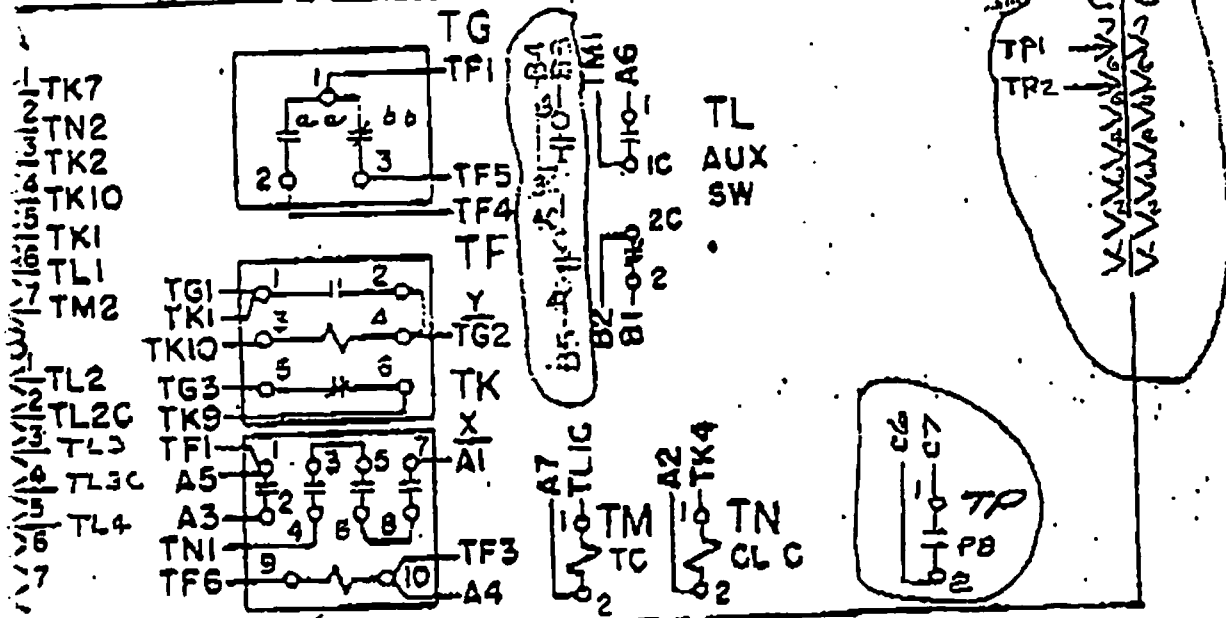
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SHEET

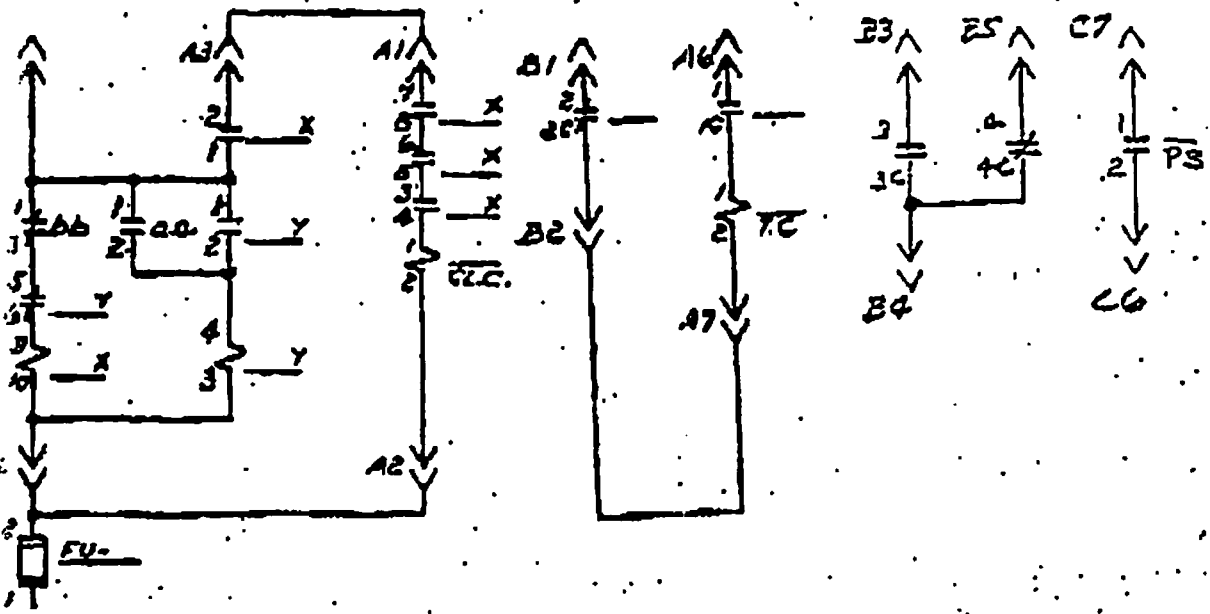
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USE LRP-394 225G101

REVISIONS



BKR BASE-FV



PRINTS TO

DATE BY	APPROVALS	DN OR DEPT.	SW NO.
ISSUED		LOCATION	CONT ON SHEET

REV NO.

TITLE

177L216-DW-G175

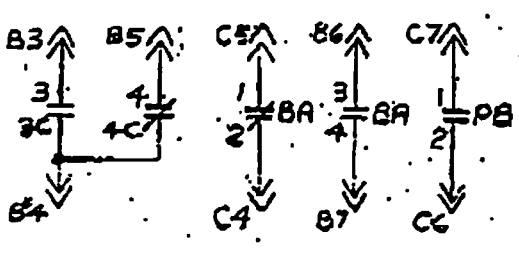
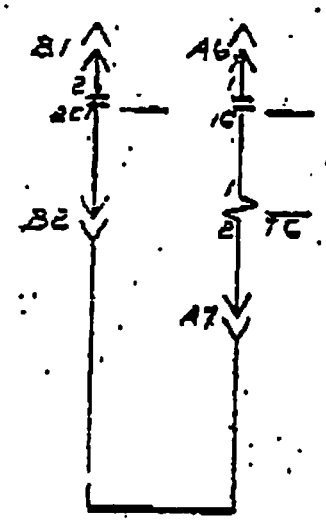
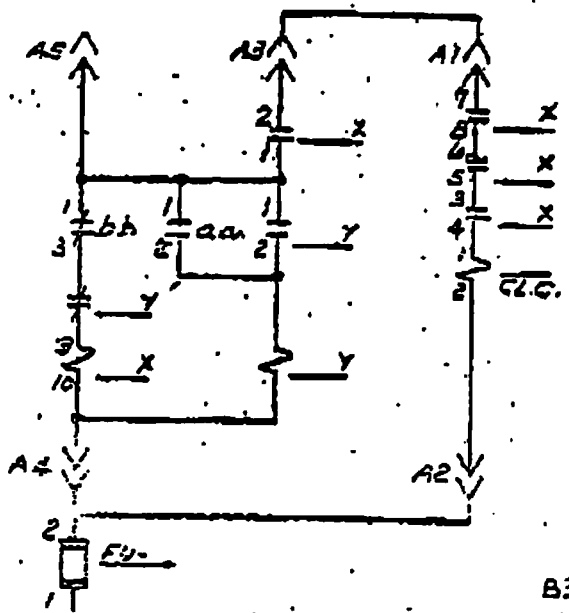
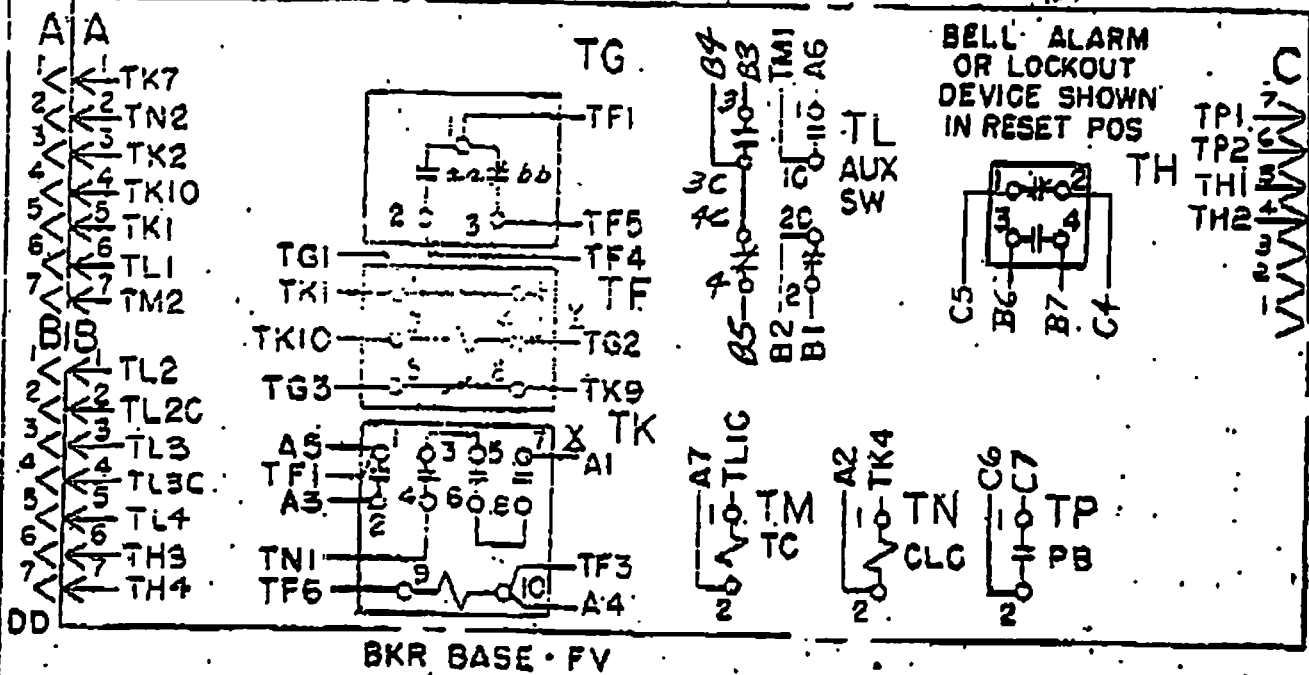
CONT ON SHEET

SP NO.

FIRST MADE FOR AK 2-15/25 D/O ACB

USE LRP-394 225G133

REVISION:



MADE BY \_\_\_\_\_ APPROVALS \_\_\_\_\_ DIV OR DEPT. \_\_\_\_\_ LOCATION \_\_\_\_\_ CONT ON SHEET \_\_\_\_\_ SH NO. \_\_\_\_\_

ISSUED \_\_\_\_\_

PRINTS TO \_\_\_\_\_



GENERAL ELECTRIC

AK-2A-15 & 25  
 DRAWING ENGR. NOTE: ALL FIG ARE FRONT VIEWS

177L216-R  
 HARNESS  
 CONN & ELEM DIAG  
 AX-2A-15 & 25

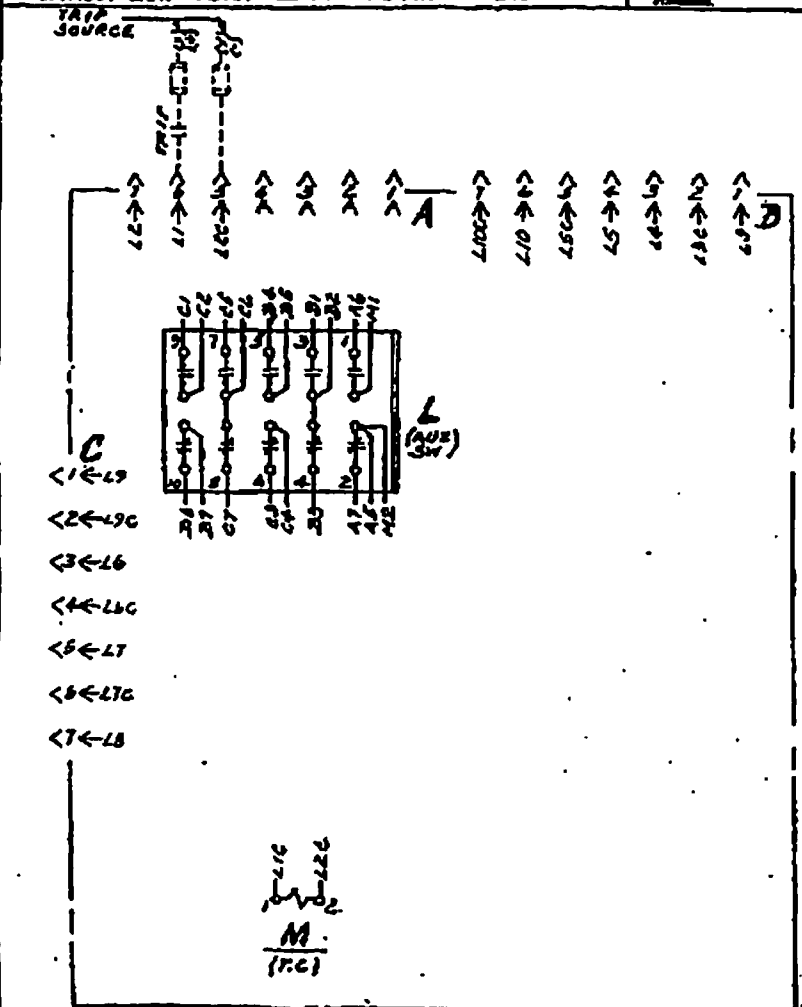


FIG-1 CONNECTION DIAGRAM

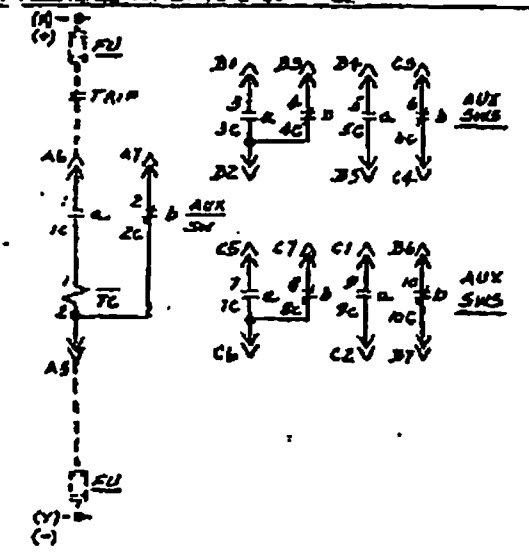


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS  
 A-SEC DISC. LOCATED TOP LEFT, FT. VIEW  
 B-SEC DISC. LOCATED TOP RIGHT, FT. VIEW  
 C-SEC DISC. LOCATED LOWER LEFT, FT. VIEW

M-IT.C. | SHUNT TRIP DEV

<p>1. THE DRAWING SHALL BE SUBJECT TO THE GENERAL TERMS AND CONDITIONS OF THE PURCHASE ORDER.                  2. THE DRAWING SHALL BE SUBJECT TO THE GENERAL TERMS AND CONDITIONS OF THE PURCHASE ORDER.                  3. THE DRAWING SHALL BE SUBJECT TO THE GENERAL TERMS AND CONDITIONS OF THE PURCHASE ORDER.</p>	<p>DATE: 8/27/60                  BY: [Signature]                  CHECKED: 8/27/60                  BY: [Signature]</p>	<p>LOW VOLTAGE                  SWITCHGEAR DEPARTMENT                  PHILADELPHIA</p>	<p>177L216-R                  REV. 03 53</p>
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SR NO.

177L216-R

CONN & ELEM DIAG

CONT ON SHEET

SR NO. 117

FIRST MADE FOR REQ. AK-2A-15 & 25

S.O.

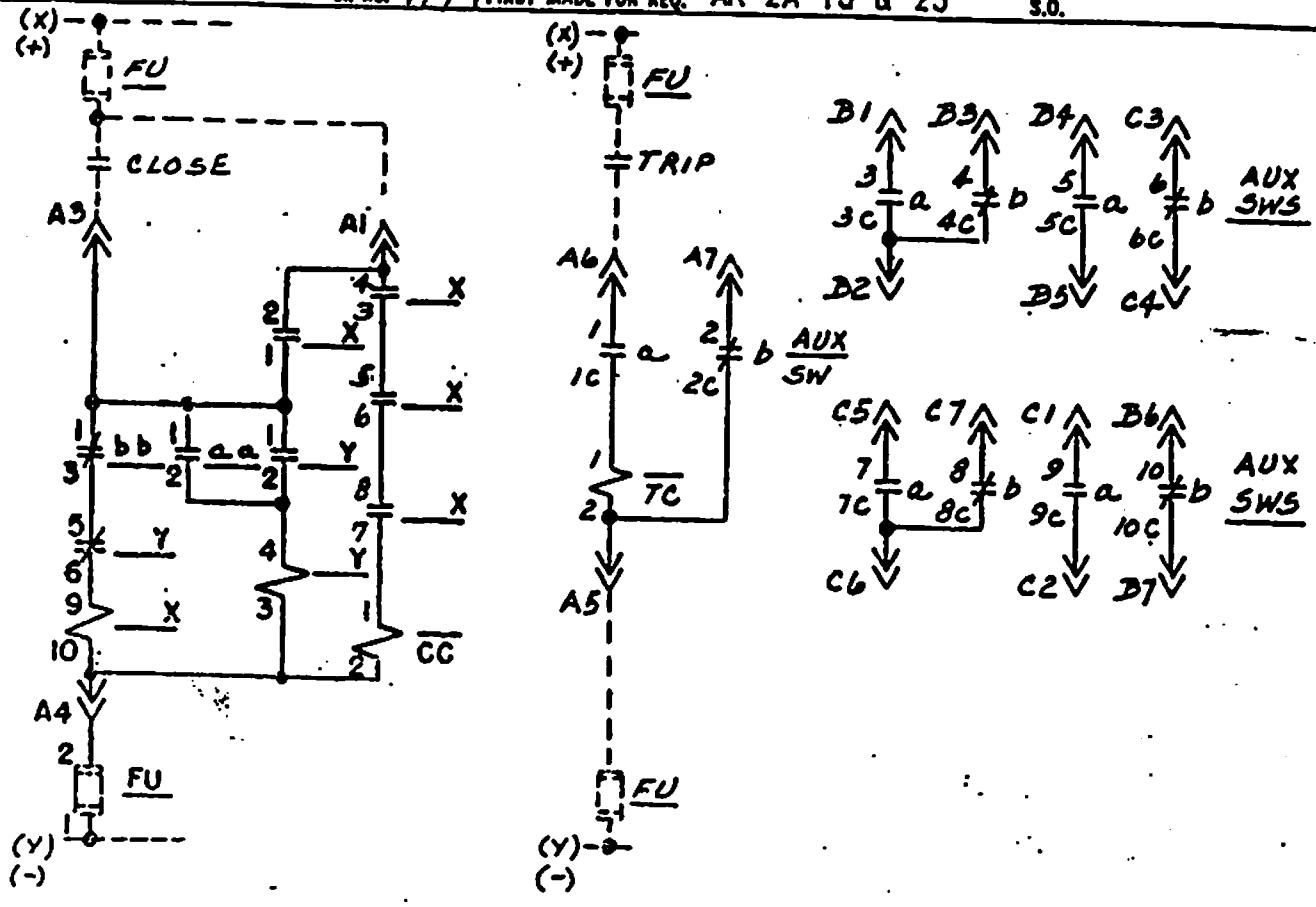


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A-SEC DISC. LOCATED TOP LEFT, FT. VIEW
- B-SEC DISC. LOCATED TOP RIGHT, FT. VIEW
- C-SEC DISC. LOCATED LOWER LEFT, FT. VIEW
- F-(Y) ANTI-PUMP, PERMISSIVE RELAY
- G-(aa-bb) CUTOFF SW.
- K-(X) CLOSING CONTACTOR - 3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN
- L-(AUX SW) 5 "a" & 5 "b" CONTACTS (SPECIAL)
- M-(T.C.) SHUNT TRIP DEV
- N-(C.C.) SOLENOID CLOSING COIL

PRINTS TO

1	REVISIONS	MADE BY	APPROVALS	LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA	177L216-R
		Jack Kilgore June 22, 1960	D. J. Carlson June 23, 1960		
2					

# AK-2A-15 & 25

DRAWOUT BKR. NOTE: ALL FIG ARE FRONT VIEWS

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS.
2. EXACT LOCATION OF APPARATUS MUST NOT BE RELIED UPON.
3. NUMBERED CIRCLES ARE MERELY CONVENIENT OR LEADS AND DO NOT NECESSARILY REPRESENT COORDINATE POINTS.
4. INTERNAL CONNECTIONS OF DEVICES ARE INCLUDED ELEMENTARY DIAGRAMS.
5. DEVICE FUNCTION NUMBERS AND ABBREVIATION STANDARDS.

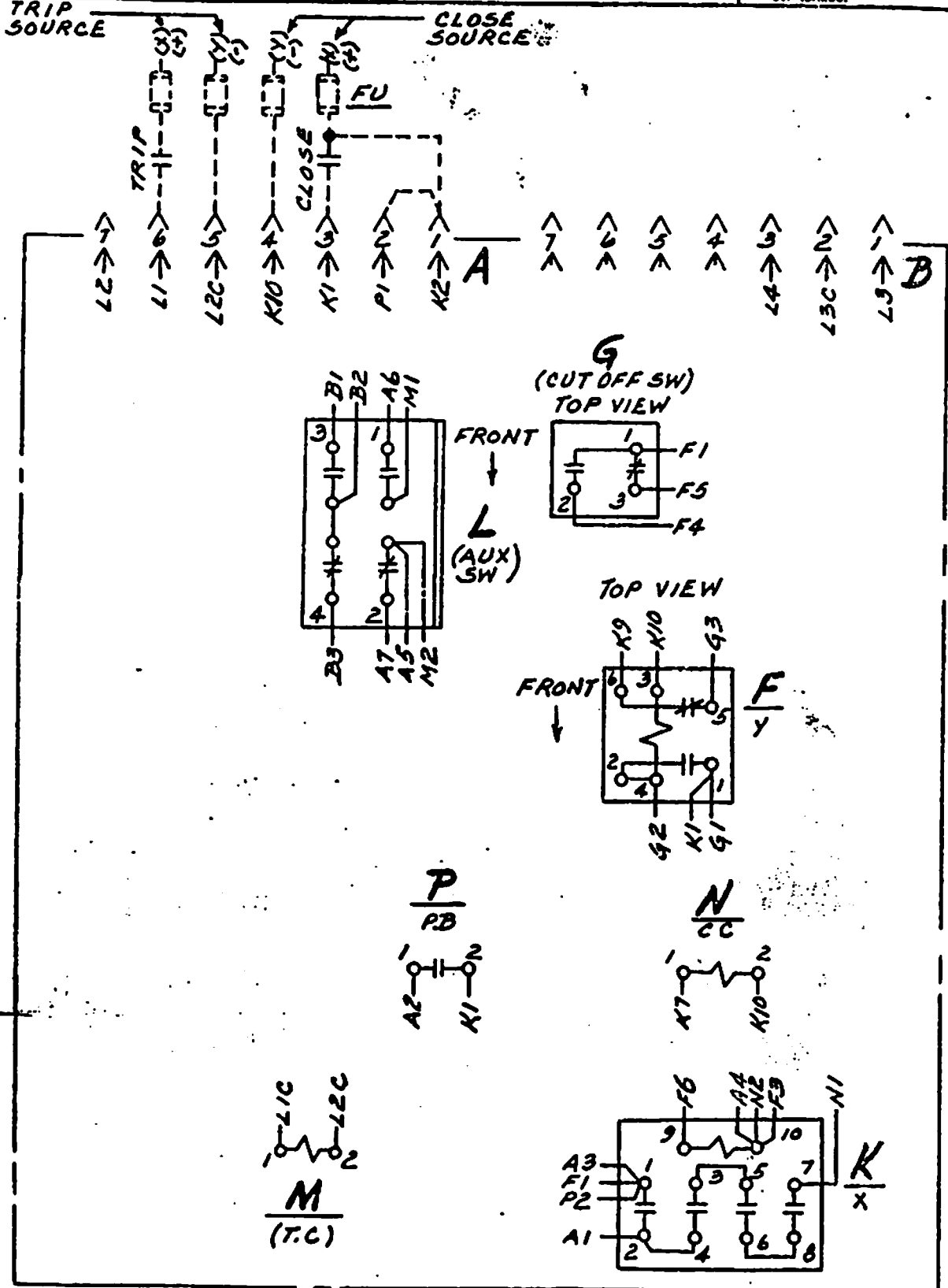


FIG-1 CONNECTION DIAGRAM

CONNECTIONS BOTH ENDS OF WIRE ARE IDENTIFIED AS TO DESTINATION. SKETCH INDICATES CONNECTION FROM DEVICE STUDS TO TERMINAL BOARD A TERMINAL I.



1. 177L216-R 137

REV 0-1  
**177L216-R**  
 CONT ON SHEET  
 SHEET NO. 137

TITLE  
**HARNES**  
**CONN & ELEM DIAG**  
 FIRST MADE FOR REQ. AK-2A-15 & 25 S.O.

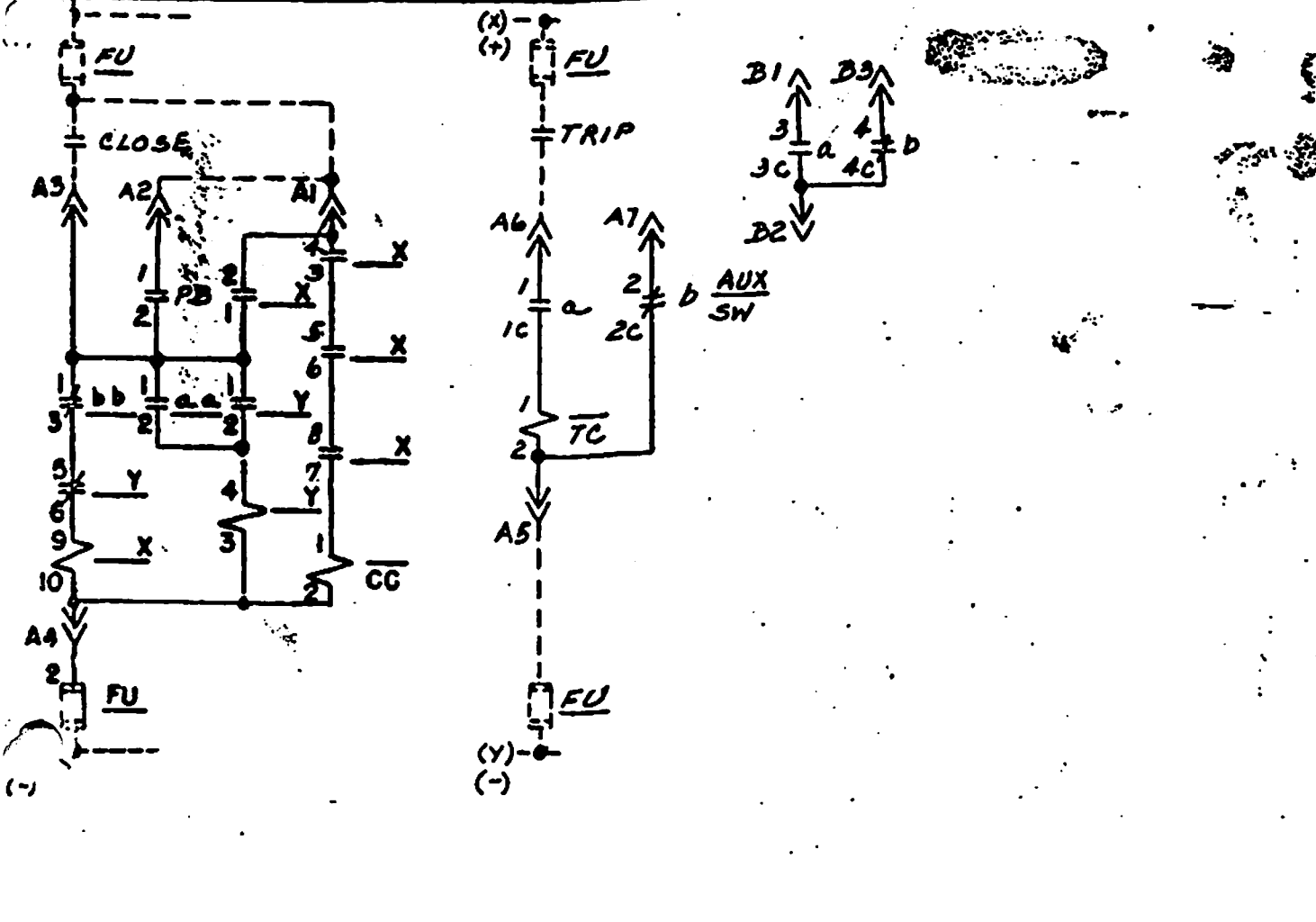


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- SEC DISC. LOCATED TOP LEFT, FT. VIEW
- SEC DISC. LOCATED TOP RIGHT, FT. VIEW
- (Y) ANTI-PUMP, PERMISSIVE RELAY
- (a, b) CUTOFF SW.

- (X) CLOSING CONTACTOR - 3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN
- (AUX SW) "a" & "b" CONTACTS (SPECIAL)
- (T.C.) SHUNT TRIP DEV
- (C.C.) SOLENOID CLOSING COIL
- (C.S.) CLOSING SW. ON BKR.

PRINTS TO

BY *Jack Kilgore* JUN 22, 1960  
 APPROVALS *D. J. ...* JUN 23, 1960

LOW VOLTAGE  
 R DEPARTMENT  
 PHILADELPHIA

**177L216-R**  
 CONT ON SHEET SHEET NO. 137

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JOE

AK-2A-15 & 25

GENERAL ELECTRIC

WRT BKR. NOTE: ALL FIG ARE FRONT VIEWS

177L216-R

HARNESS  
CONN & ELEM DIAG

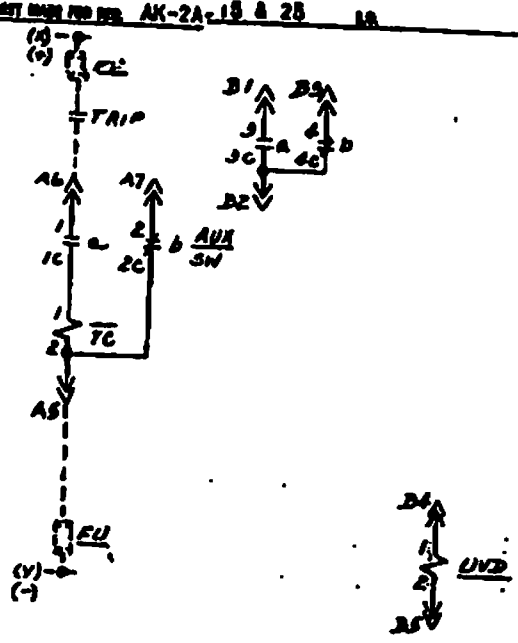
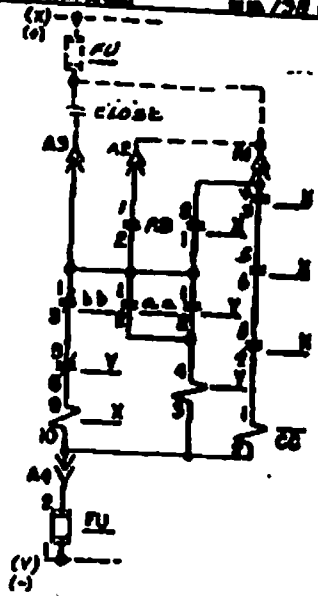
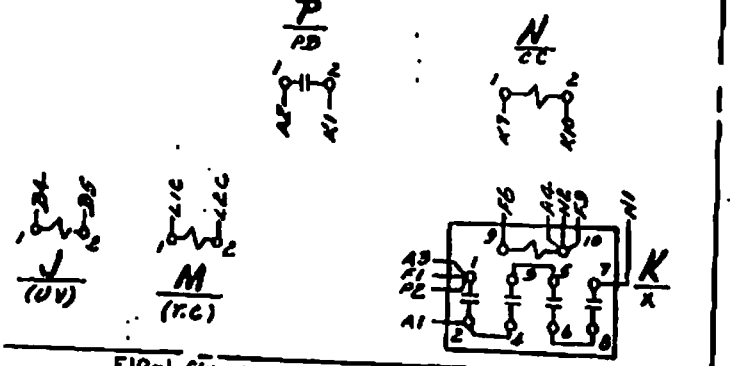
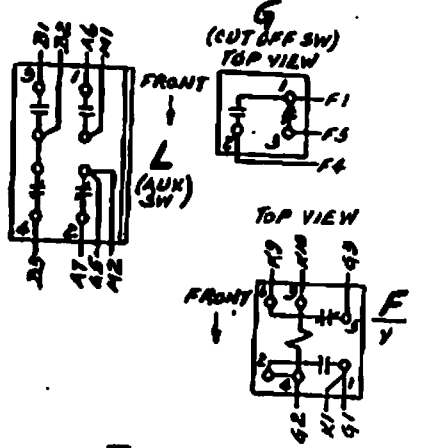
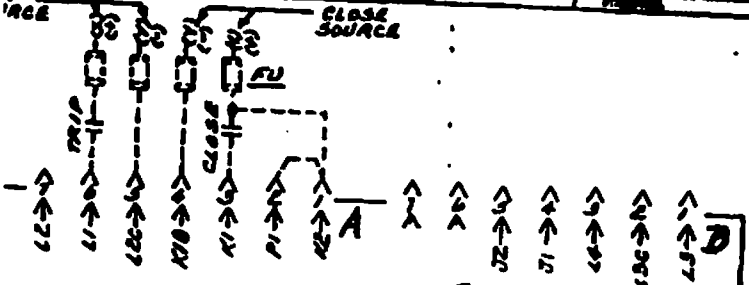


FIG-2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS  
 A-SEC DISC. LOCATED TOP LEFT, FT. VIEW  
 B-SEC DISC. LOCATED TOP RIGHT, FT. VIEW

F-(Y) ANTI-PUMP, PERMISSIVE RELAY  
 G-(G-bb) CUTOFF SW.  
 H-(B.A.) (1) BELL ALARM DEVICE - MAN. OR AUTO. RESET  
 (2) BELL ALARM DEVICE WITH LOCKOUT - MAN. RESET  
 J-(U.V.) UNDERVOLTAGE TRIP DEVICE TIME DELAY OR INSTANTANEOUS  
 K-(X) CLOSING CONTACTOR - 3 SETS OF CONTACTS IN SERIES (MAIN)  
 & 1 SET FOR SEAL-IN  
 L-(AUX SW) "a" & "b" CONTACTS (SPECIAL)  
 N-(T.C.) SHUNT TRIP DEV  
 H-(C.C.) SOLENOID CLOSING-COIL  
 P-(P.B.) CLOSING SW. ON BKR.

FIG-1 CONNECTION DIAGRAM

TITLE

177L216RW-G117

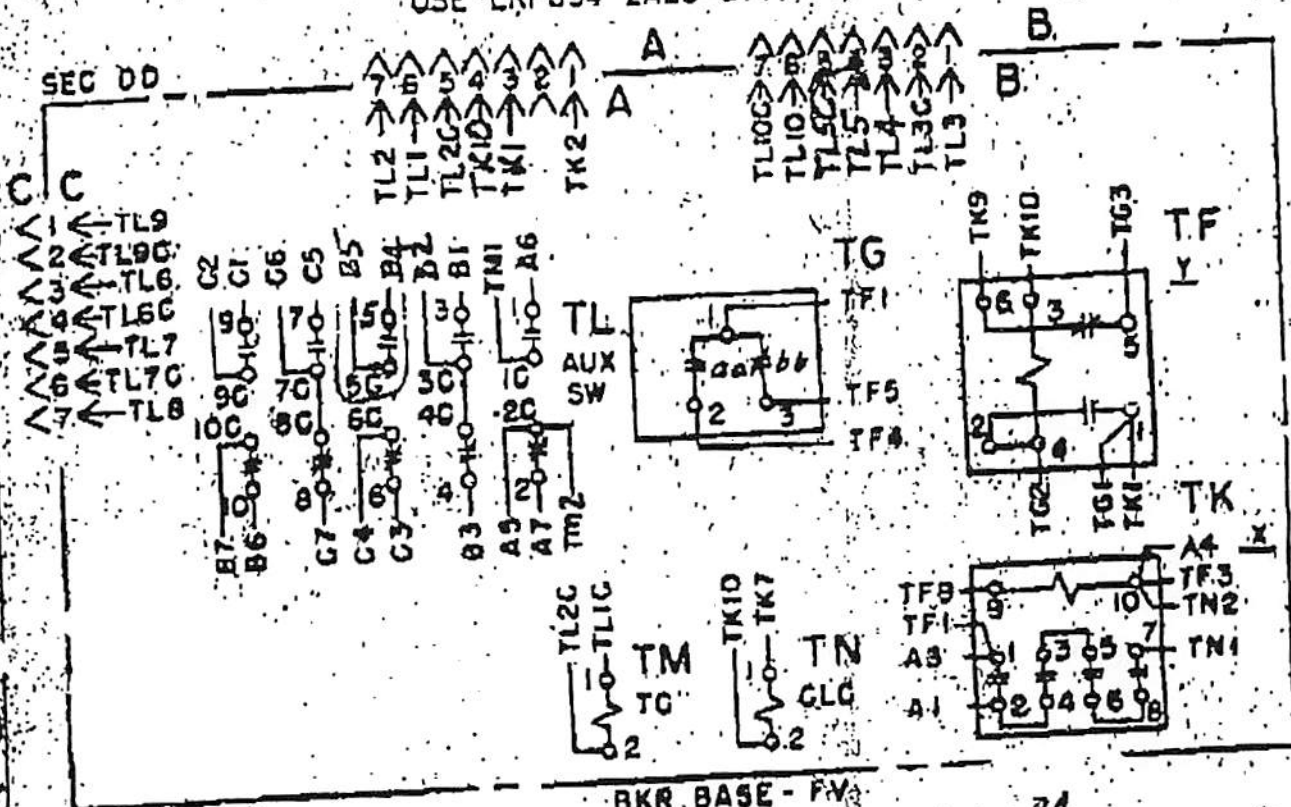
FIRST MADE FOR AK-2A-15/25 D/O ACB

CONT. ON SHEET

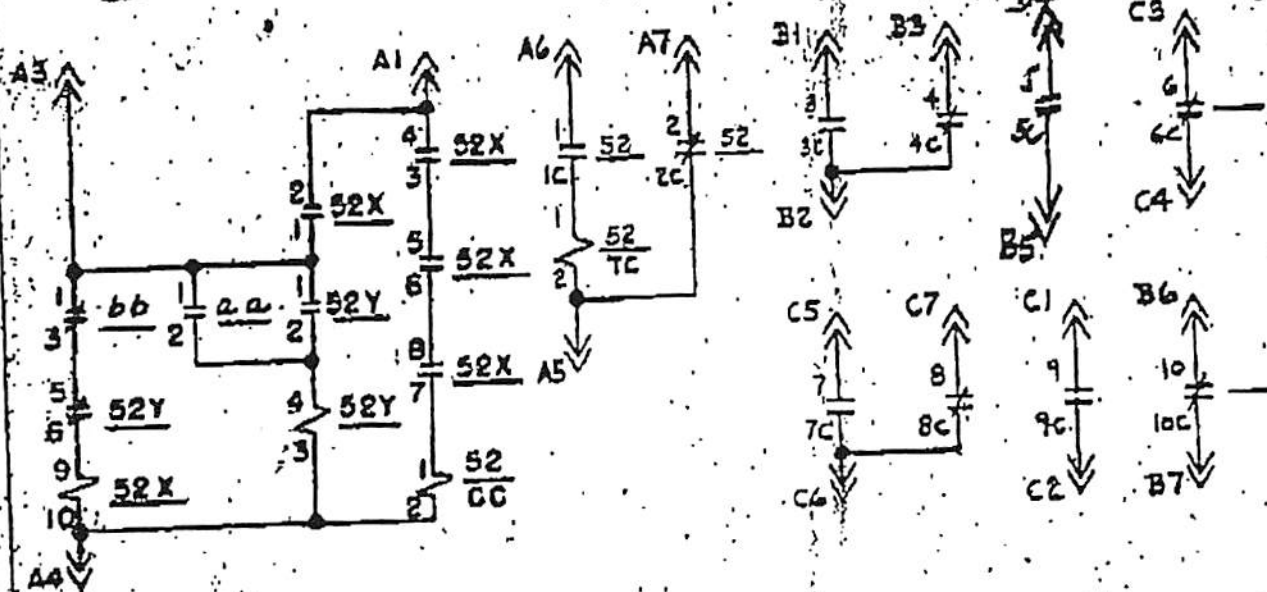
DN. NO.

REVISIONS

USE LRP394 2A25-G117



BKR BASE - FV



PRINTS TO

DATE BY

APPROVALS

DIV. DR.

1.17.5

AK-2-15 & 25  
 ENCLOSED OR STATIONARY MOUNTED BREAKER

NOTE: ALL FIGS. ARE FRONT VIEWS

177L216-5

GENERAL ELECTRIC

HARNNESS  
 CONN. & ELEM. DIAG.

FIRST MADE FOR REQ. AK-2-15 & 25 S.O.

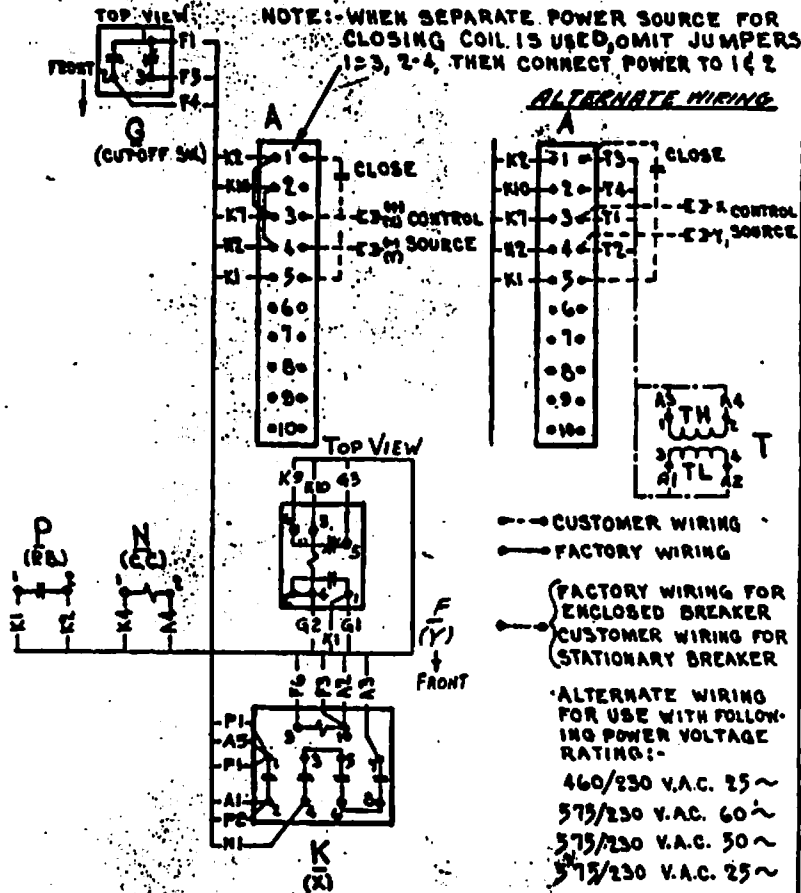


FIG. 1. CONNECTION DIAGRAM

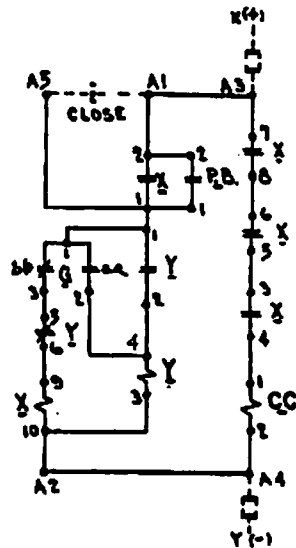


FIG. 2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A - TERMINAL BOARD - FRONT VIEW
- F-(Y) - ANTI-PUMP PERMISSIVE RELAY
- G - CUT-OFF SWITCH
- N-(C.C.) - SOLENOID CLOSING COIL
- P-(P.B.) - CLOSING SW. ON BKR.
- T - AUX. POWER TRANSFORMER
- K-(X) - CLOSING CONTACTOR - 3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN

DATE	BY	APPROVED	SWGR.	177L216-5
	James Sept. 3, 1964		PHILA	
	September 9, 1964			

JOSP-AI RE

NO. 0-12

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177L216-5

WIPNESS  
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FIRST MADE FOR REQ. AK-2-15 & 25-80

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- K-(X) CLOSING CONTACTOR - 3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN
- L-(AUX. 24) 2 & 25 CONTACTS (SIDE)

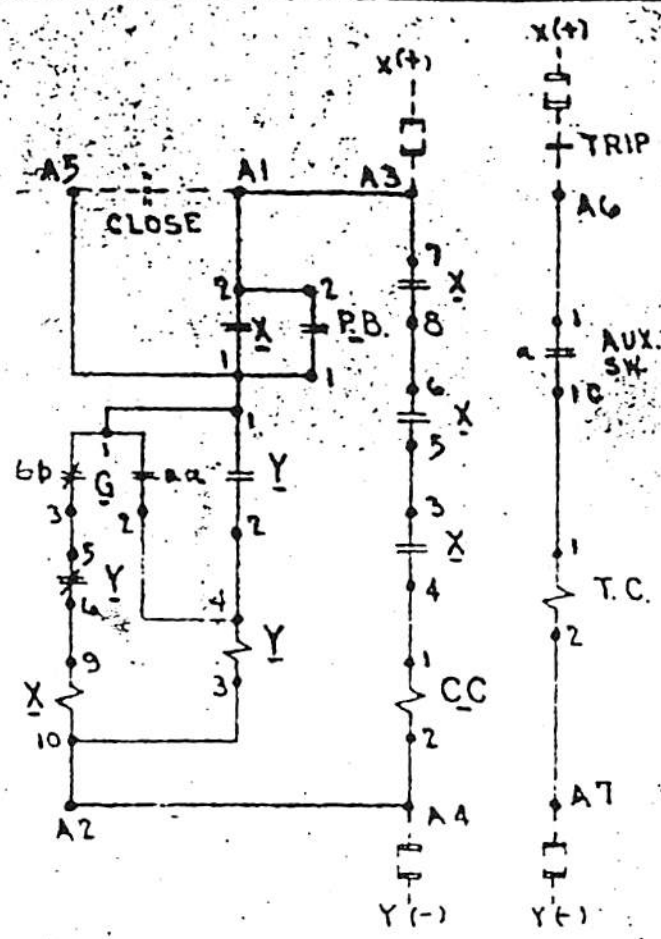


FIG. 2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A- TERMINAL BOARD FRONT VIEW
- F-(Y) ANTI-PUMP PERMISSIVE RELAY
- G- CUT-OFF SWITCH
- H-(B.A.) BELL ALARM DEVICE WITHOUT LOCKOUT - MAN. OR AUTO. RESET
- H-(B.A.) BELL ALARM DEVICE WITH LOCKOUT - MAN. RESET ONLY
- K-(X) CLOSING CONTACTOR - 3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN
- L-(AUX. 24) 2 & 25 CONTACTS (SIDE)
- M-(T.C.) SHUNT TRIP DEVICE
- N-(C.C.) SOLENOID CLOSING COIL
- P-(P.B.) CLOSING SW. ON BRK
- T- AUX. POWER TRANSFORMER



AK-2-15 & 25

ENCLOSED OR STATIONARY MOUNTED BREAKER

NOTE: ALL FIGS. ARE FRONT VIEWS

177L216-5

HARNNESS  
CONN. & ELEM. DIAG.

FIRST MADE FOR REG. AK-2-15 & 25 S.O.

Aug. 26, 2014 9:18AM CROWN

No. 8098 P. 2

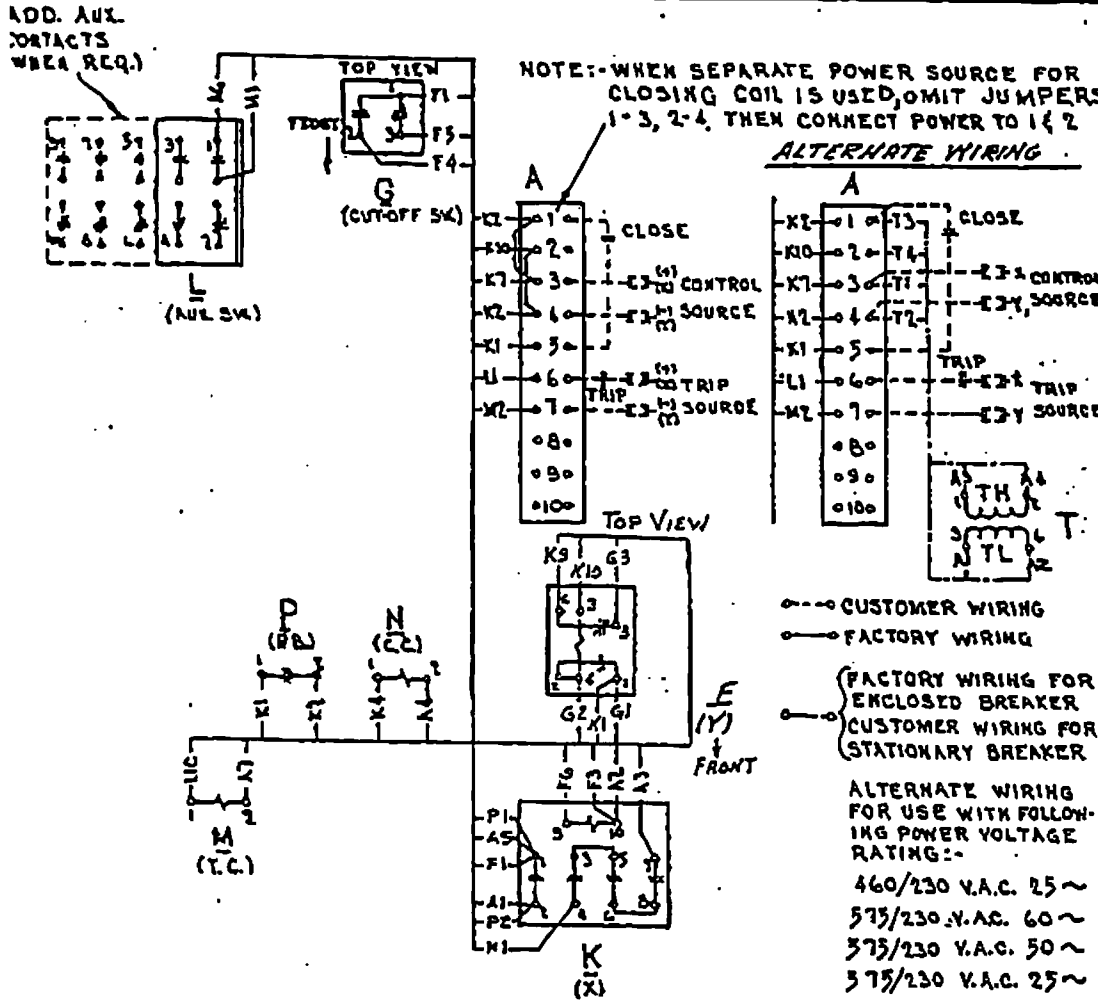
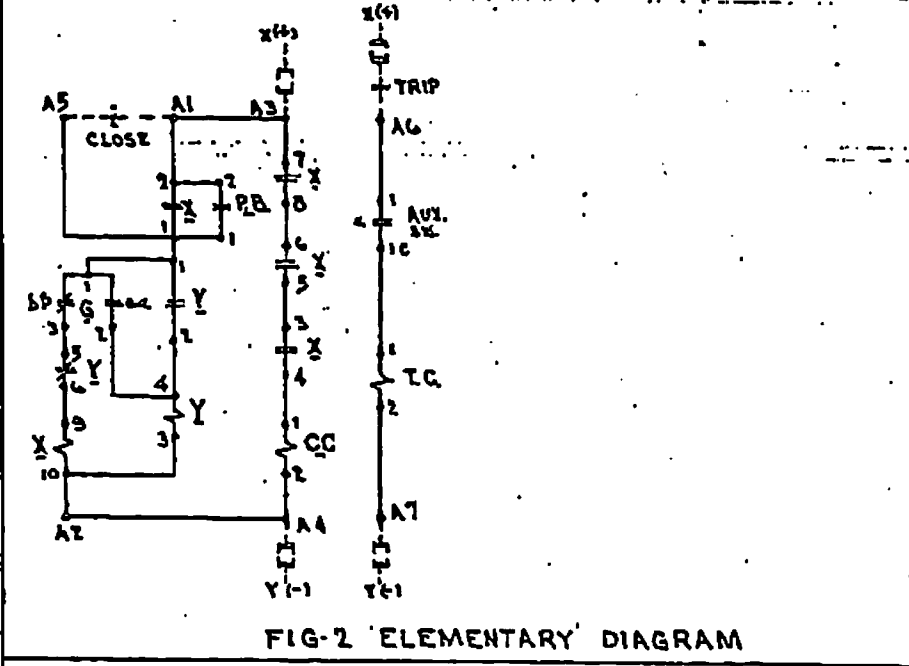


FIG-1 CONNECTION DIAGRAM



- LIST OF ABBREVIATIONS**
- A- TERMINAL BOARD-FRONT VIEW
  - F-(Y) ANTI-PUMP PERMISSIVE RELAY
  - G- CUT-OFF SWITCH
  - M-(T.C.) SHUNT TRIP DEVICE
  - N-(C.C.) SOLENOID CLOSING COIL
  - P-(P.B.) CLOSING SW. ON BKR.
  - T- AUX. POWER TRANSFORMER
  - K-(X) CLOSING CONTACTOR- 3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN
  - L-(AUX. SW.) 2 'a' & 2 'b' CONTACTS (STD) 5 'a' & 5 'b' (SPECIAL)

3- No. of copies made	3	DATE	11/25/57	APPROVAL	L.V. SWGR.	177L216-5
REVISION	1	DATE	11/25/57	APPROVAL	PHILA	
REVISION	2	DATE		APPROVAL		

LSP-A RD

AK-2-15 & 25

ENCLOSED OR STATIONARY MOUNTED BREAKER

NOTE: ALL FIGS. ARE FRONT VIEWS

177L216-5

HARNNESS  
CONN. & ELEM. DIAG.

FIRST MADE FOR REQ. AK-2-15 & 25

ADD. AUX.  
CONTACTS  
(WHEN REQ.)

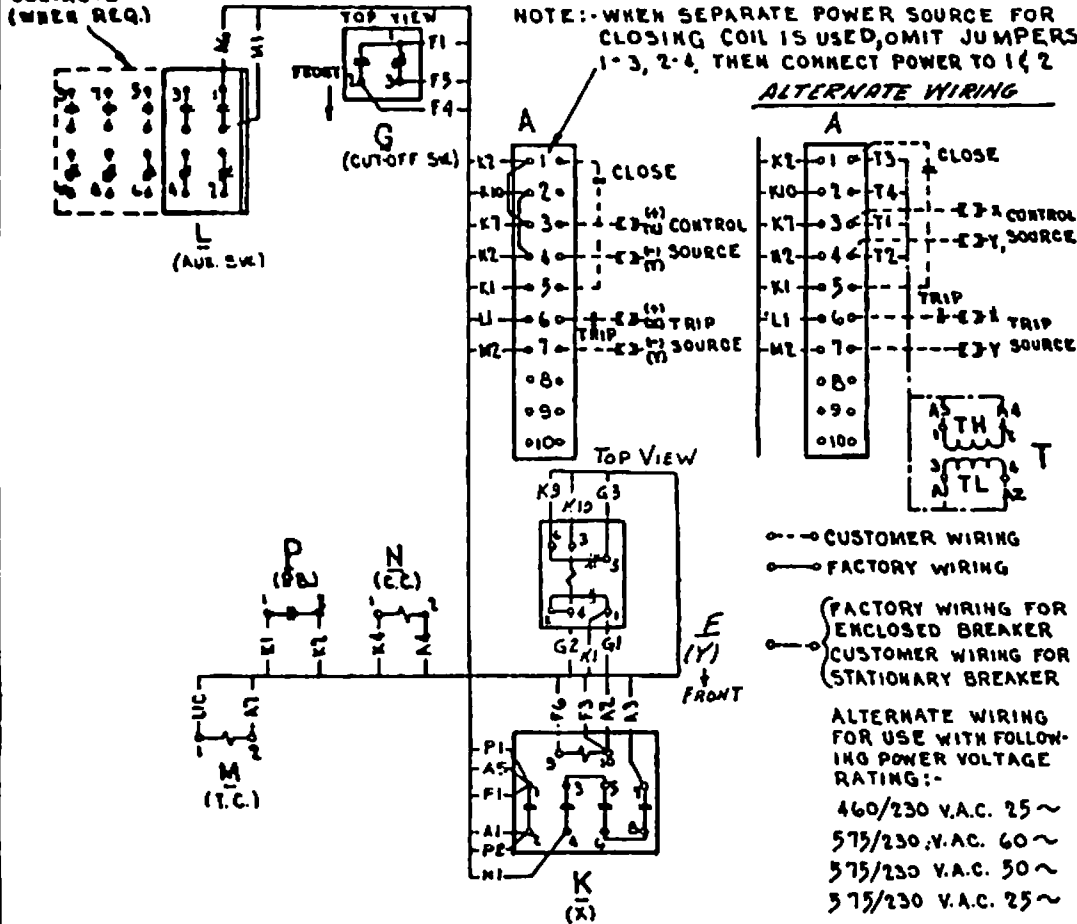
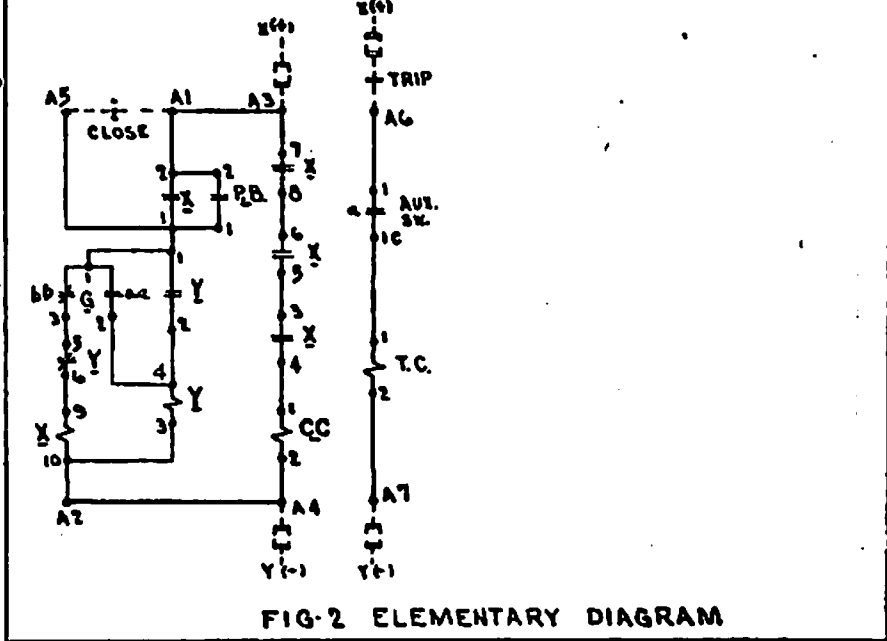


FIG. 1 CONNECTION DIAGRAM



- LIST OF ABBREVIATIONS**
- A- TERMINAL BOARD-FRONT VIEW
  - F-(Y) ANTI-PUMP PERMISSIVE RELAY
  - G- CUT-OFF SWITCH
  - M-(T.C) SHUNT TRIP DEVICE
  - N-(C.C) SOLENOID CLOSING COIL
  - P-(R.B.) CLOSING SW ON BRK.
  - T- AUX. POWER TRANSFORMER
- K-(x) CLOSING CONTACTOR- 3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN
- L-(AUX. SW.) 2 'a' & 2 'b' CONTACTS (STD) 5 'a' & 5 'b' (SPECIAL)

REVISED RELAY	3-37	1	APPROVAL	L.V. SWGR.	177L216-5
CONTR. ON #38	26, 1957	2	PHILA		

LSP-A RD

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TITLE

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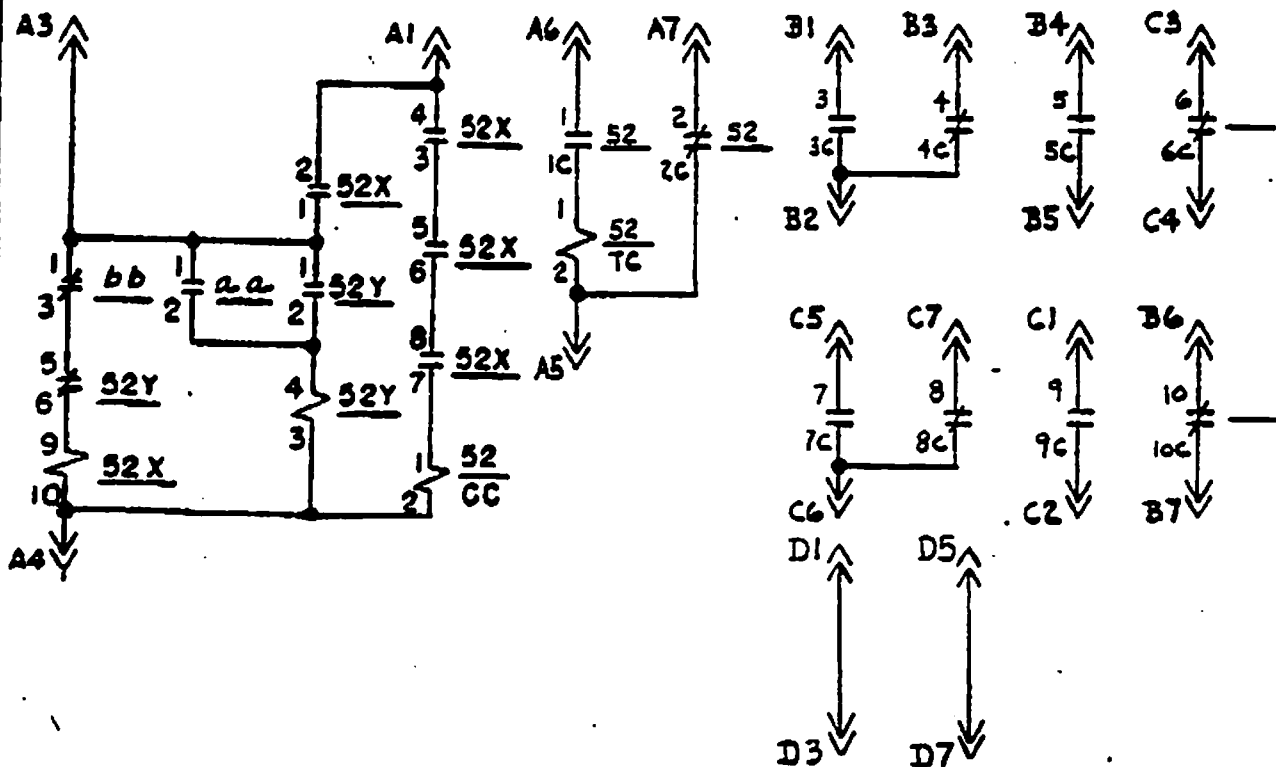
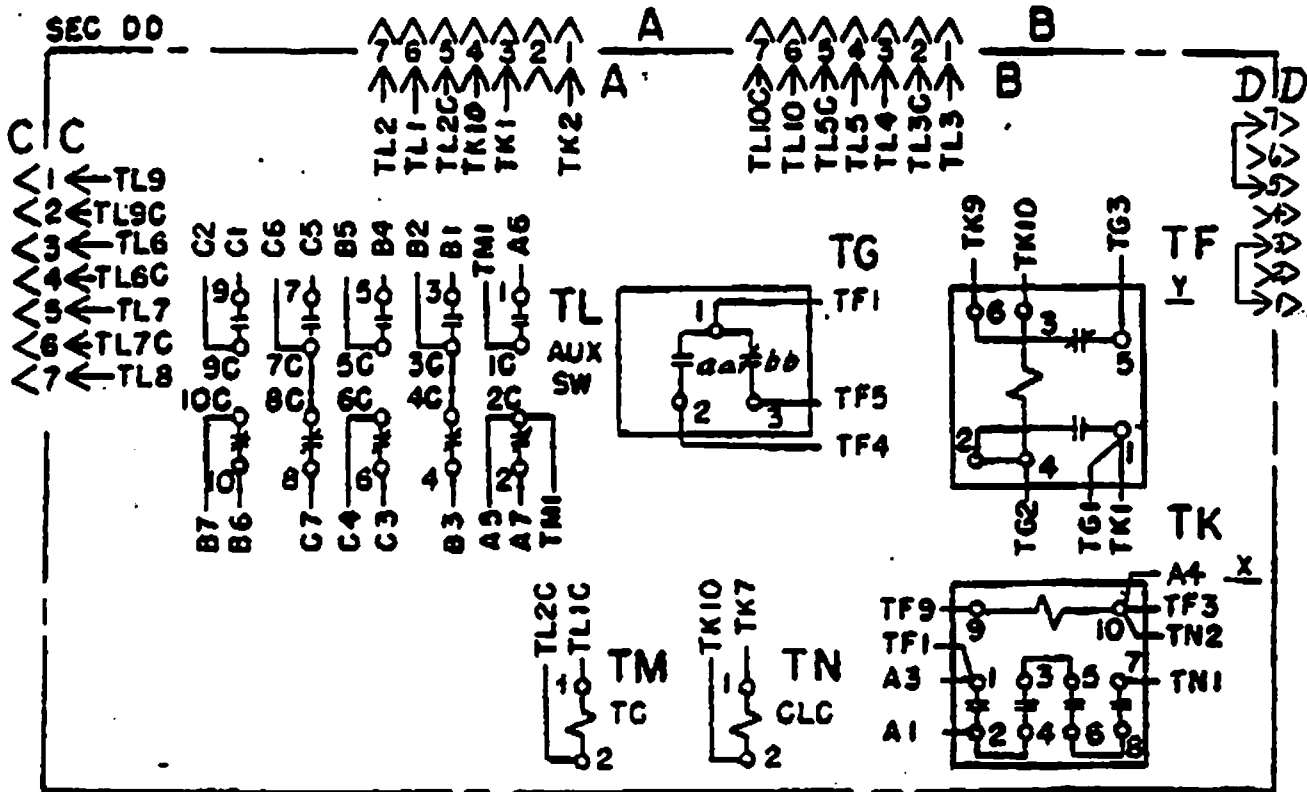
AK-2A-15/25 D/O ACB

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FIRST MADE FOR AK-2A-15/25 D/O ACB

USE LRP394 2A25-G117



REVISION	DATE	BY

PRINTS TO

MADE BY  
*Philadelphian*  
 25/1965  
 29/1965

LOW VOLTAGE  
 PHILADELPHIA

0178A6540

REV 0

TITLE

0178A6540

AK-2A-15/25 D/O ACB

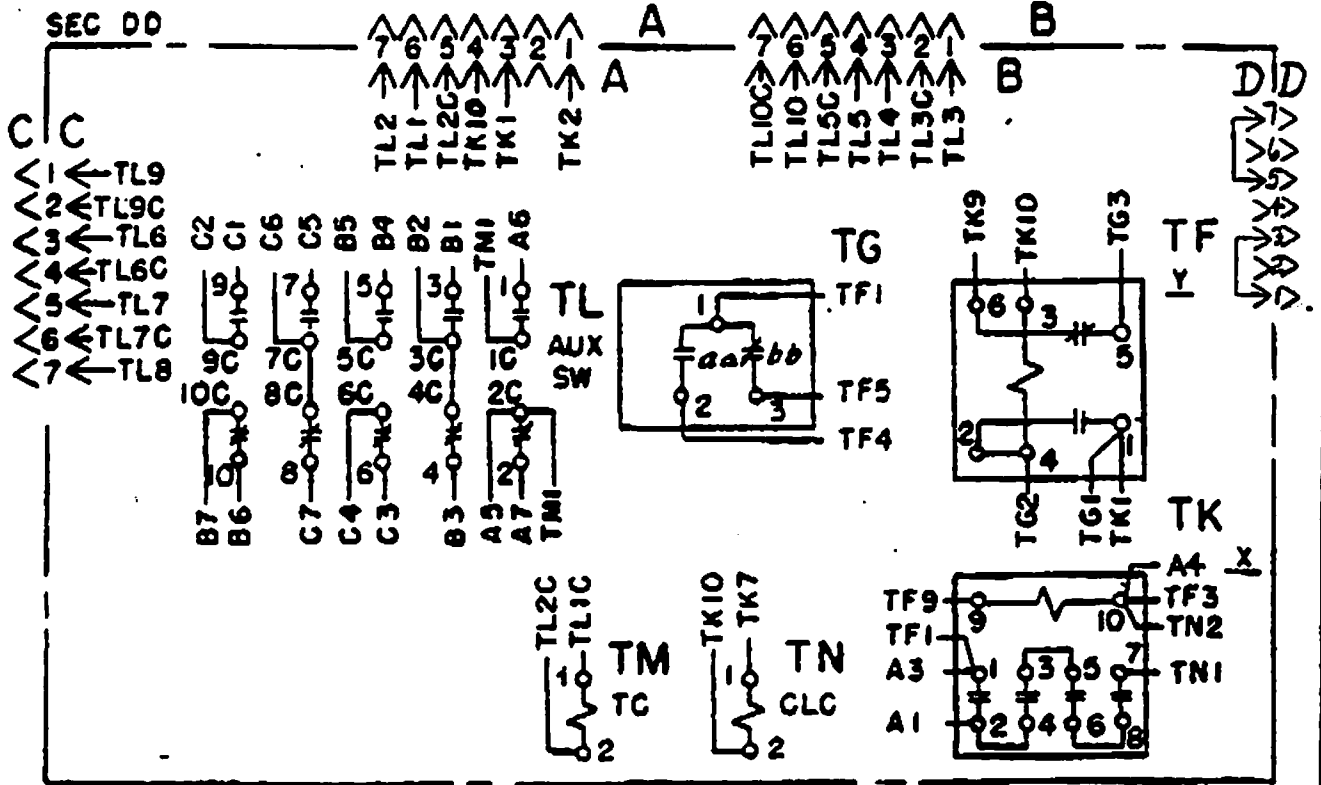
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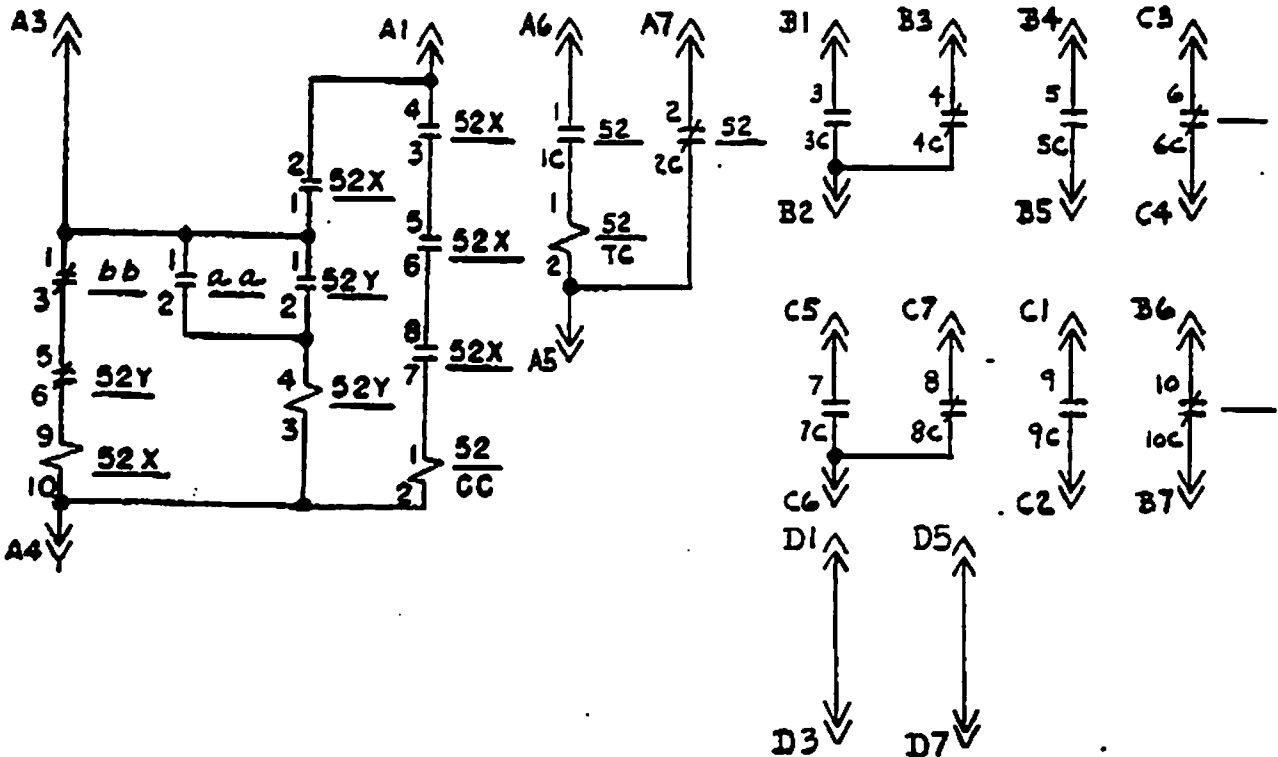
FIRST MADE FOR AK-2A-15/25 D/O ACB

USE LRP394 2A25-G117

REVIS



BKR BASE - FV



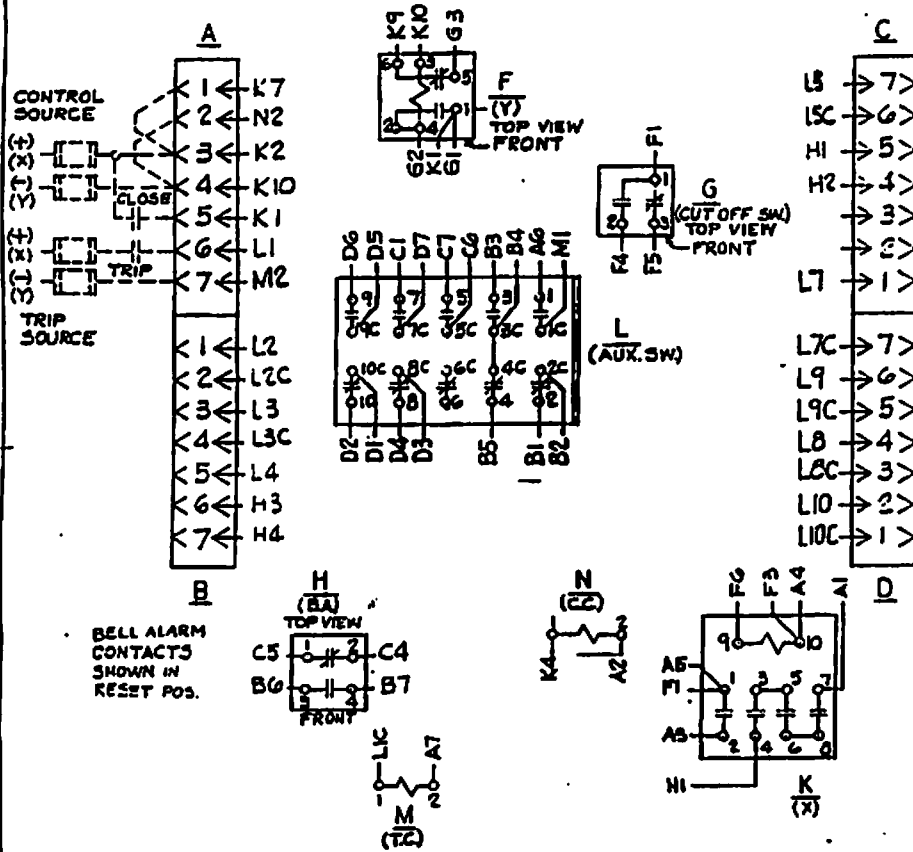
PRINTS

ALL FIG. FRONT VIEW EXCEPT AS NOTED

1. THE DRAWING SHOWS CIRCULAR CONNECTIONS ONLY. THE EXACT LOCATION OF APPLICABLE POINTS IS OBTAINED FROM THE CONNECTIONS LIST AND FROM THE LOCATION OF CONTACTS.
2. LEADS AND POINTS RELATIONSHIP IS INDICATED BY CONTACTS.
3. INTERNAL CONNECTIONS OF DEVICES ARE INCLUDED WITH THE EXCEPT AS NOTED.
4. SYMBOLS FOR DEVICES AND ABBREVIATIONS ARE AS SHOWN.

184L701-D

CONN. AND ELEMENTARY DIAG.



WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED, OMIT JUMPERS A1-A5 & A2-A4. THEN CONNECT POWER TO A1 & A2

FIG. 1 CONN. DIAG.

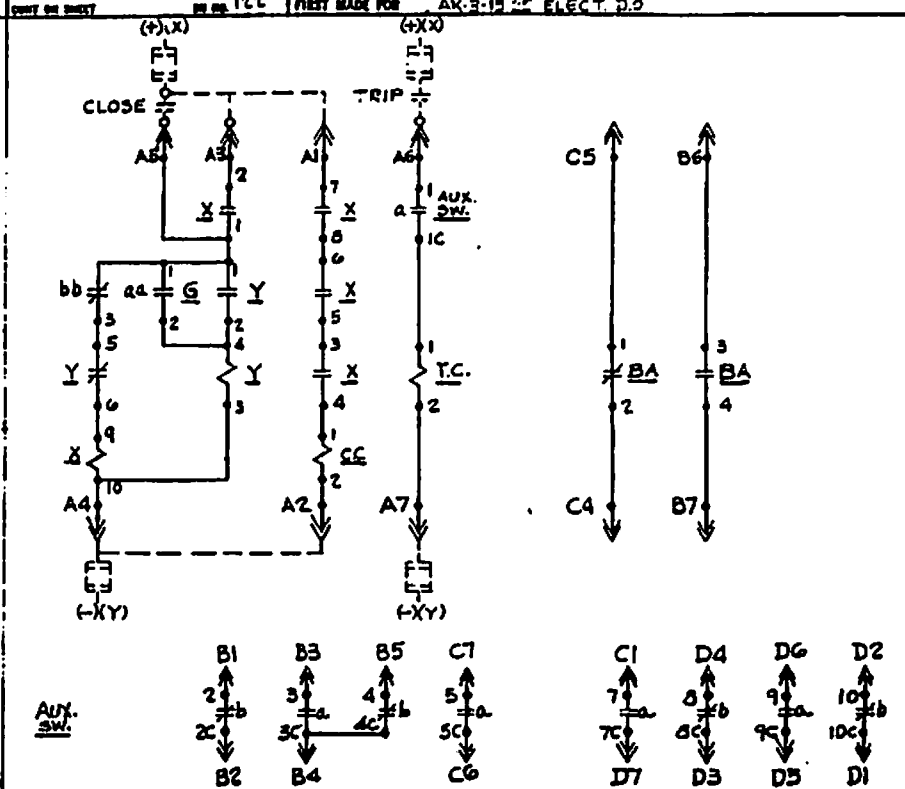


FIG. 2 ELEMENTARY DIAG.

LIST OF ABBREVIATIONS

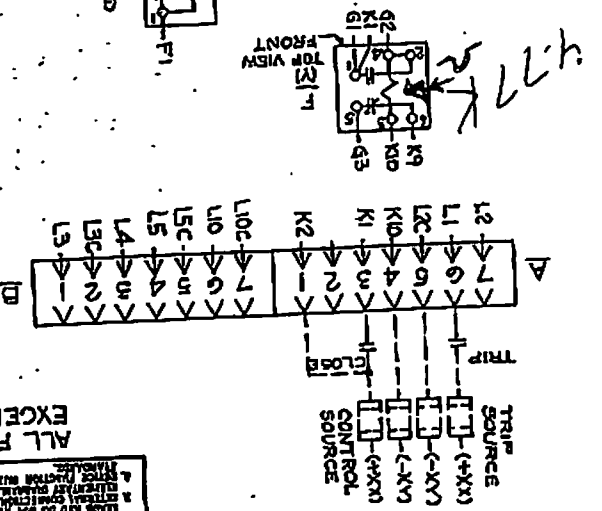
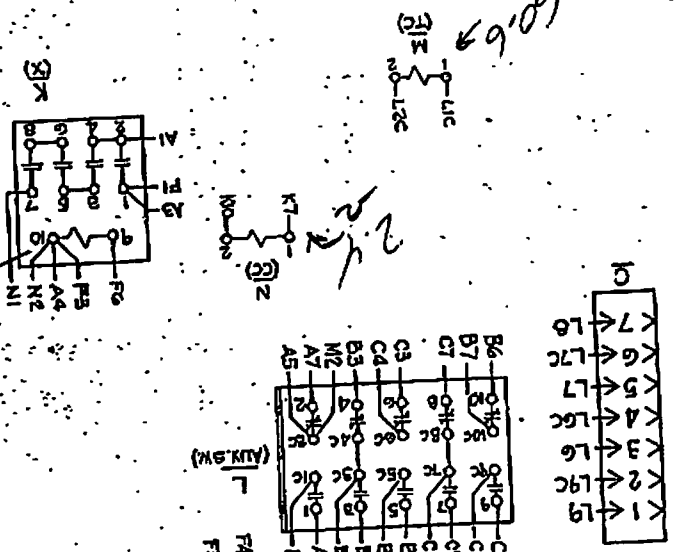
- A - SEC. DISC. UPPER LEFT FR. VIEW
- B - SEC. DISC. LOWER LEFT FR. VIEW\*
- C - SEC. DISC. UPPER RIGHT FR. VIEW\*
- D - SEC. DISC. LOWER RIGHT FR. VIEW\*
- F - (Y) ANTI-PUMP PERMISSIVE RELAY
- G - (aa-bb) CUT OFF SW.
- H - (BA) (1) BELL ALARM DEV. MAN. OR AUTO. RESET\*
- (2) BELL ALARM DEV. WITH LOCK OUT MAN. RESET\*
- J - (UV) UNDERVOLTAGE TRIP DEV.\*
- K - (X) CLOSING CONTACTOR
- L - (AUX. SW)\*
- M - (TC) SHUNT TRIP DEV. \*
- N - (CC) SOLENOID CLOSING COIL
- P - (PB) CLOSING SW. ON BREAKER

\* WHEN REQD.

CONTRACTOR  
FOR THE USE OF THE  
ELECTRICAL SERVICE  
DEPARTMENT  
PHILADELPHIA  
ELECTRICAL SERVICE  
DEPARTMENT  
PHILADELPHIA



FIG. 1 CONN. DIAG.

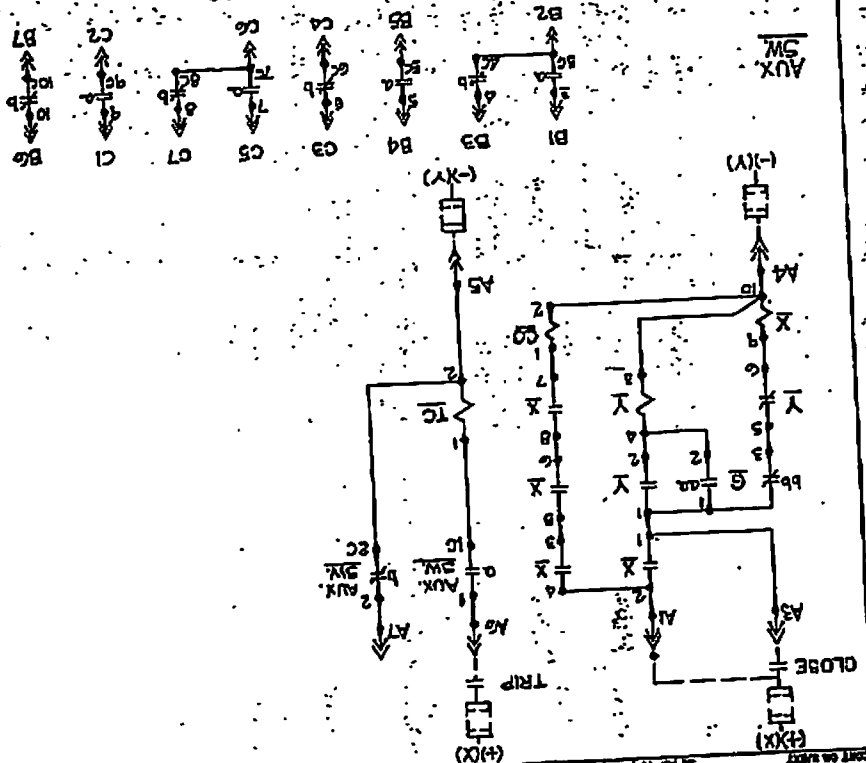


ALL FIG. FRONT VIEW EXCEPT AS NOTED

1. THE PARTS SHOWN SHOULD BE IDENTICAL TO THE PARTS SHOWN ON THE DRAWING.
2. THE LOCATION OF PARTS WHICH ARE NOT SHOWN IN THE DRAWING SHOULD BE IDENTICAL TO THE PARTS SHOWN ON THE DRAWING.
3. THE LOCATION OF PARTS WHICH ARE NOT SHOWN IN THE DRAWING SHOULD BE IDENTICAL TO THE PARTS SHOWN ON THE DRAWING.
4. THE LOCATION OF PARTS WHICH ARE NOT SHOWN IN THE DRAWING SHOULD BE IDENTICAL TO THE PARTS SHOWN ON THE DRAWING.

- LIST OF ABBREVIATIONS
- A-SEC DISC. UPPER LEFT FR. VIEW \*
  - B-SEC DISC. UPPER RIGHT FR. VIEW \*
  - C-SEC DISC. LOWER LEFT FR. VIEW \*
  - F-(Y) ANTI-PUMP, PERMISSIVE RELAY
  - G-(BA) BELL ALARM DEV. MAN. OR AUTO. RESET \*
  - H-(BA) BELL ALARM DEV. WITH LOCKOUT MAN. RESET \*
  - J-UVV UNDERVOLTAGE TRIP DEV. \*
  - K-(X) CLOSING CONTACTOR
  - L-(AUX. SW) \*

FIG. 2 ELEMENTARY DIAG.



CONN AND ELEMENTARY DIAG. AK-3A-15/25

184L701-R

GENERAL ELECTRIC

COLLINS & HALLION

GGXR 281

OK CT 5/1/02

GE AK35

GENERAL ELECTRIC

CONT. ON SHEET

54 IN.

P.2

NO. 197

CUSTOMER SERV. BURL

8:41AM

JAN. 29. 2002

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY. THE EXACT LOCATION OF APPARATUS MUST NOT BE READ FROM IT.
2. DIMENSIONS ARE INDICATED BY NUMBERS OF LINES AND DO NOT NECESSARILY REPRESENT COORDINATE.
3. EXTERNAL CONNECTIONS OF DEVICES ARE INCLUDED WITH THE ELEMENTARY DIAGRAM.
4. EXCEPT FUNCTION SYMBOLS AND ABBREVIATIONS ARE ASA STANDARDS.

ALL FIG. FRONT VIEW EXCEPT AS NOTED

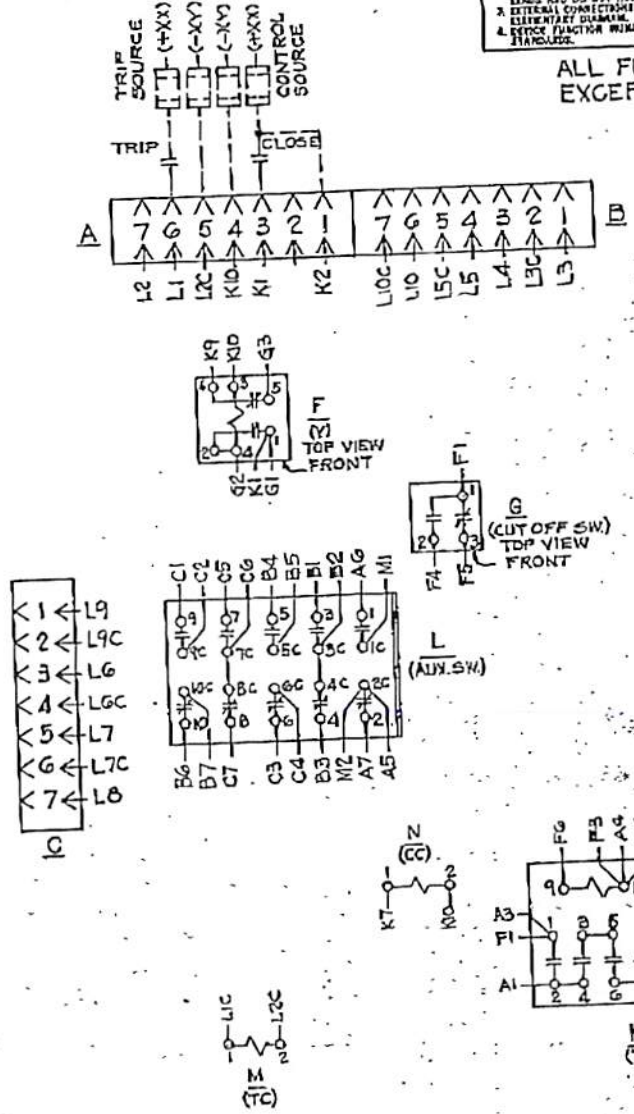


FIG. 1 CONN. DIAG.

184L701-R  
 FIRST MADE FOR AK-3A-15/25  
 ELECT

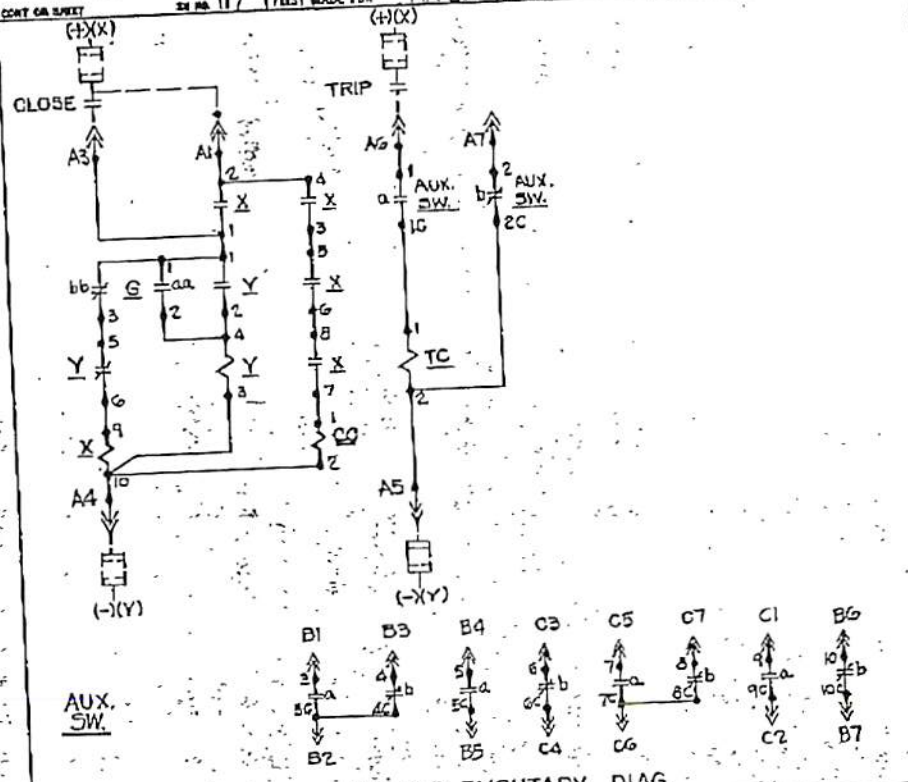


FIG. 2 ELEMENTARY DIAG. LIST OF ABBREVIATIONS

- A- SEC. DISC. UPPER LEFT FR. VIEW \*
  - B- SEC. DISC. UPPER RIGHT FR. VIEW \*
  - C- SEC. DISC. LOWER LEFT FR. VIEW \*
  - F- (Y) ANTI-PUMP, PERMISSIVE RELAY
  - G- (aa-bb) CUT OFF SW.
  - H- (BA) (1) BELL ALARM DEV. MAN. OR AUTO. RESET \*
  - (2) BELL ALARM DEV. WITH LOCKOUT MAN. RESET \*
  - J- (UV) UNDERVOLTAGE TRIP DEV. \*
  - K- (X) CLOSING CONTACTOR
  - L- (AUX. SW) \*
  - M- (TC) SHUNT TRIP DEV. \*
  - N- (CC) SOLENOID CLOSING COIL
  - P- (PB) CLOSING SW. ON BKR. \*
- \* WHEN REQ'D.

CONNECTIONS  
 FROM ENDS OF WIRE ARE IDENTIFIED AS TO DESTINATION, SIZE AND HEIGHT OF TERMINALS FROM SOURCE 1 TO 100 & TO TERMINAL CENTS & TERMINALS.

MADE BY *H. Bryan Jan 3, 1967*  
 APPROVED *[Signature]*  
 LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA  
 184L701-R  
 CONT. ON SHEET 54 IN. 117

**Beach, Julie (IndSys,MKT)**

**From:** Schley, Julie L (SUPP)  
**Sent:** Monday, January 28, 2002 2:41 PM  
**To:** Beach, Julie (IndSys,MKT)  
**Subject:** FW: Connection Diagram - Our Job

Julie,  
Can you help with this ?

*AK25  
MW Gen - Collins Sta*

Julie  
-----Original Message-----  
**From:** Schley, Julie L (SUPP)  
**Sent:** Monday, January 28, 2002 3:40 PM  
**To:** Crouch, Stanley (IndSys, MKT)  
**Subject:** FW: Connection Diagram - Our Job #GCXR273

Hi Stanley,

Please fax a copy of the wiring diagram to the customer fax number below.

Thanks,

Julie  
-----Original Message-----  
**From:** Williams, Kim [mailto:Kim.Williams@sea.siemens.com]  
**Sent:** Monday, January 28, 2002 3:07 PM  
**To:** Schley, Julie L (SUPP)  
**Subject:** Connection Diagram - Our Job #GCXR273

Julie:

Can we get a copy of connection diagram #184L701RWG117 faxed to us for an AK25 breaker? Please advise. Thank you.

Kim Williams  
SIEMENS-Westinghouse  
708-418-0260 (Phone)  
708-418-0299 (FAX)

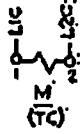
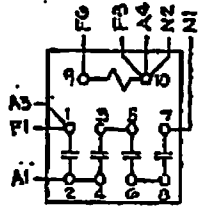
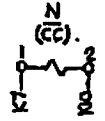
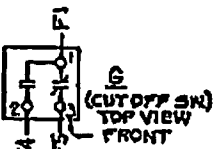
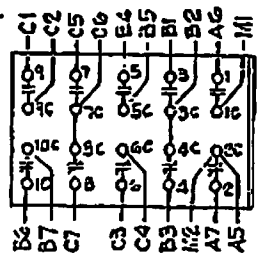
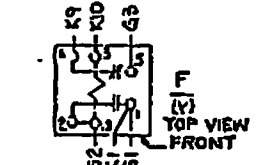
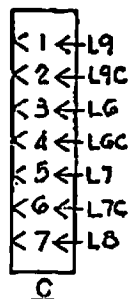
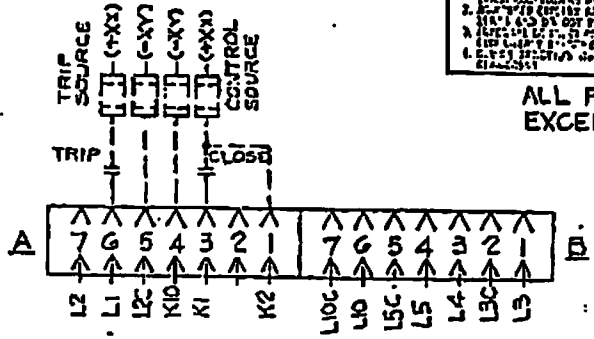
*Kim & Julie - Is this what you need?  
Wasnt sure what the "WG" was.  
Let me know -*



*Julie*



DATE REV. 12/25/55  
 TRIP SOURCE



1. THIS DRAWING IS THE PROPERTY OF GENERAL ELECTRIC AND SHOULD NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.  
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 3. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR THE PROTECTION OF THIS DRAWING FROM UNAUTHORIZED DISSEMINATION.  
 4. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR THE PROTECTION OF THIS DRAWING FROM UNAUTHORIZED DISSEMINATION.  
 5. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR THE PROTECTION OF THIS DRAWING FROM UNAUTHORIZED DISSEMINATION.

ALL FIG. FRONT VIEW EXCEPT AS NOTED

GENERAL ELECTRIC

184L701-R

CONN. AND ELEMENTARY DIAG. ELECT

DATE OF TEST 11 11 77 FIRST MADE FOR AK-3A-15/25

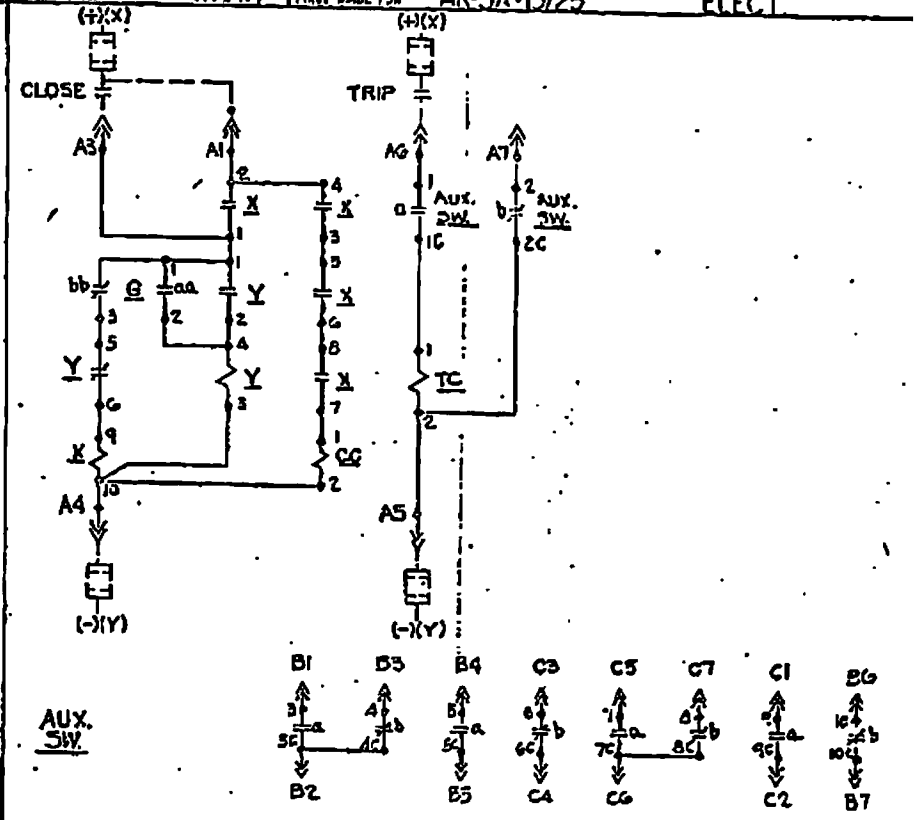


FIG. 2 ELEMENTARY DIAG.

LIST OF ABBREVIATIONS

- A- SEC. DISC. UPPER LEFT FR. VIEW \*
- B- SEC. DISC. UPPER RIGHT FR. VIEW \*
- C- SEC. DISC. LOWER LEFT FR. VIEW \*
- F- (Y) ANTI-PUMP, PERMISSIVE RELAY
- G- (ca-bb) CUT OFF SW.
- H- (BA) (1) BELL ALARM DEV. MAN. OR AUTO. RESET \*
- (2) BELL ALARM DEV. WITH LOCKOUT MAN. RESET \*
- J- (UV) UNDERVOLTAGE TRIP DEV. \*
- K- (X) CLOSING CONTACTOR
- M- (TC) SHUNT TRIP DEV. \*
- N- (CC) SOLENOID CLOSING CC
- P- (PB) CLOSING SW. ON BKR.

**Crouch, Stanley (IndSys, MKT)**

---

**From:** Schley, Julie L (SUPP)  
**Sent:** Monday, January 28, 2002 3:40 PM  
**To:** Crouch, Stanley (IndSys, MKT)  
**Subject:** FW: Connection Diagram - Our Job #GCXR273

Hi Stanley,

Please fax a copy of the wiring diagram to the customer fax number below.

Thanks,

Julie

-----Original Message-----

**From:** Williams, Kim [mailto:Kim.Williams@sea.siemens.com]  
**Sent:** Monday, January 28, 2002 3:07 PM  
**To:** Schley, Julie L (SUPP)  
**Subject:** Connection Diagram - Our Job #GCXR273

Julie:

Can we get a copy of connection diagram #184L701RWG117 faxed to us for an AK25 breaker? Please advise. Thank you.

**Kim Williams**  
**SIEMENS-Westinghouse**  
708-418-0260 (Phone)  
708-418-0299 (FAX) ←

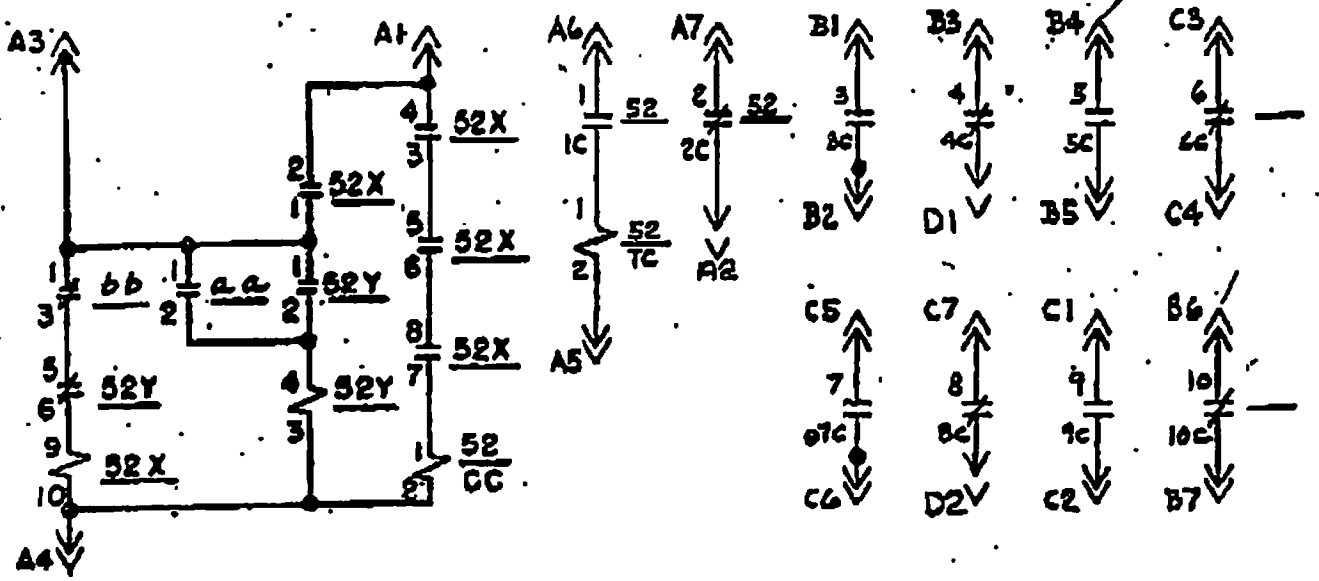
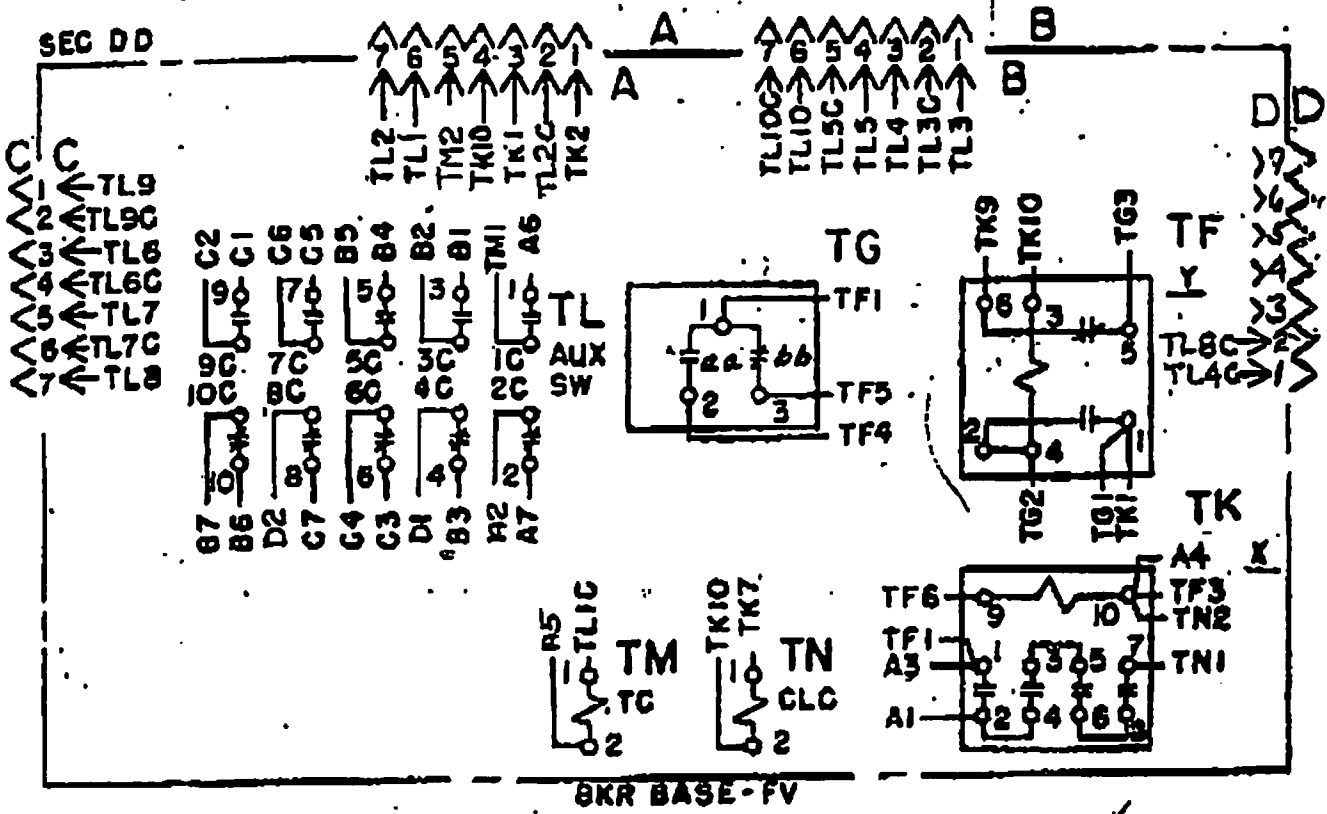
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TITLE  
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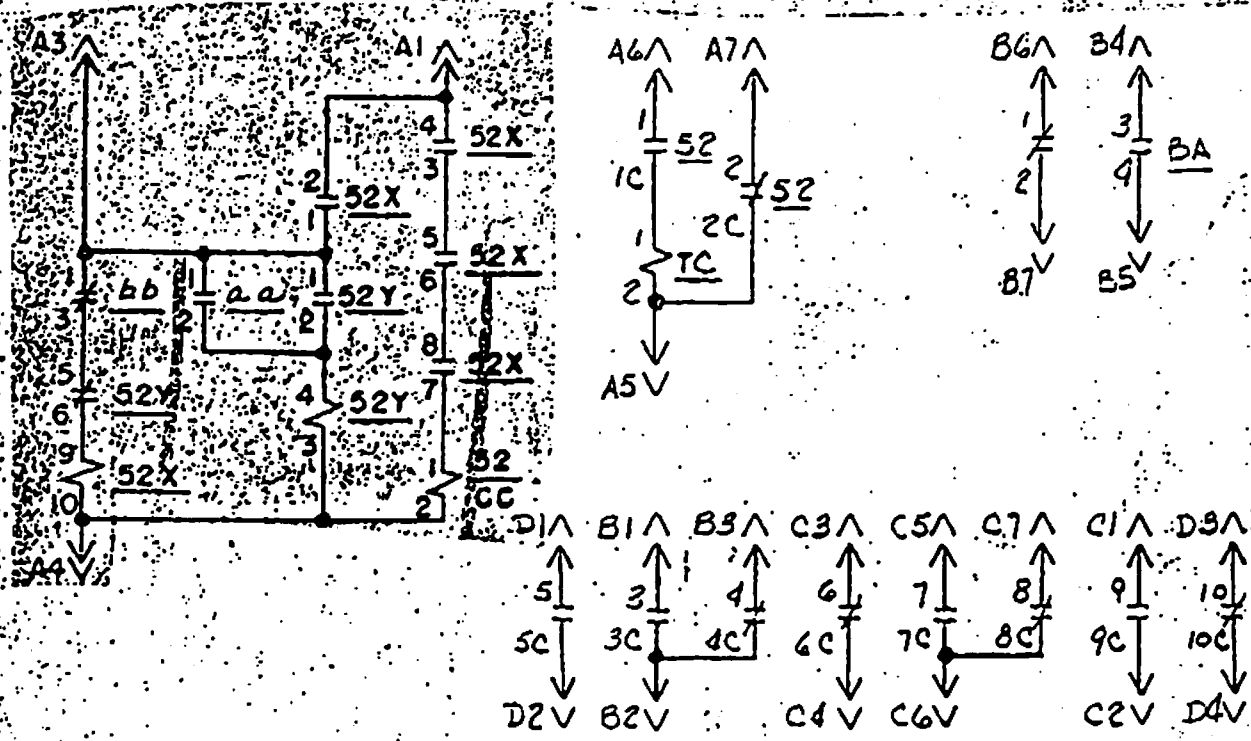
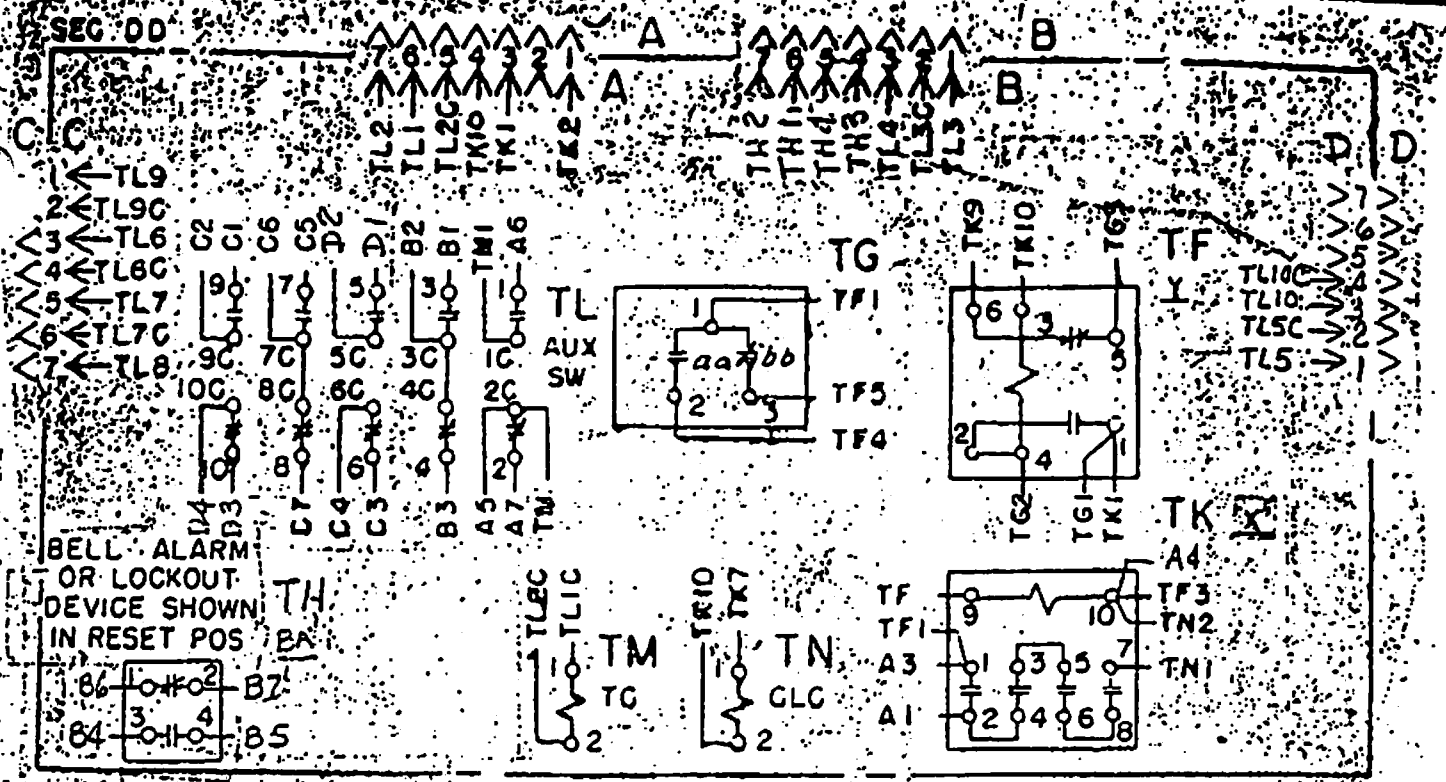
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USE LRP394 2A25-G145

REVISION:

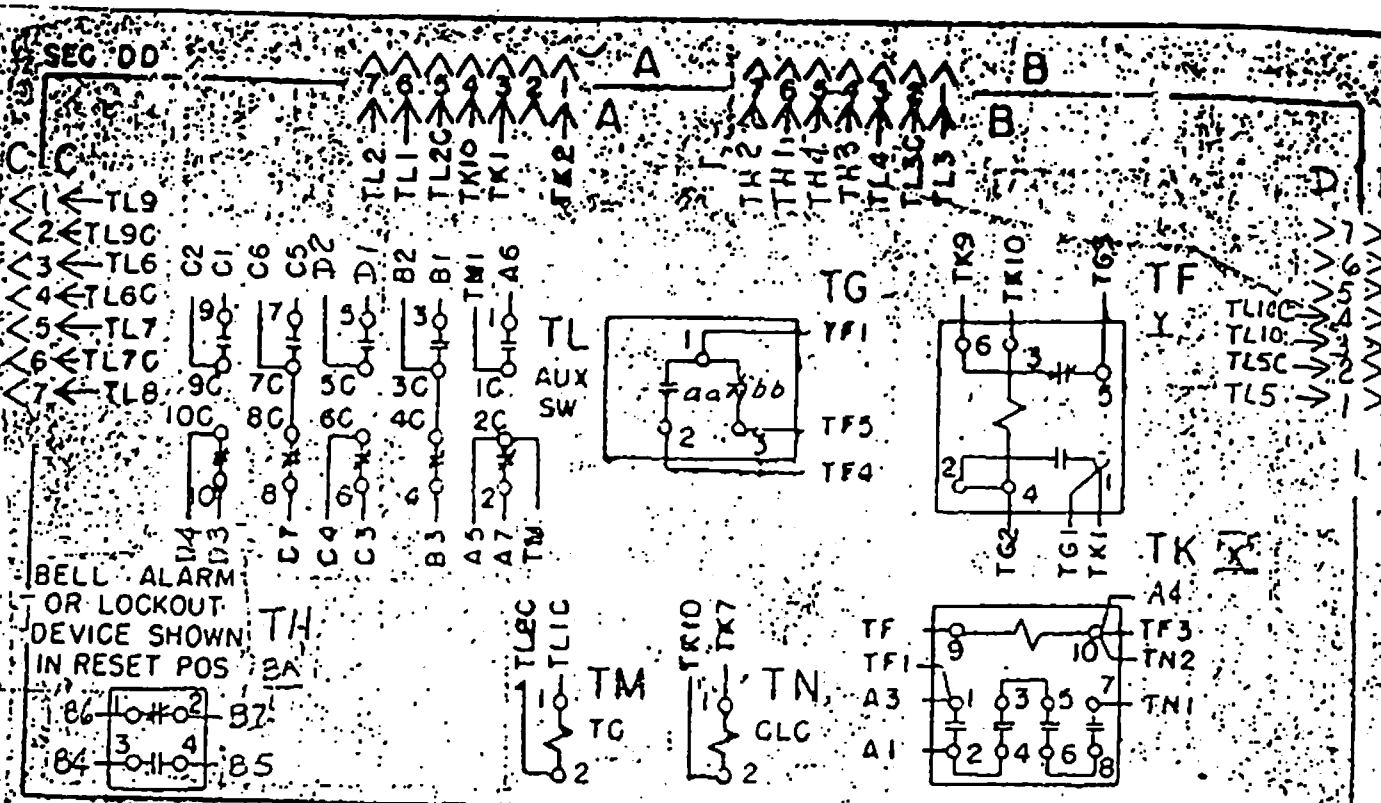


REVISION:
1
2
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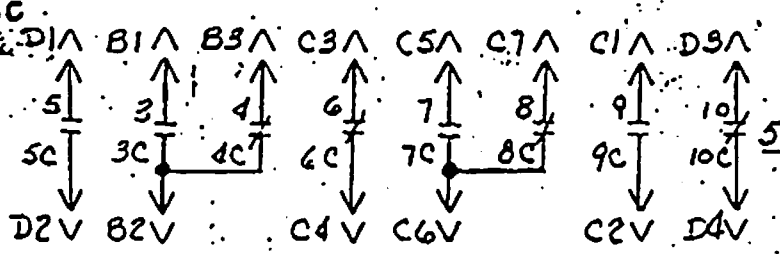
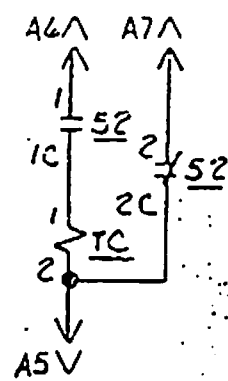
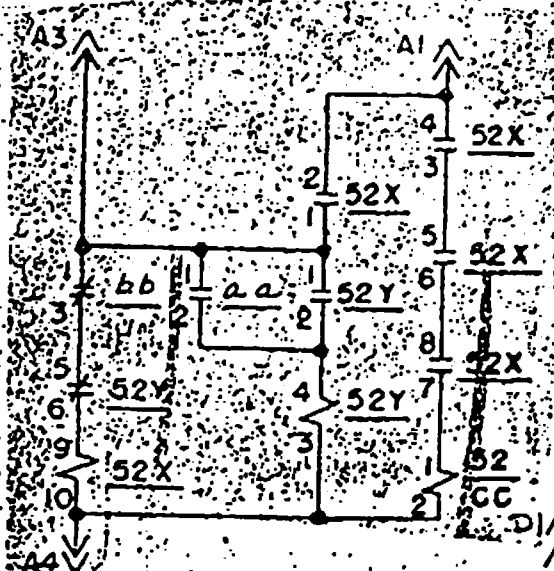
2	9-4-71	REV. TRACER
1	2-1-71	REV. BA.
		CONTS

55W	GENERAL ELECTRIC	TITLE: D10 ACB
1-28-71	LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA	AK-2A/3A-15/25
2-1-71	0x-2	0226A8502



BELL ALARM  
OR LOCKOUT  
DEVICE SHOWN  
IN RESET POS

BKR BASE - FV



9-14-71	REV. 10/15/71
2	ERRORS
1	REV. 6A

53W	GENERAL ELECTRIC	TITLE: D10 ACB
1-28-71	LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA	AK-2A/3A-15/25
2-1-71	OX-2	0226A8502

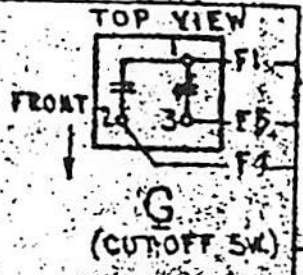
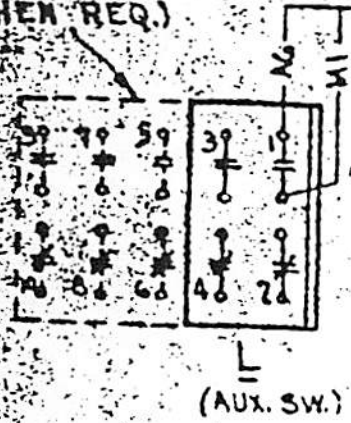
CONT ON B-EXT  
DRAWING NO.

AK-2-15 & 25

ENCLOSED OR STATIONARY MOUNTED BREAKER

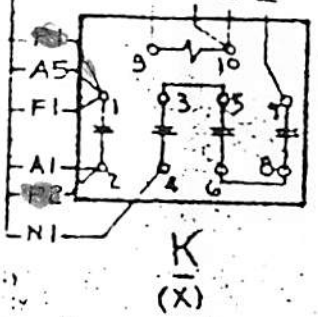
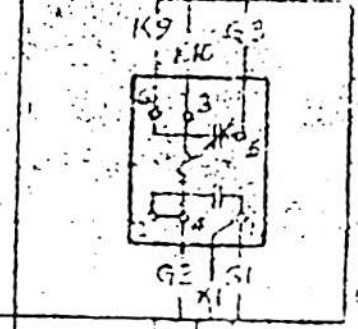
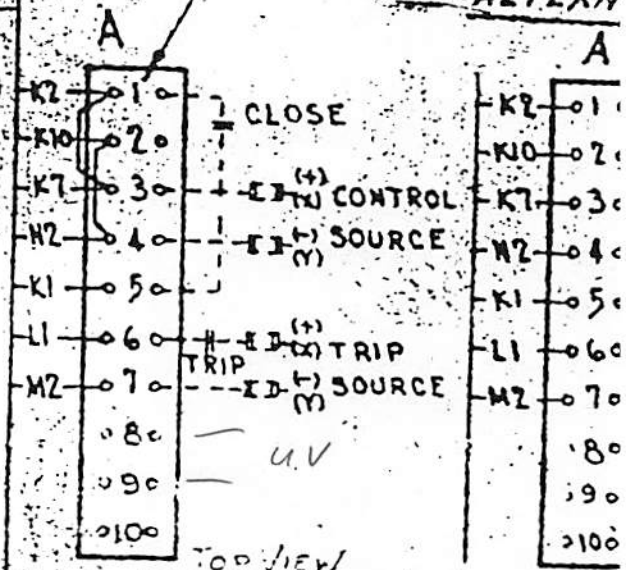
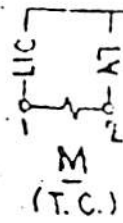
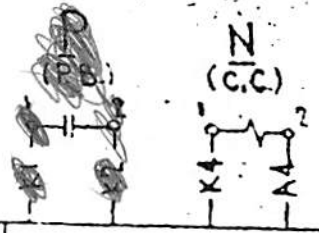
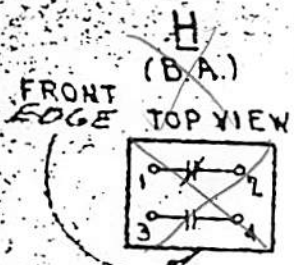
NOTE: ALL FIGS. AR

ADD AUX. CONTACTS (WHEN REQ.)



NOTE: WHEN SEPARATE POS. CLOSING COIL IS USED 1-3, 2-4, THEN CONNE

BELL ALARM DEVICE WITH OR WITHOUT LOCKOUT IN RESET POSITION



--- CUS  
--- FAC  
{ FAI  
EN  
CUS  
STA

ALT  
FOF  
ING  
RA  
46  
575  
575  
575

# 177L216SWG-53

FIG. 1 CONNECTION

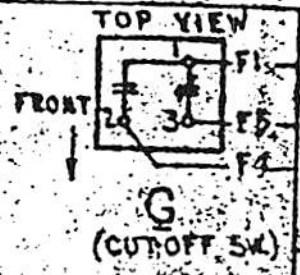
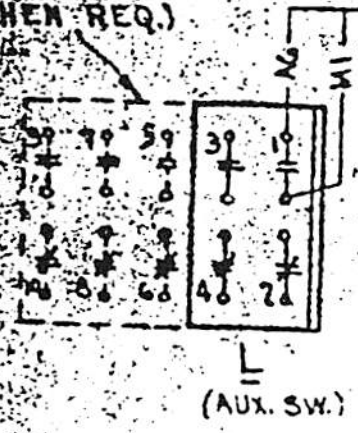
DATE: 1-15-50  
 DRAWING NO. 15 E 25

# AK-2-15 E 25

## ENCLOSED OR STATIONARY MOUNTED BREAKER

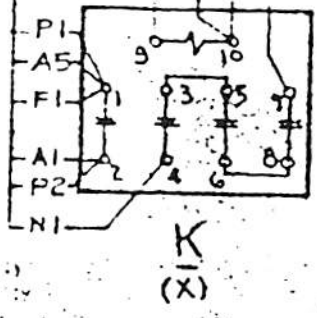
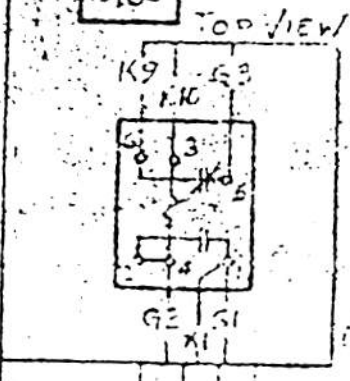
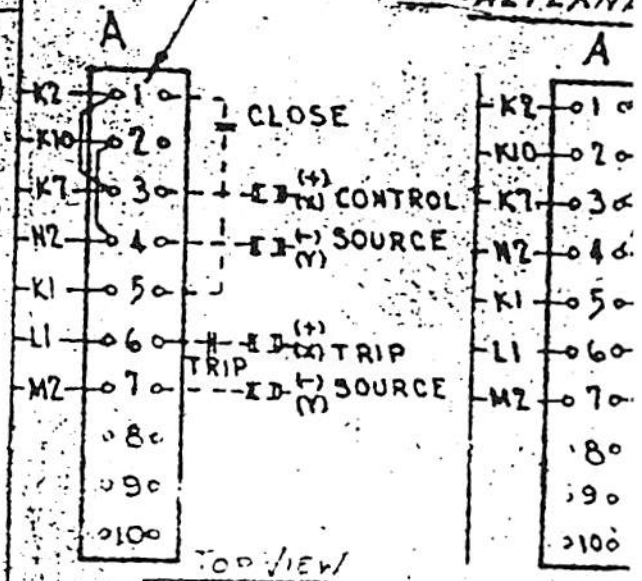
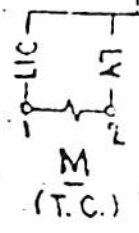
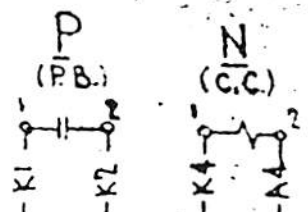
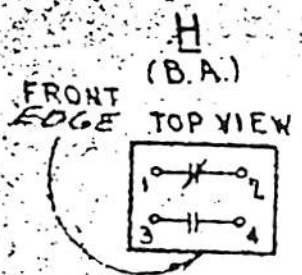
NOTE: ALL FIGS ARE

ADD AUX CONTACTS (WHEN REQ.)



NOTE: WHEN SEPARATE POW CLOSING COIL IS USE 1-3, 2-4, THEN CONNE ALTERN

BELL ALARM DEVICE WITH OR WITHOUT LOCKOUT IN RESET POSITION



--- CUS  
 --- FAC  
 (FAC ENI CUS STA

ALT FOR ING RA 460 575 575 575

FIG. 1 CONNECTION

# AK-2A-15 & 25

DRAWOUT BKR. NOTE: ALL FIG ARE FRONT VIEWS

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS EXACT LOCATION OF EACH WIRE MUST BE NOTED
2. ALL WIRE CONNECTIONS ARE TO BE MADE TO THE TERMINAL BOARD AS SHOWN
3. ALL WIRE CONNECTIONS OF DEVICES ARE INCLUDING ELECTRICAL SYMBOLS
4. DEVICE FUNCTION NUMBERS AND ABBREVIATION SHALL BE AS SHOWN

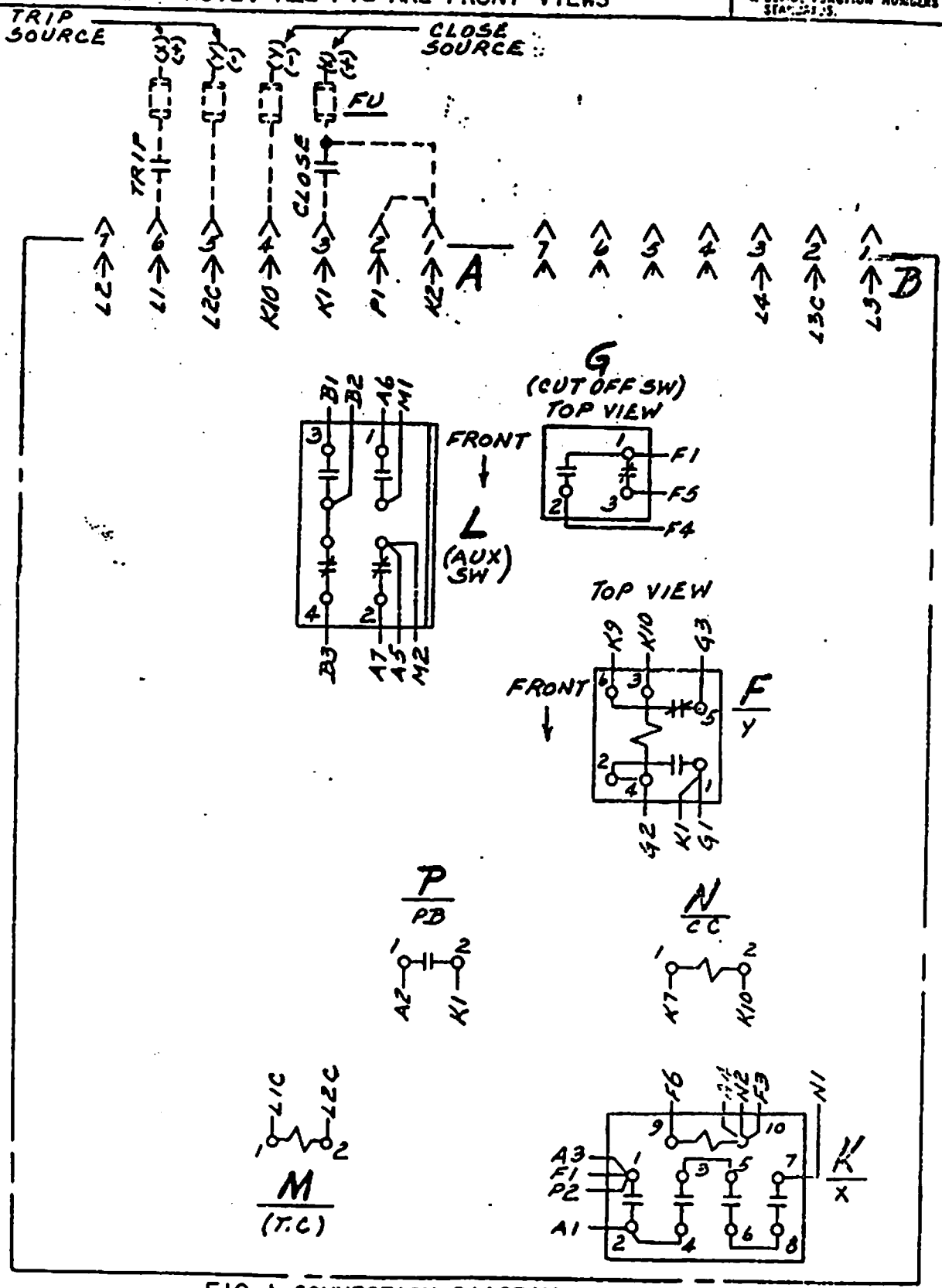
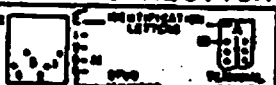


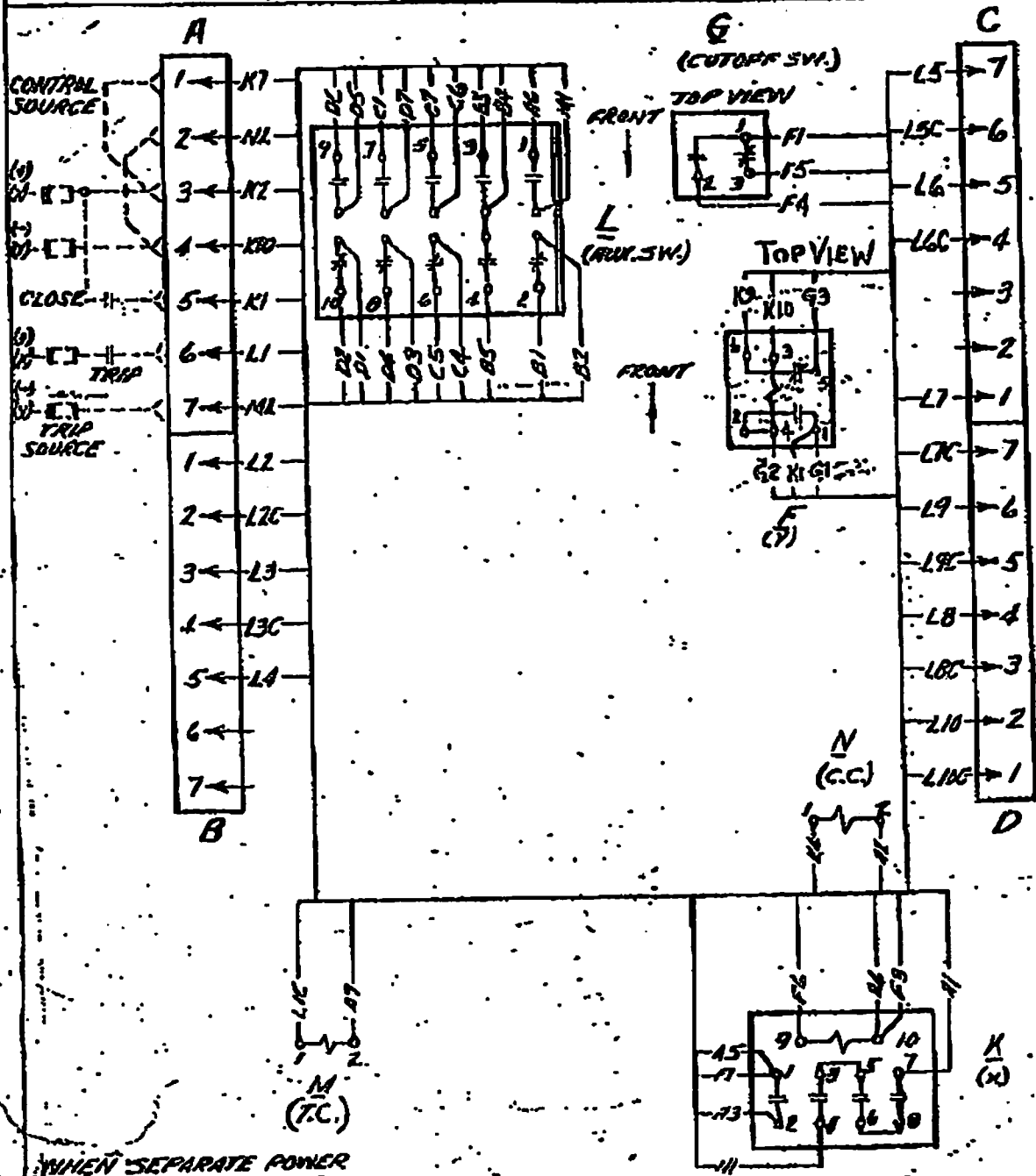
FIG-1 CONNECTION DIAGRAM

CONNECTIONS BOTH ENDS OF WIRE ARE IDENTIFIED AS TO DESTINATION. SKETCH INDICATES CONNECTION FROM DEVICE & STUD TO TERMINAL BOARD & TERMINAL I.





**AK-2-15 F 25**  
**DRAWING BKR. NOTE: ALL FIG. ARE FRONT VIEWS**



\*\* TOTAL PAGE 002 \*\*

WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED OMIT JUMPERS A1-A5 & A2-A4 THEN CONNECT POWER TO A1 & A2.

**FIG-1 CONNECTION DIAGRA.**

REVISIONS	DATE	BY	NO.
1	5-27-57	W. J. ...	1
2	10-10-58	W. J. ...	2

# AK-2A-15 & 25

DRAWOUT BKR. NOTE: ALL FIG ARE FRONT VIEWS

1. THIS DRAWING SHOWS ELECTRICAL EXACT LOCATION OF APPARATUS.
2. NUMBERED CIRCLES ARE MERELY LEADS AND DO NOT NECESSARILY INDICATE INTERNAL CONNECTIONS OF DEVICE ELEMENTARY DIAGRAM.
3. INTERNAL CONNECTIONS OF DEVICE ELEMENTARY DIAGRAM.
4. DEVICE FUNCTION NUMBERS ARE STANDARDS.

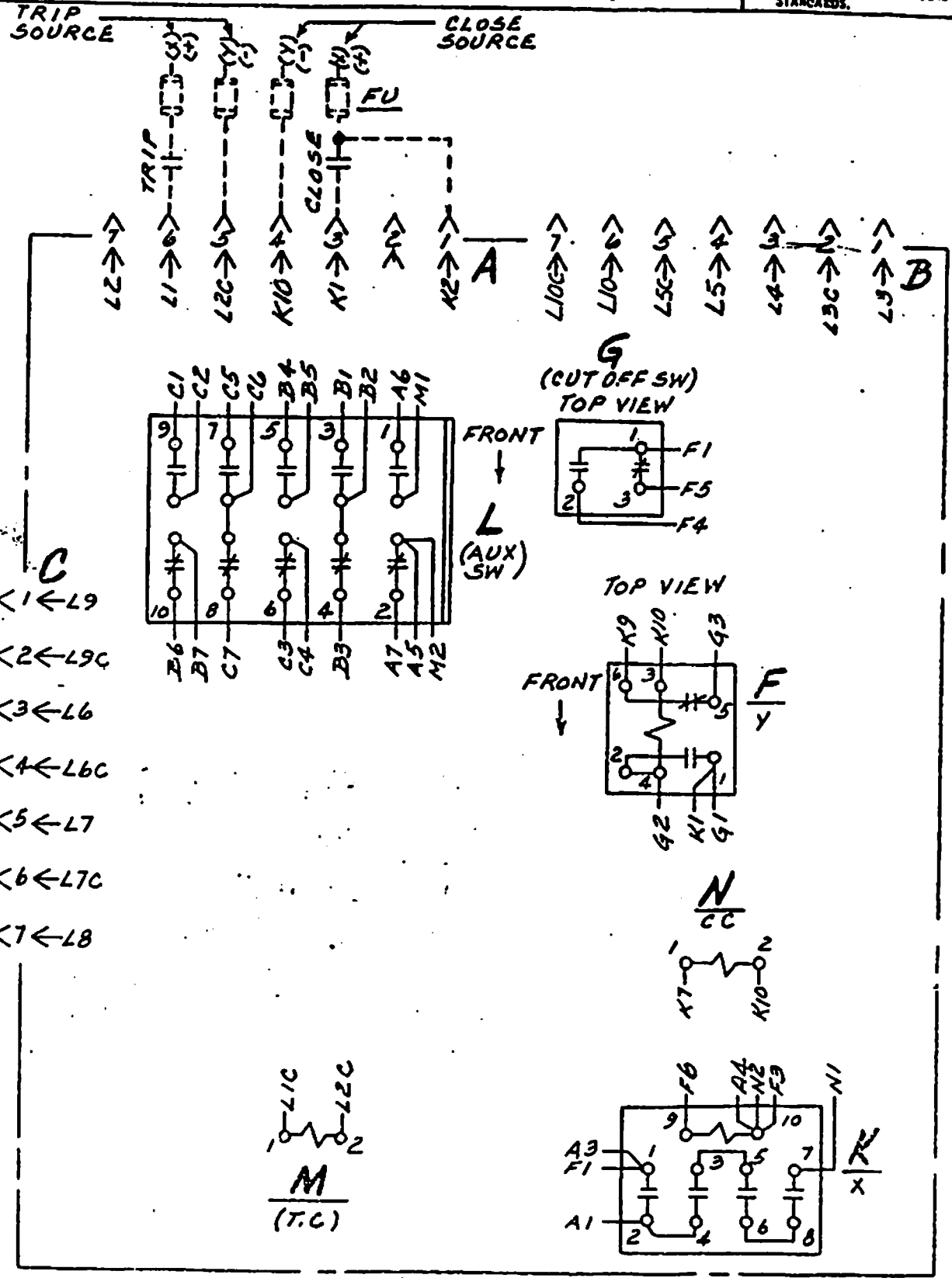


FIG-1 CONNECTION DIAGRAM

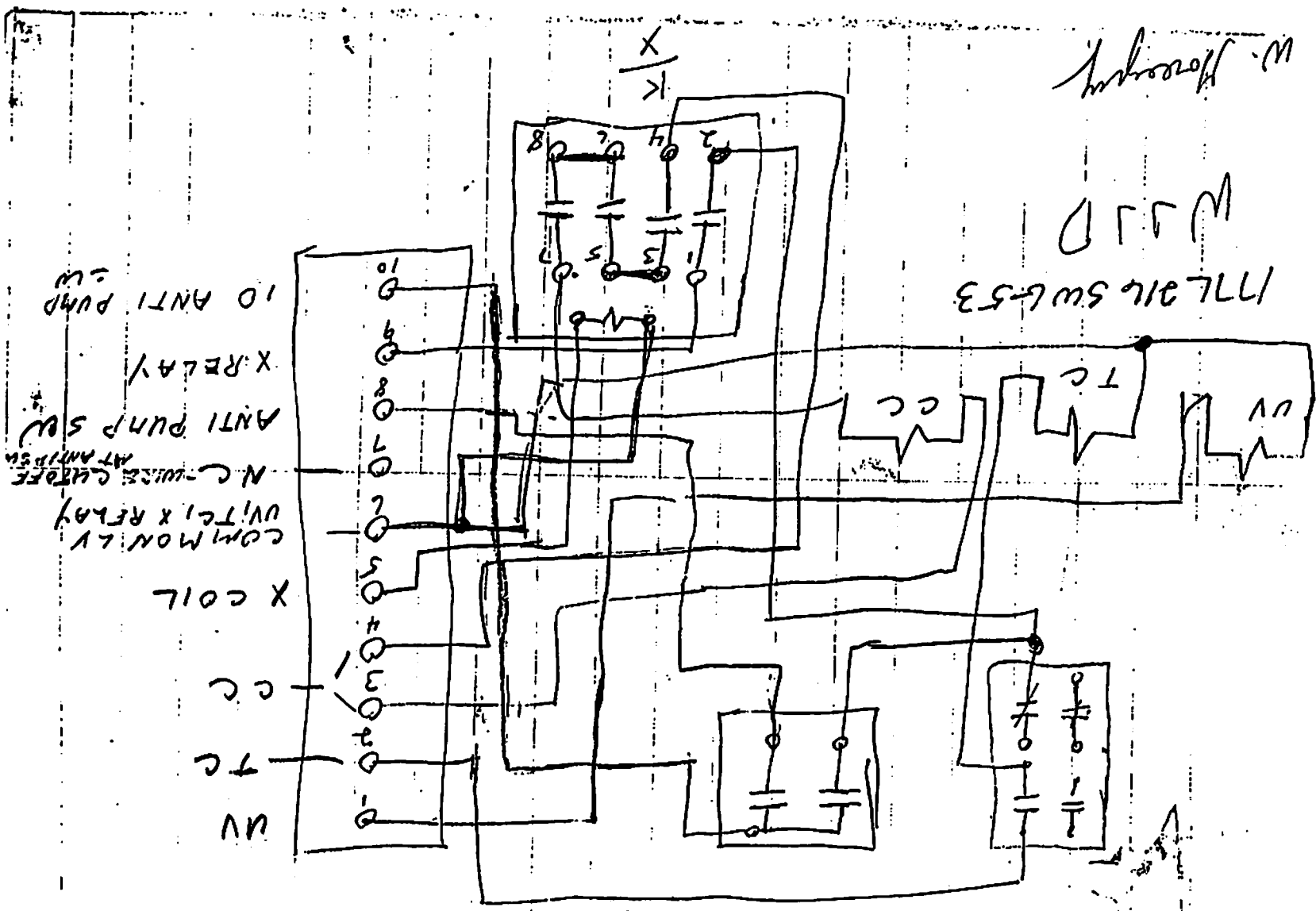
CONNECTIONS BOTH ENDS OF WIRE ARE IDENTIFIED AS TO DESTINATION. SKETCH INDICATES CONNECTION FROM DEVICE & STUD 3 TO TERMINAL BOARD A TERMINAL 1.



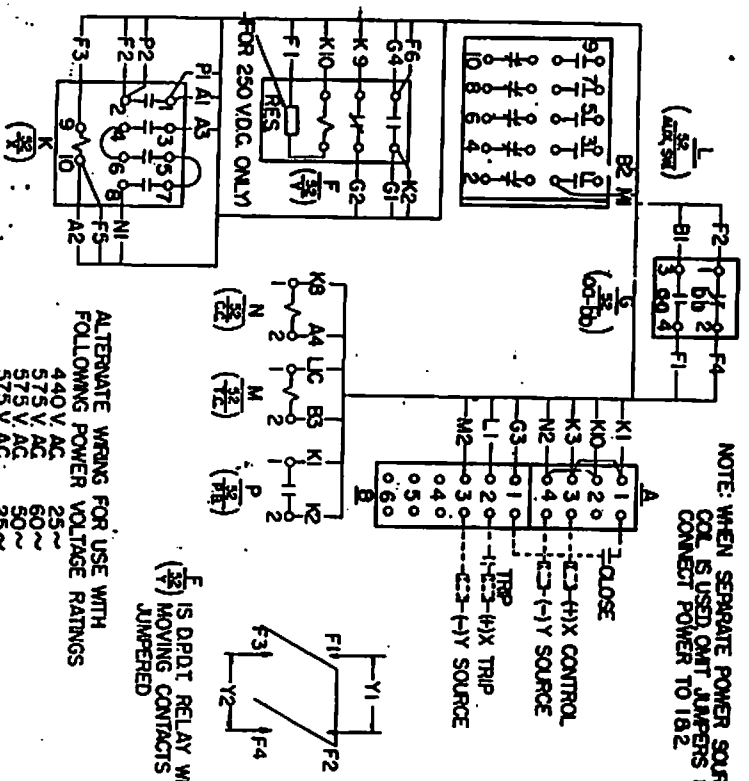
CORR. L. DEV. & C. ELEM. DIAG. 137MS NO 1400

W. H. H. H. H. H.

177L 216 SW 6-53  
W 3 J D

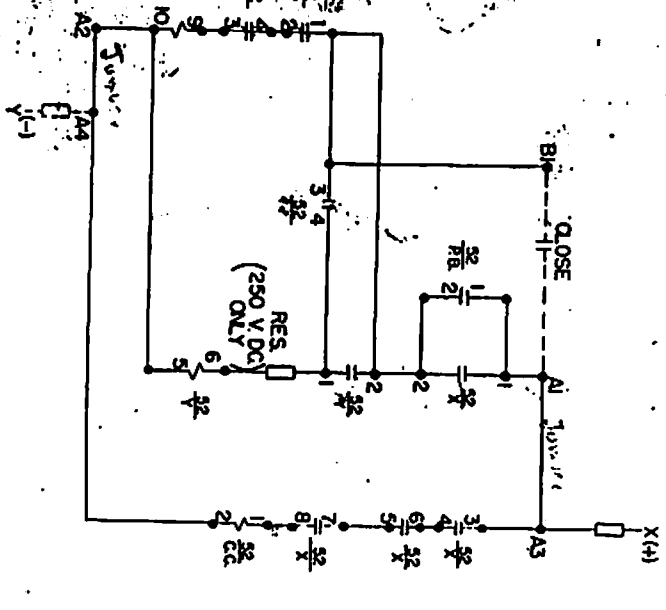


NOTE: WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED OMIT JUMPERS F-3 & 2-4 THEN CONNECT POWER TO 1B,2



ALTERNATE WIRING FOR USE WITH FOLLOWING POWER VOLTAGE RATINGS  
 440V AC 25  
 575V AC 60  
 575V AC 50  
 575V AC 25

**CONNECTION DIAGRAM**



**LIST OF ABBREVIATION**

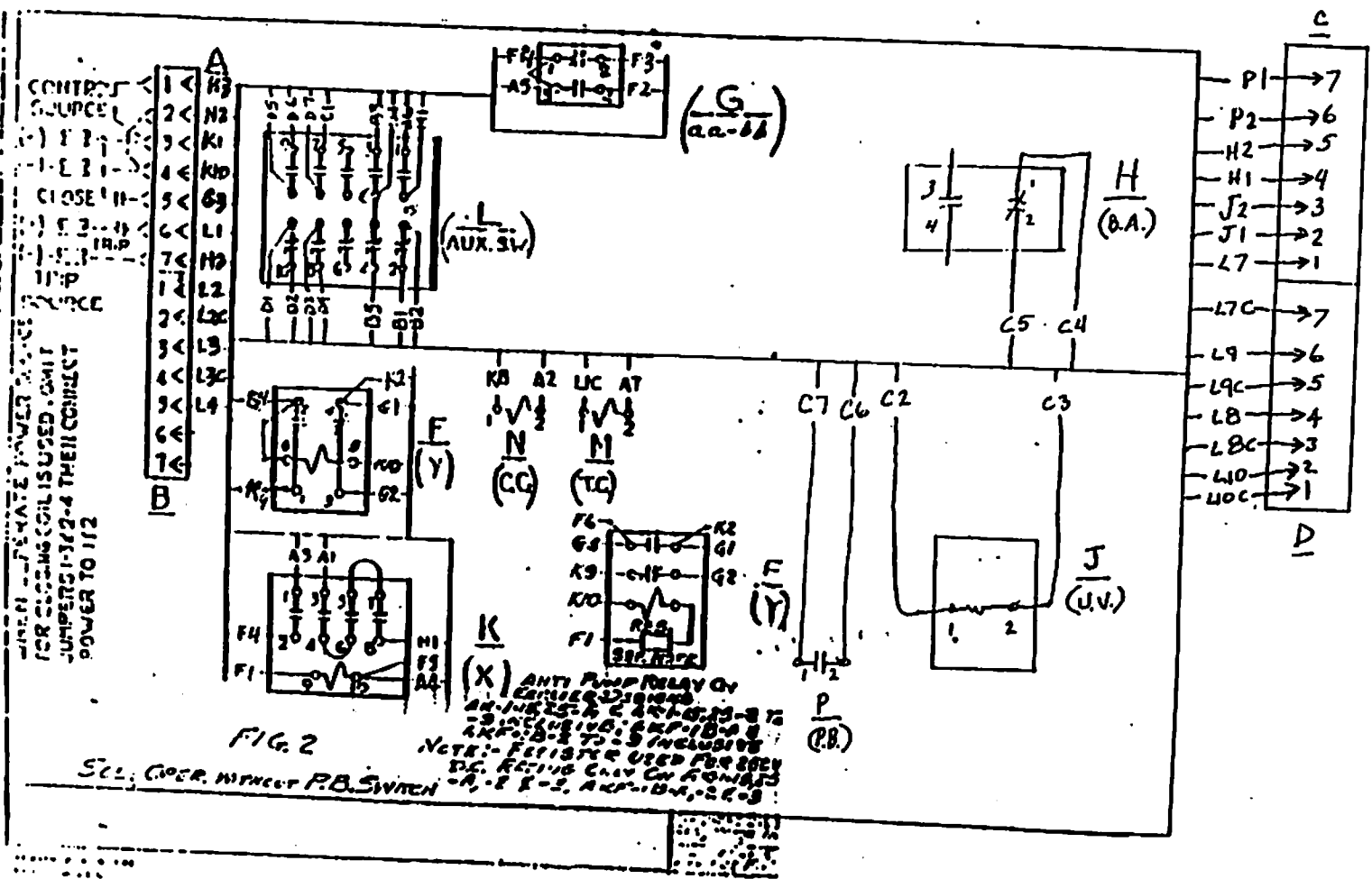
- A- TERMINAL BOARD LOCATED TOP RIGHT, FRONT VIEW.
- B- TERMINAL BOARD-CONNECTED UNDER-A
- F- ANTI- PUMP, PERMISSIVE RELAY
- G- (12-18) MECHANISM SWITCH
- H- (18) BELL ALARM OR LOCKOUT DEVICE OPERATES ON Y WHEN BREAKER TRIPS ON OVERCURRENT- MANUAL RESET, 2 OR 3 CONTACT
- J- (18) UNDERVOLTAGE TRIP DEVICE - TIME DELAY OR INSTANTANEOUS.
- K- (12) CLOSING CONTACTOR- 3 SETS OF CONTACTS IN SERIES (MAIN) & 1 SET FOR SEAL-IN.
- L- (12) AUX. SW- 2 "2" & 2 "5" CONTACTS (STD) OR 5 "2" & 5 "5" (SPECIAL)
- M- (12) SLANT TRIP DEVICE
- N- (12) SOLENOID CLOSING COIL
- P- (18) CLOSING SWITCH ON BREAKER
- S- (12) REVERSE CURRENT TRIP POTENTIAL COIL
- T- (12) TRANSFORMER

**ELEMENTARY DIAGRAM**

Wiring Diagrams

USX  
 GARY WORKS  
 SINTERING PLANT

DRAWOUT BKR.  
 AK-1-15425  
 NOTE: ALL FIGS. ARE 1

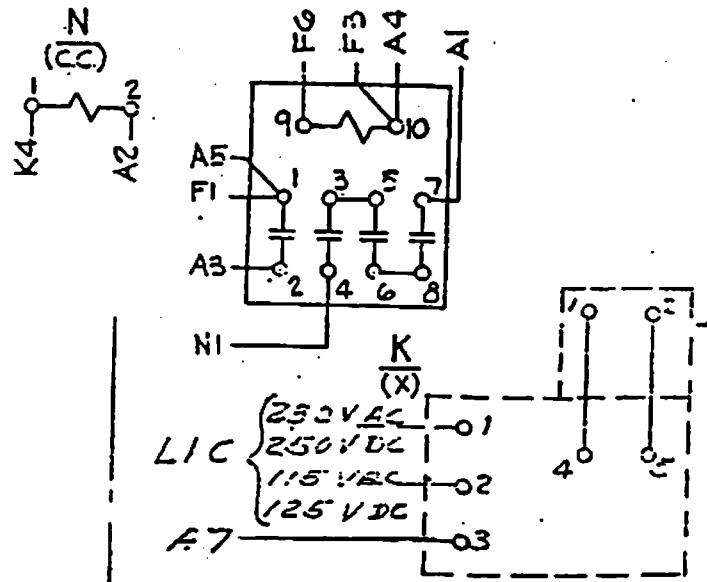
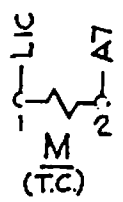
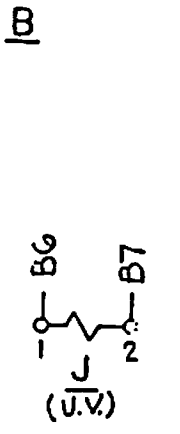
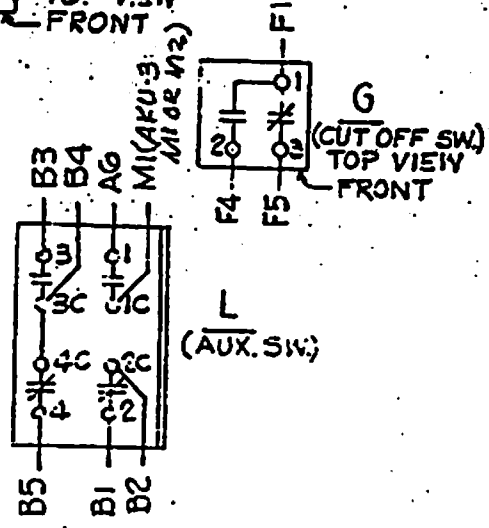
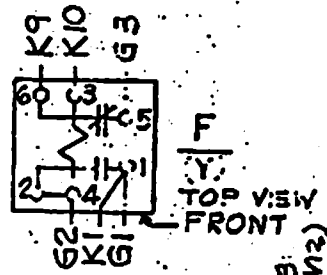
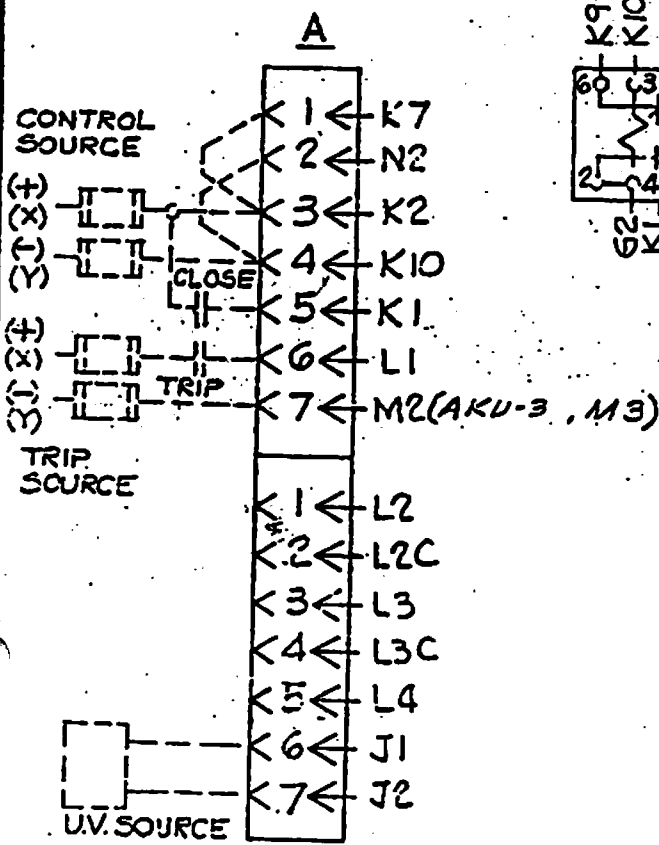


R-117

ON 8214720

# ALL FIG. FRONT VIEW EXCEPT AS NOTED

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS OF EXACT LOCATION OF APPARATUS MUST BE AS SHOWN.
2. NUMBERED CIRCLES ARE MERELY CONVENIENT LEADS AND DO NOT NECESSARILY REPRESENT COMPONENTS OF THE CIRCUIT.
3. INITIAL CONNECTIONS OF DEVICES ARE INCLUDED IN THIS DRAWING.
4. DEVICE FUNCTION NUMBERS AND ABBREVIATIONS STANDARDS.

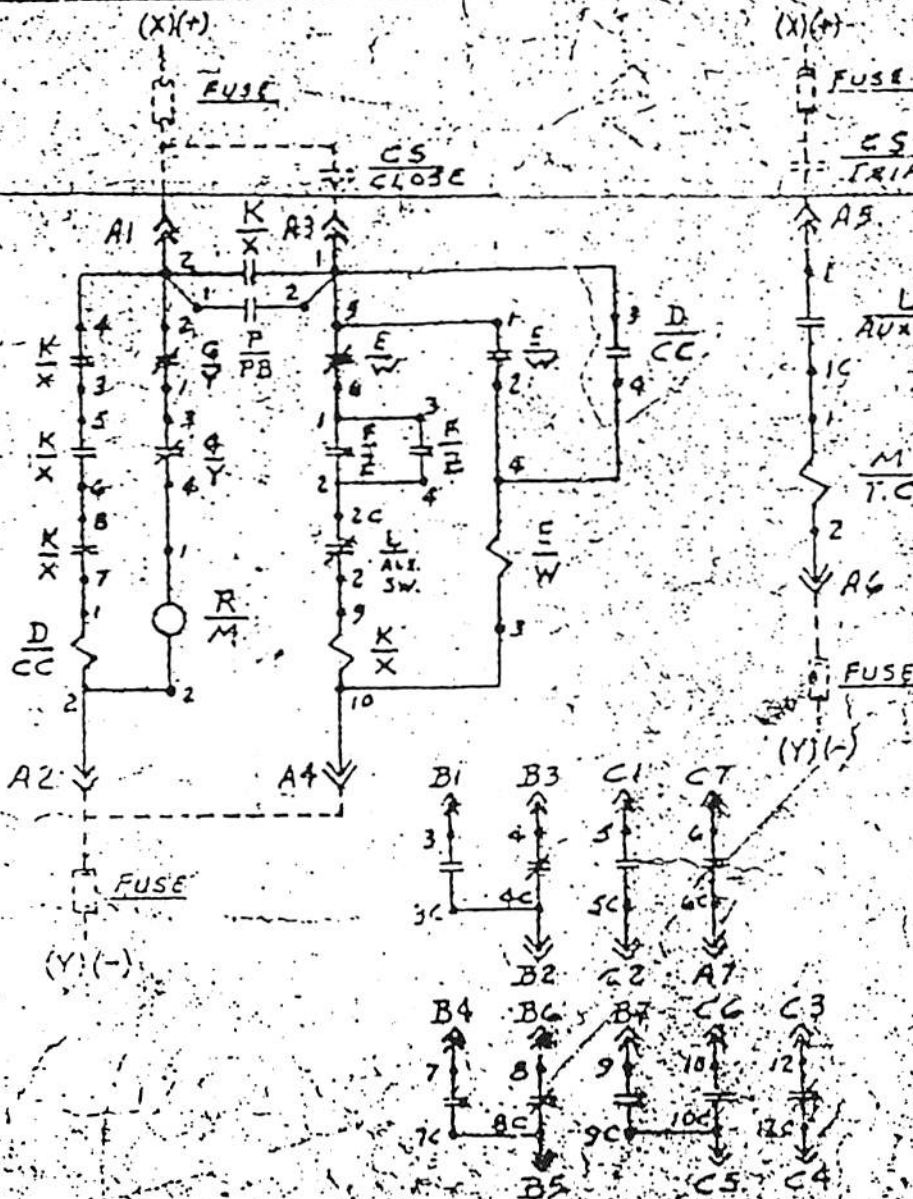


WHEN SEPARATE POWER SOURCE FOR CLOSING COIL IS USED, OMIT JUMPERS A1-A3 & A2-A4. THEN CONNECT POWER TO A1 & A2

AK-3 ONLY AKU-3 ONLY M  
FIG. 1 CONN. DIAG. TC. PS-1

CONNECTIONS	REVISED	DATE	BY
EITHER ENDS OF WIRE ARE IDENTIFIED AS TO TERMINALS, SWITCHES AND CABLES CONNECTION FROM LEFT STUDS TO THE MAIN BOARD A TECHNICAL L.			
1	11/27/55	WIRING	WIRING
2			

TITLE: **CONN & ELEM. DIAGRAM**  
 FIRST MADE FOR: **QUICK CLASSY AK-2-50/75/100**



TYPICAL ELEMENTARY SCHEME

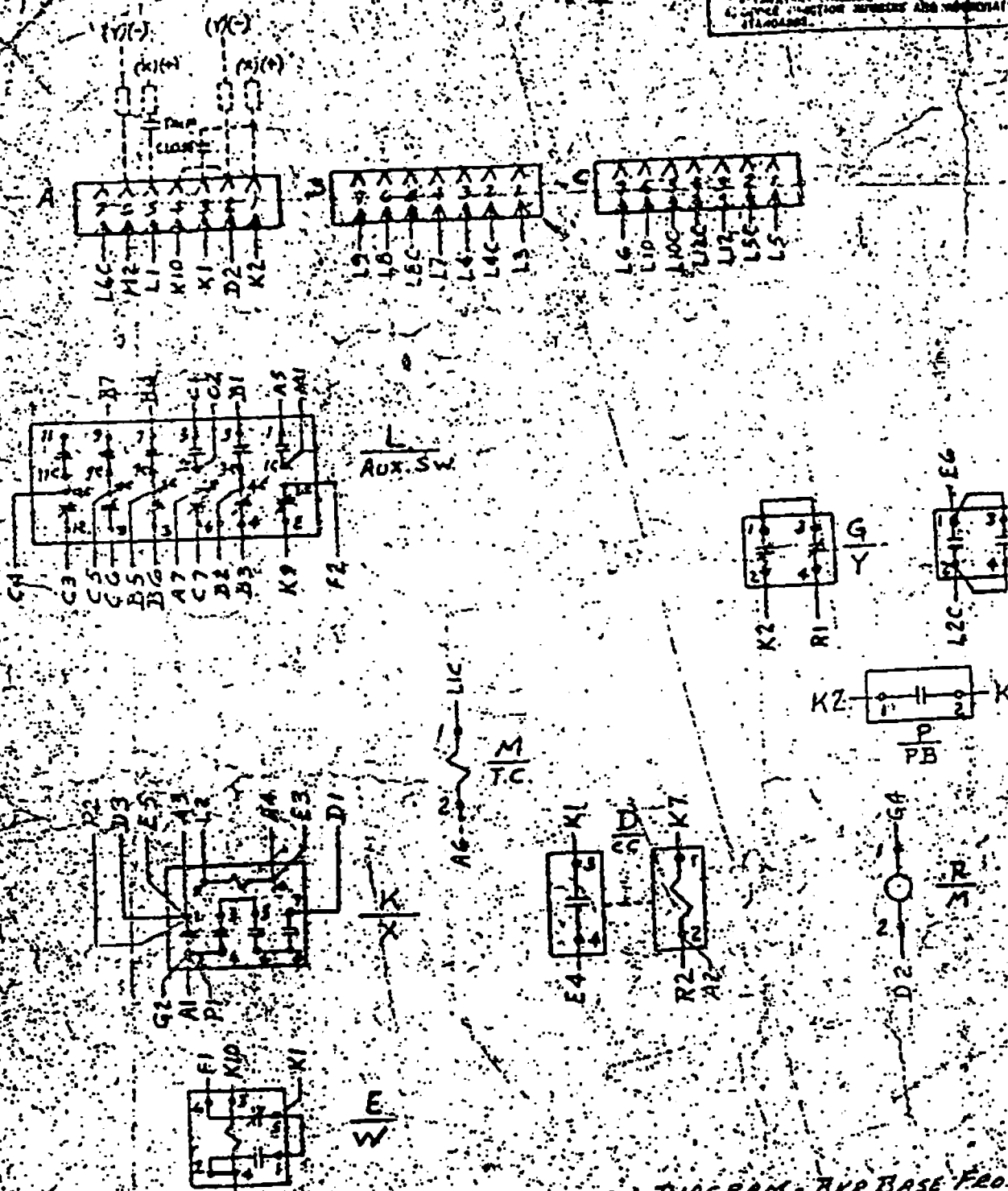
LIST OF ABBREVIATIONS

- |                             |                         |                         |
|-----------------------------|-------------------------|-------------------------|
| A. SEC. DISC. AT TOP LEFT   | L. AUX. SW.             | R. CLOSING RELAY (C.C.) |
| B. SEC. DISC. AT TOP CENTER | M. SHUNT (T.R.A.T.C.)   | S. STOP                 |
| C. SEC. DISC. AT TOP RIGHT  | P. PUSH BUTTON          | T. THERMAL CUT-OFF      |
| D. CLOSING RELAY (C.C.)     | S. STOP (A.S.)          | X. MOTOR                |
| E. ANTI-PUMP RELAY (W)      | R. CLOSING RELAY (C.C.) |                         |
| F. CUT OFF SWITCHES (Y, Z)  |                         |                         |
| G. CONTACT RELAY (X)        |                         |                         |

017760272D

0177/0272-2  
 0177/0272-2

THIS DIAGRAM SHOWS ELECTRICAL SYMBOLS  
 THAT ARE NOT OF APPROVED TYPE AND  
 IS NOT TO BE USED FOR REPAIR OR  
 RECONSTRUCTION OF DEVICES UNLESS  
 THE ORIGINAL MANUFACTURER'S  
 SPECIFICATIONS ARE OBSERVED.  
 ALL ELECTRICAL SYMBOLS AND CONNECTIONS  
 ARE APPROVED.



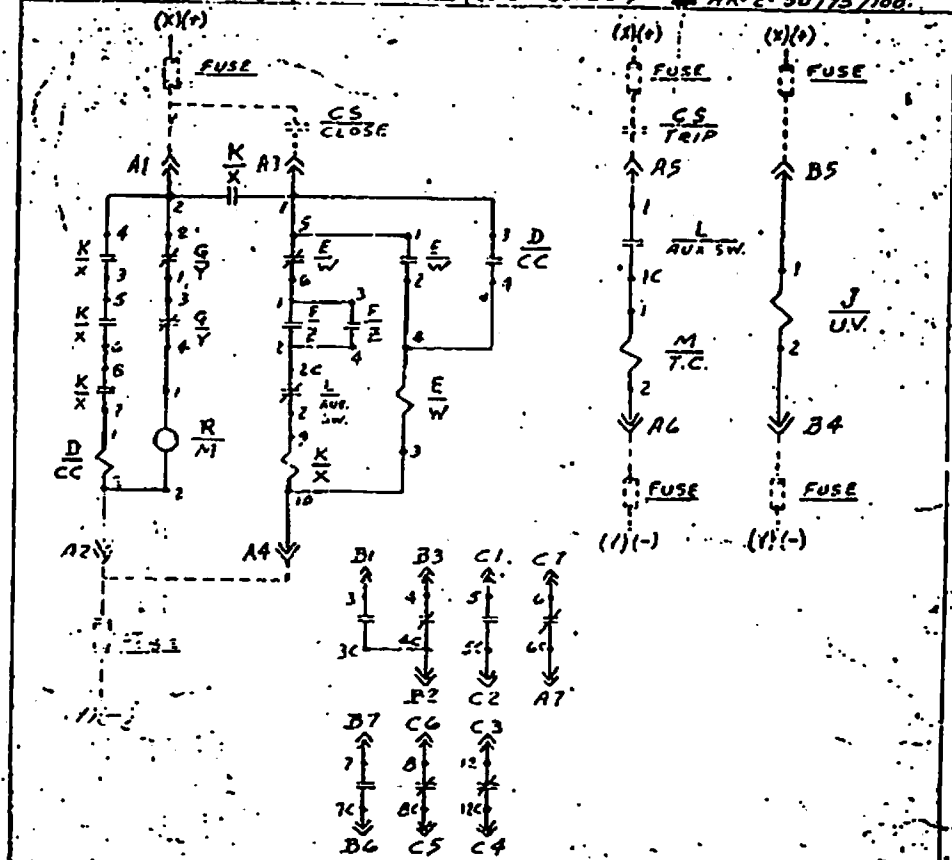
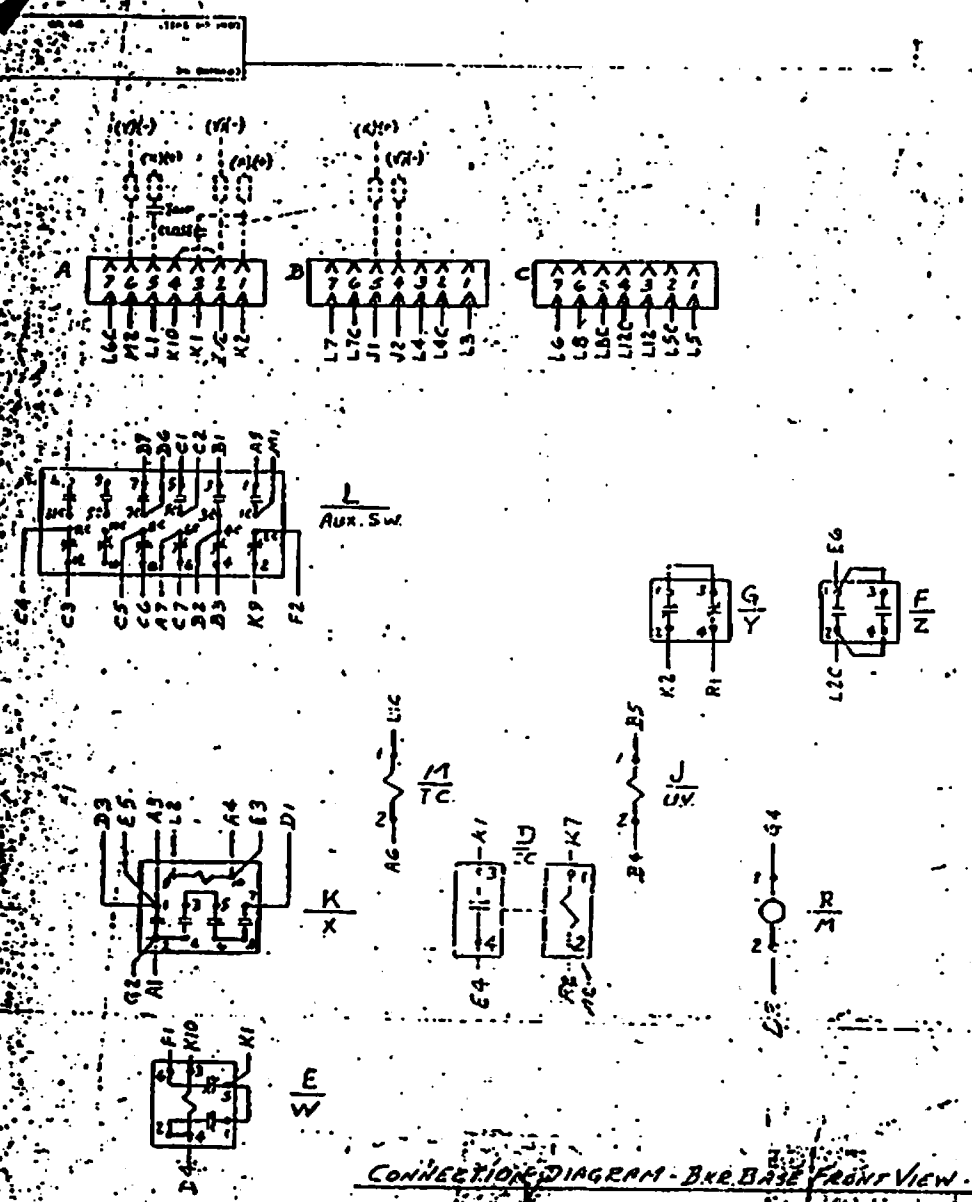
CONNECTION DIAGRAM - BKR BASE PRO.



Shokat

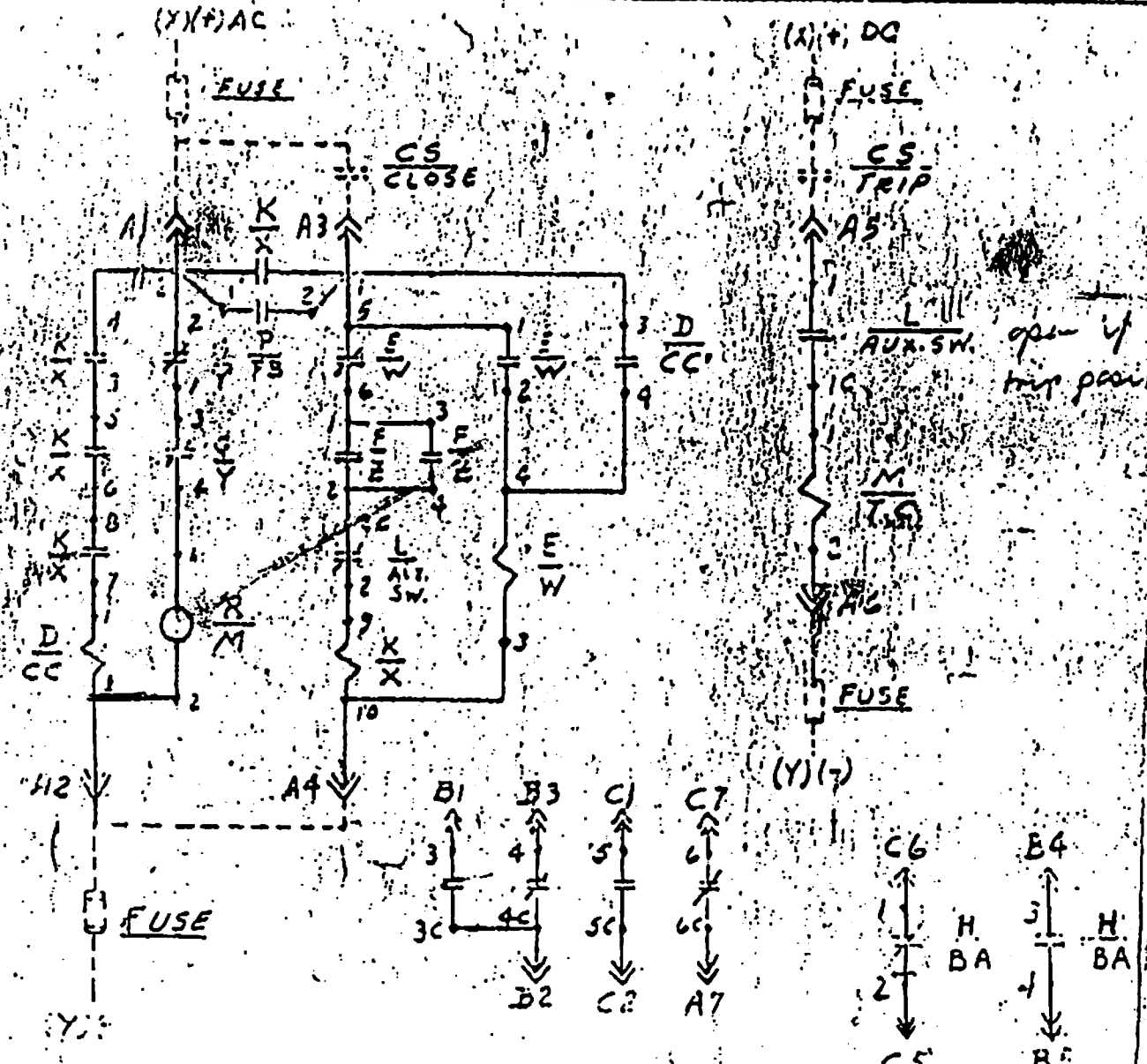
GENERAL ELECTRIC

0177L0272-D **CONN. ELEM. DIAGRAM**  
CON. NO. 106 FIRST MADE FOR (QUICK CLOSE) AK-2-50/75/100



- LIST OF ABBREVIATIONS**
- A - SEC. DISC. AT TOP LEFT
  - B - SEC. DISC. AT TOP CENTER
  - C - SEC. DISC. AT TOP RIGHT
  - D - CLOSING RELAY (CC)
  - E - ANTI-PUMP RELAY (W)
  - F - CUT-OFF SWITCHES (Y, Z)
  - J - UNDERVOLTAGE DEVICE TIME OR INST. (U.V.)
  - K - CONTROL RELAY (X)
  - L - AUX. SW. A-B-B CONTACTS TYPE 2B12
  - M - SHUNT TRIP (T.C.)
  - R - CLOSING SPRING CHARGING MOTOR (M)

DATE: JUN 10 1960  
 CHECK: JUN 17 1960  
 APPROVED: [Signature]  
 0177L0272-D  
 ASBA RD

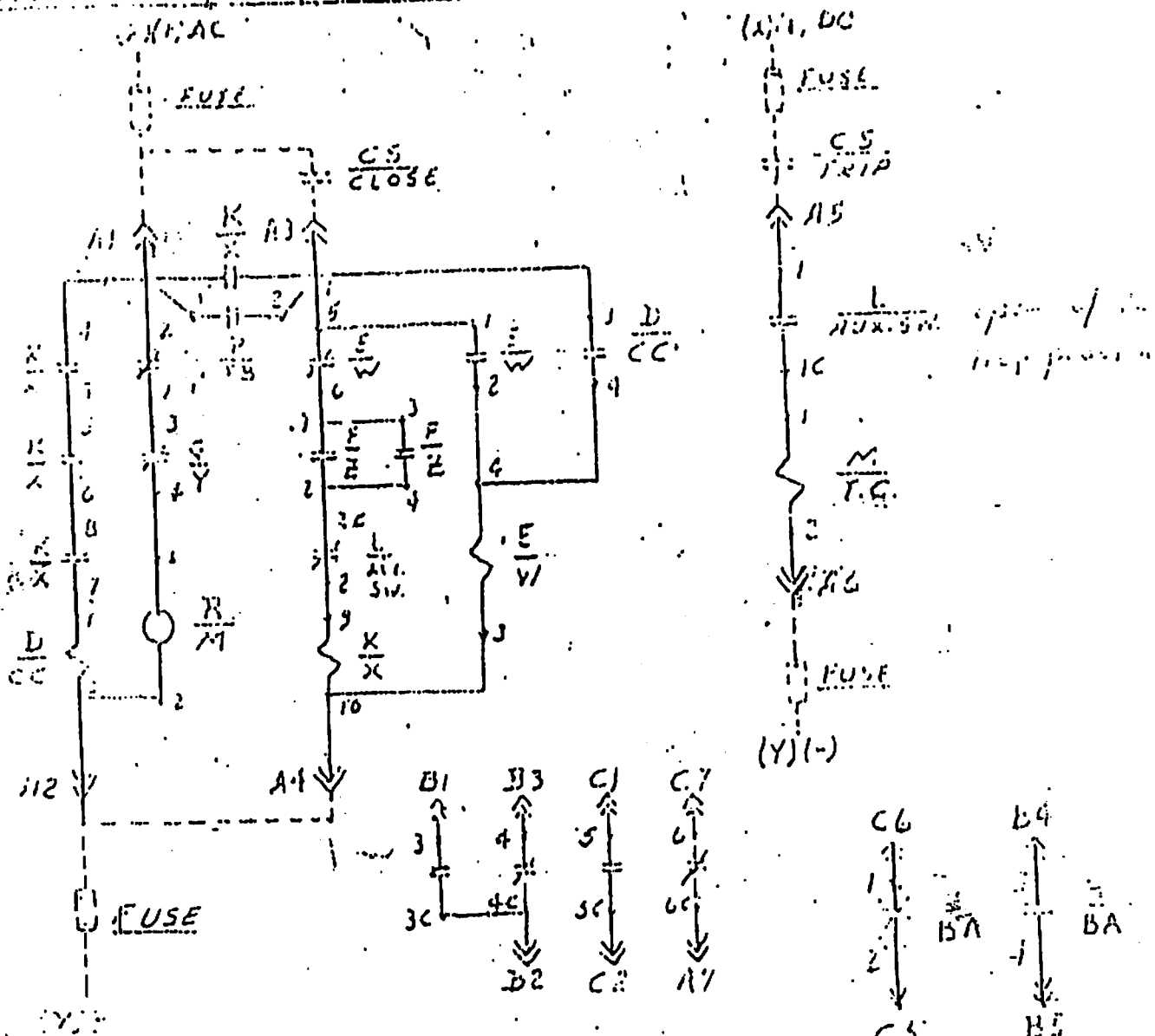


ELEMENTARY SCHEME

OF ABBREVIATIONS

- A. SEC DISC. AT TOP LEFT
- B. SEC DISC AT TOP CENTER
- C. SEC DISC AT TOP RIGHT
- D. CLOSING RELAY (CC)
- E. ANTI-PUMP RELAY (W)
- F. CUT OFF SWITCHES (Y, Z)
- H. BELL ALARM OR LOCKOUT DEVICE OPERATES WHEN BRK IS TRIPPED BY ANY MEANS OTHER THAN SHUNT OR MANUAL TRIP. Q & D CONTACTS SHOWN WITH BRK IN RESET POSITION (NORMAL OPERATION)
- K. CONTROL RELAY (X)
- L. AUX. SW. A & P CONTACTS TYPE SB12
- M. SHUNT TRIP (T.C.)
- P. PUSH BUTTON CLOSING SW ON BRK (P.B.)
- R. CLOSING SPRING CHARGING MOTOR (M)

PRINTS TO



ELEMENTARY SCHEME OF ABBREVIATIONS

- A. SEC DISC. AT TOP LEFT
- B. SEC DISC. AT TOP CENTER
- C. SEC DISC. AT TOP RIGHT
- D. TRIPPING RELAY (CC)
- E. AUXILIARY RELAY (VI)
- F. CUTOFF SWITCHES (Y, Z)
- G. LOCKOUT DEVICE
- H. INDICATOR WHICH BRR IS TRIPPED
- I. INDICATOR WHICH BRR IS TRIPPED
- J. PUSH BUTTON CLOSING SWITCH ON BRR (P.B.)
- K. CONTROL RELAY (X)
- L. AUX. SW. A&P CONTACTS TYPE 5B12
- M. THUNT TRIP (T.C.)
- N. CLOSING SPRING CHARGING MOTOR (M)

INDICATOR WHICH BRR IS TRIPPED  
INDICATOR WHICH BRR IS TRIPPED  
INDICATOR WHICH BRR IS TRIPPED

0177102-12  
F. 12. A

0177L0272-D

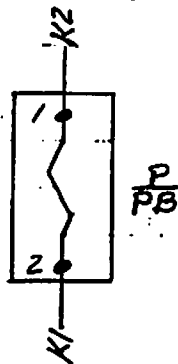
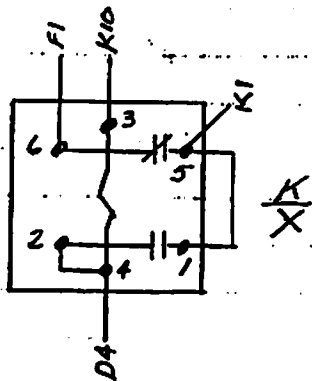
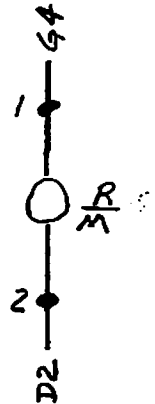
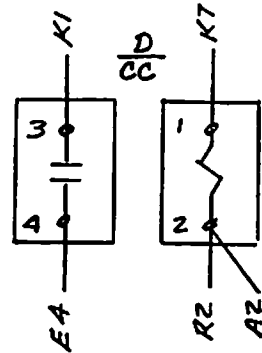
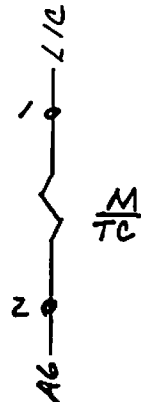
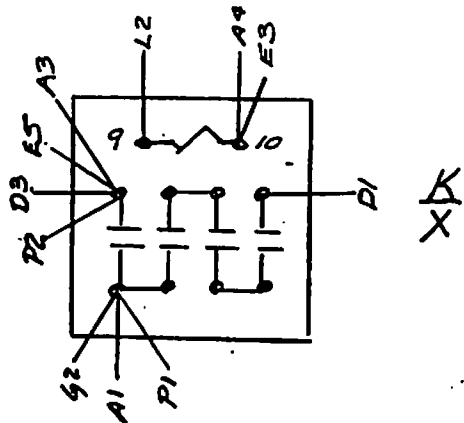
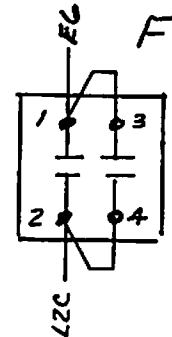
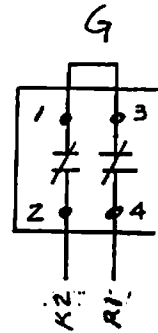
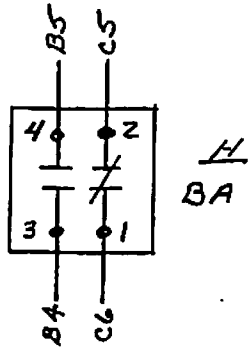
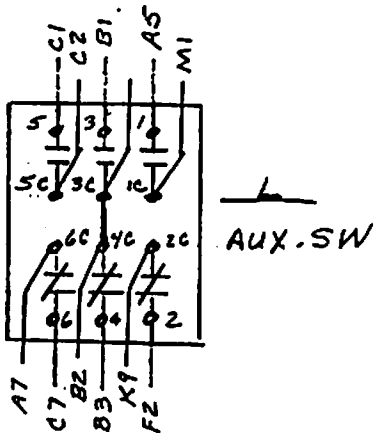
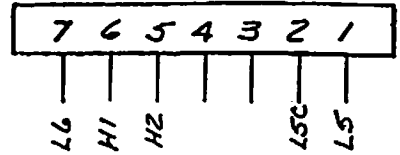
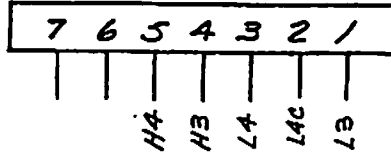
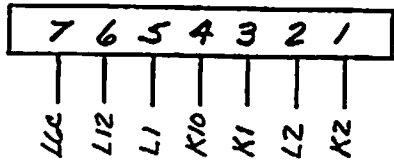
QUICK CLOSE

AK2-50/75/100

A

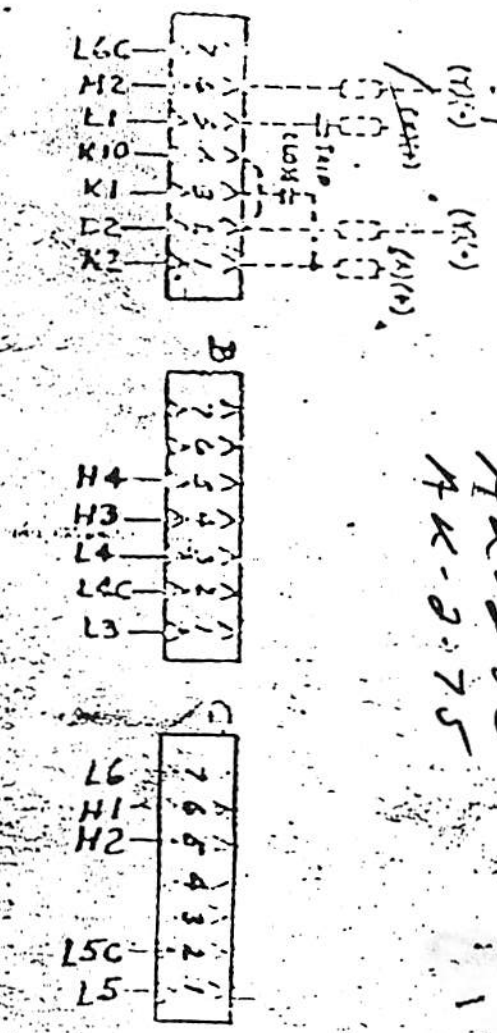
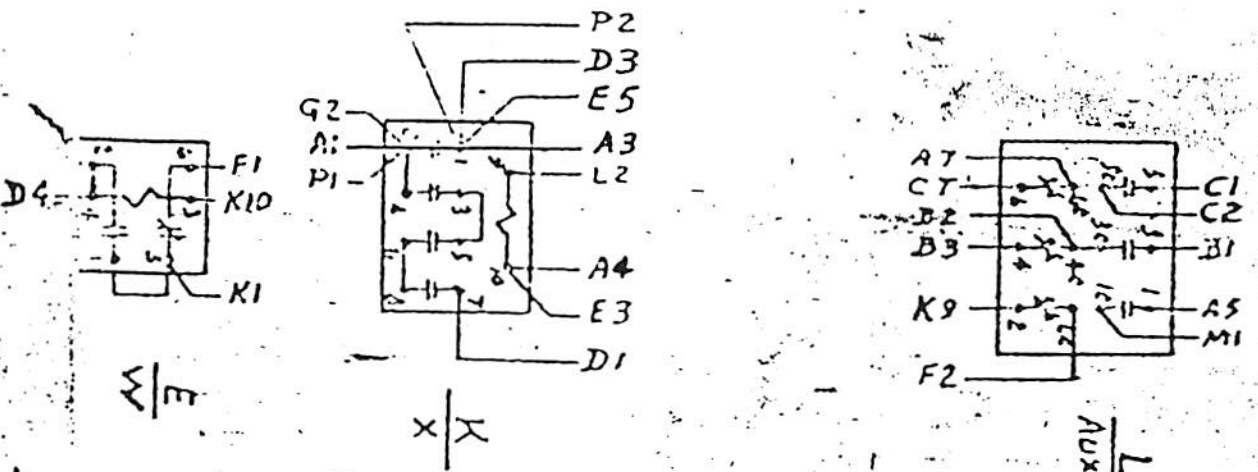
B

C



- $\frac{D}{CC}$  QUICK CLOSE COIL & SWITCH
- L AUXILIARY SWITCH
- $\frac{H}{BA}$  BELL ALARM
- G-F CUT OFF SWITCHES
- $\frac{K}{X}$  CONTROL (X) RELAY
- $\frac{E}{W}$  ANTI-PUMP (Y) RELAY
- $\frac{M}{TC}$  SHUNT TRIP
- $\frac{R}{M}$  CHARGING MOTOR
- $\frac{PB}{PB}$  CLOSING PUSH BUTTON ON BREAKER

Quick Check  
0177627



AK-2-58  
AK-2-75

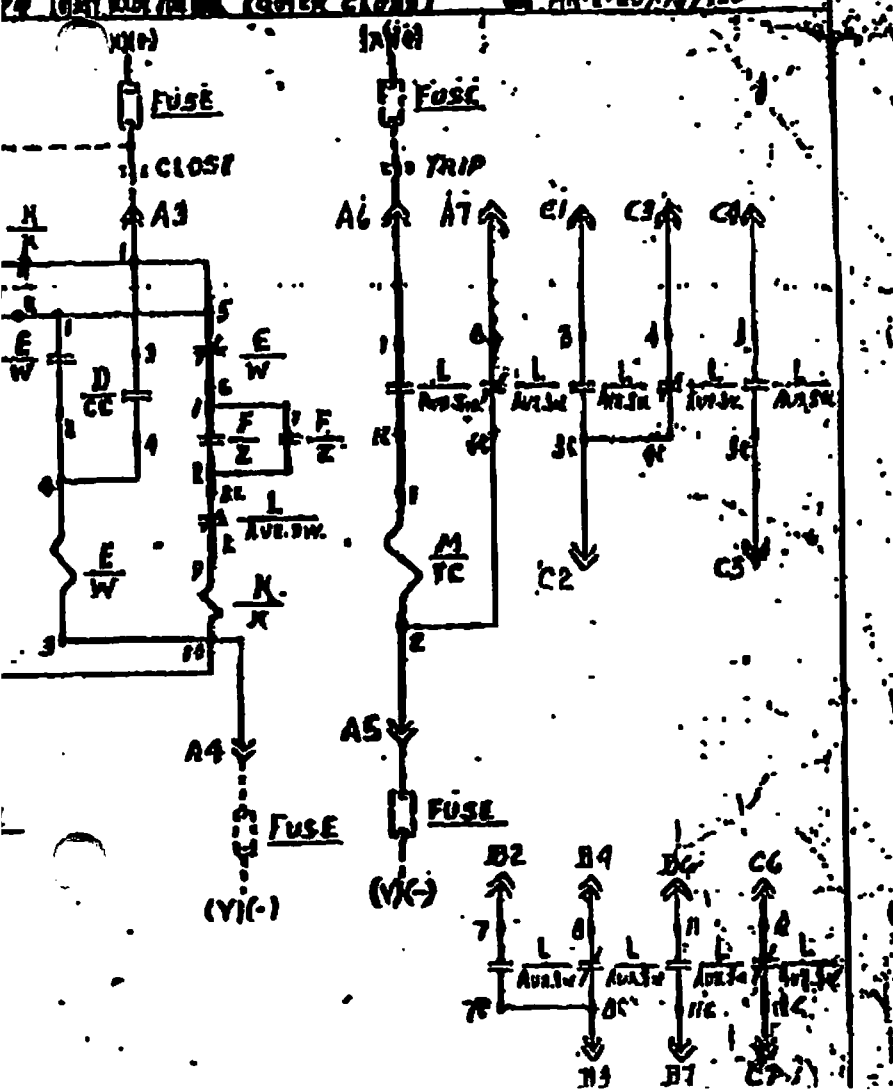
CONNECTION DIAGRAM - SEE THIS FRONT

MR 1-1777

GENERAL ELECTRIC

01772-0272-R

CONN. & ELEM. DIAG.



pg. 2

3197538479 8+6736479 PAGE. 02  
\*\*\* TOTAL PAGE. 003 \*\*\*

helle V. Rocha

MR 47-1777

GENERAL ELECTRIC

01777

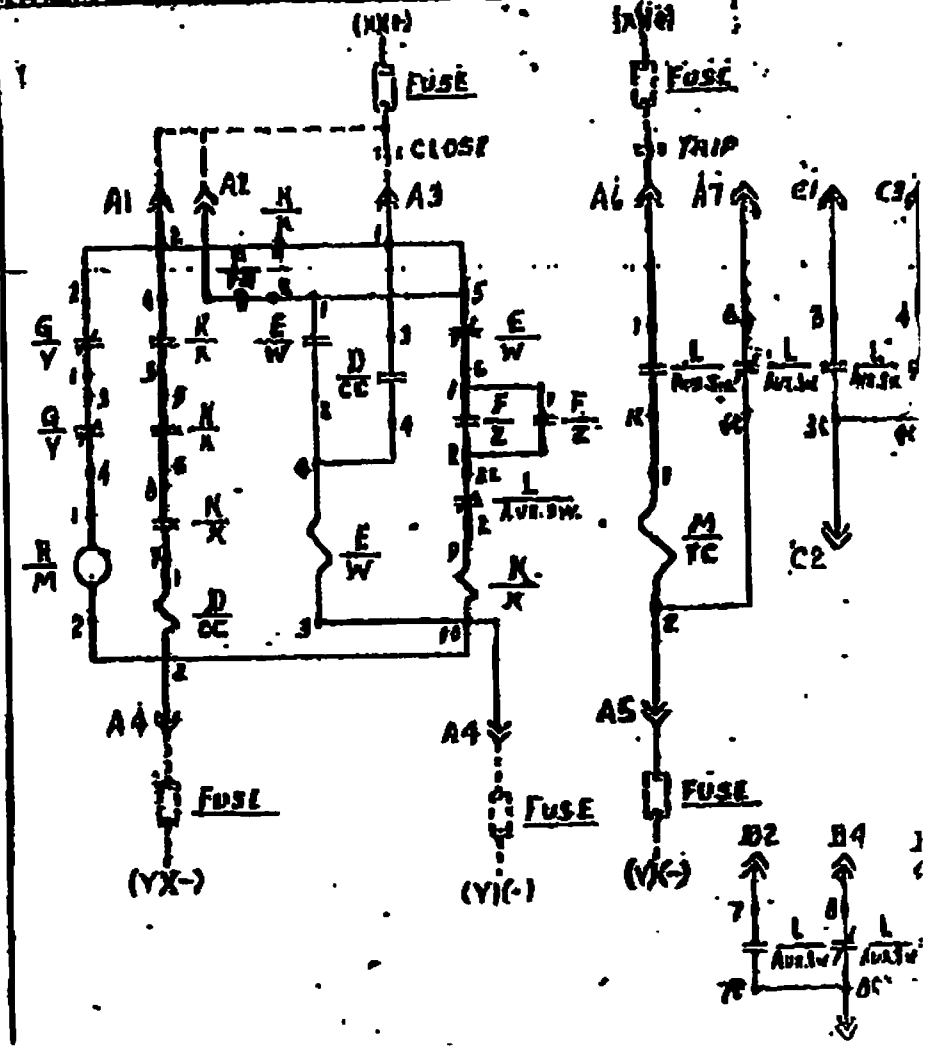
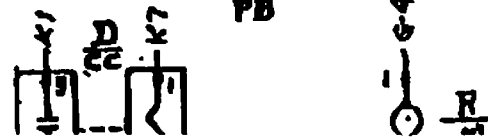
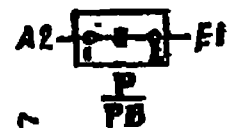
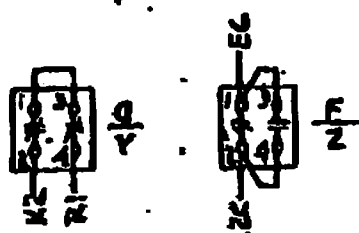
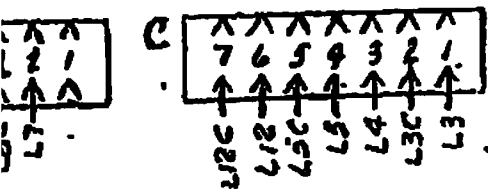
1. THE COMPANY AND MANUFACTURER OF THIS EQUIPMENT ARE NOT RESPONSIBLE FOR THE PROPER INSTALLATION OF THIS EQUIPMENT OR FOR THE PROPER CONNECTION OF THIS EQUIPMENT TO THE POWER SUPPLY OR TO OTHER EQUIPMENT.

017770272-R

CONN. & ELEM. DIAG.

DIAGRAMA DE CONEXÃO (CONEXÃO)

AN-1-80/



0177L0272-R

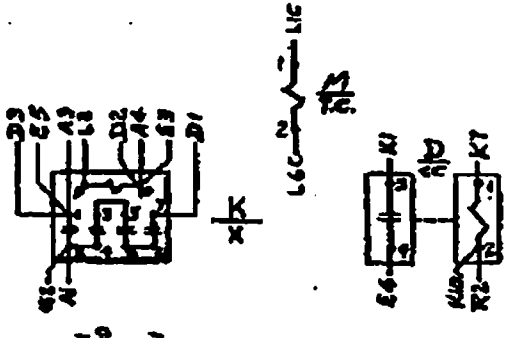
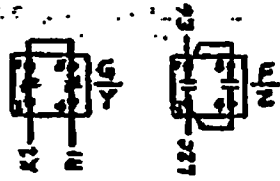
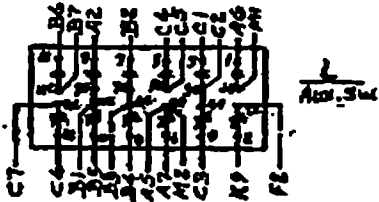
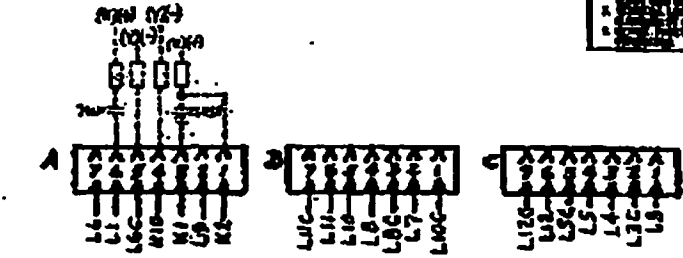
GENERAL ELECTRIC

0177L0272-R

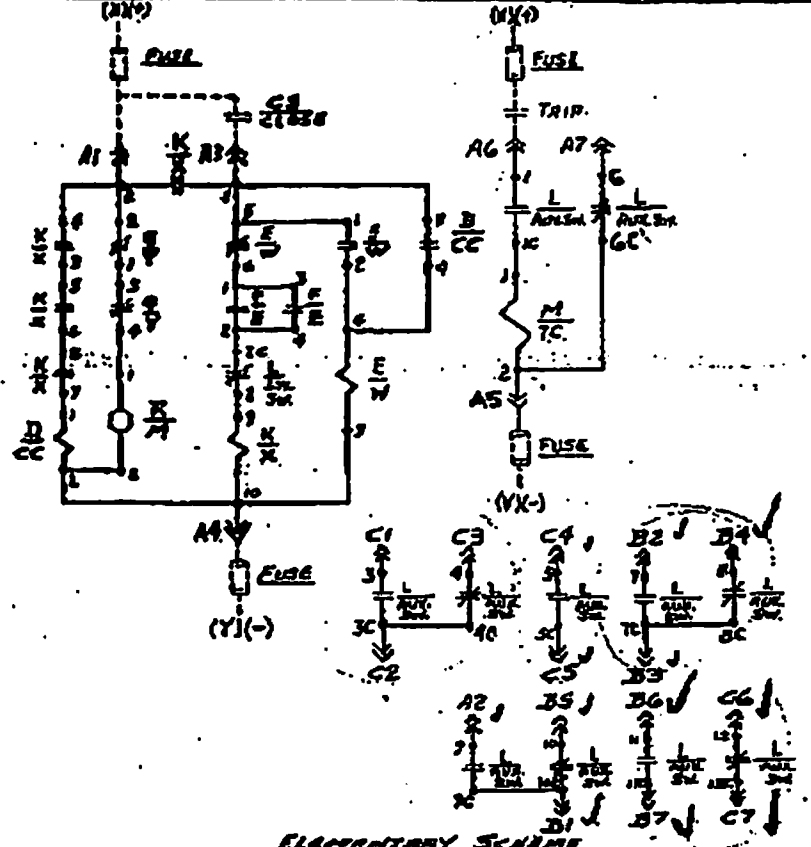
0177L0272-R

CONN. & ELEM. DIAG.

POST BOX FOR BOX (QUICK CHANGE) BK-2A-50/75/100



CONNECTION DIAGRAM - BASE FRONT VIEW



ELEMENTARY SCHEM

LIST OF ABBREVIATIONS

- A - SEC DISC AT TOP LEFT
- B - SEC DISC AT TOP CENTER
- C - SEC DISC AT TOP RIGHT
- CC - CLOSING RELAY (CC)
- W - ANTI-PUMP RELAY (W)
- Y, Z - CUT-OFF SWITCHES (Y, Z)
- K - CONTROL RELAY (K)
- L - AUX SW AT B CONTACTS TYPE SW
- A - START TEST (P.C.)
- R - CLOSING SPRING CHASING MOTOR (M)

0177L0272-R

LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA

0177L0272-R

RD



AK-2-50,75, & 100  
DRAWOUT BKR

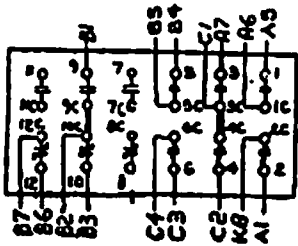
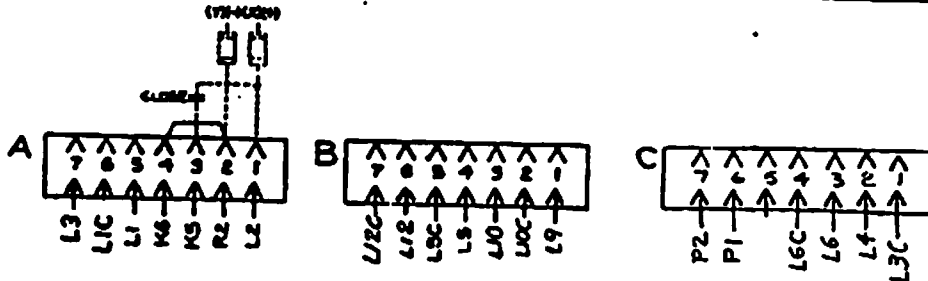
NOTE: BKR SHOWN IN  
OPEN POSITION  
WITH SPRING  
DISCHARGED

1. THE DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY. THE EXACT LOCATION OF APPLICABLE WIRING SHALL BE SHOWN BY THE DRAWING OF THE BKR AND THE ELECTRICAL CONNECTIONS OF THE BKR TO THE MAIN ELECTRICAL SYSTEM.
2. THE DRAWING SHOWS THE ELECTRICAL CONNECTIONS OF THE BKR TO THE MAIN ELECTRICAL SYSTEM.
3. THE DRAWING SHOWS THE ELECTRICAL CONNECTIONS OF THE BKR TO THE MAIN ELECTRICAL SYSTEM.
4. THE DRAWING SHOWS THE ELECTRICAL CONNECTIONS OF THE BKR TO THE MAIN ELECTRICAL SYSTEM.

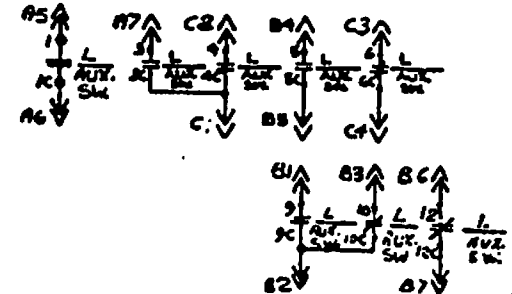
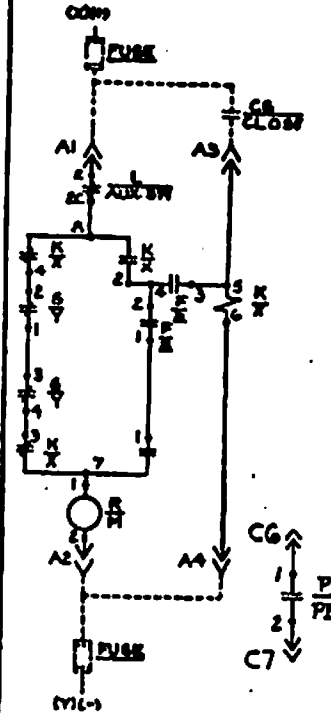
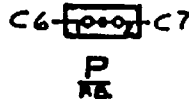
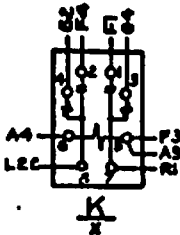
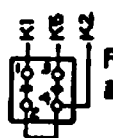
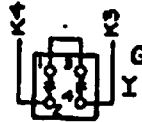
GENERAL ELECTRIC

177L240-D

CONN. & ELEM. DIAG.



AUX SW



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

A-SEC DISC AT TOP LEFT  
B-SEC DISC AT TOP CENTER  
C-SEC DISC AT TOP RIGHT  
P } CUT OFF SWITCHES (Y, Z)

K-CLOSING RELAY TYPE HGA(X)  
L-AUX SW "A" & "B" CONTACTS  
TYPE SB12 (AUX SW)

P-PUSH BUTTON CLOSING SW  
ON BKR (P, B)  
R-CLOSING SPRING CHARGING  
MOTOR (M)

CONNECTION DIAGRAM-BKR BASE-FRONT VIEW

DATE: 25. Ulan. Jan 22 '64

LOW VOLTAGE  
NON-PONDEROUS DEPARTMENT

PRINTS TO

JOE

AUG 18 '94 06:08AM

AK-2-50,75, & 100  
DRAWOUT BKR

NOTE: BKR SHOWN IN  
OPEN POSITION  
WITH SPRING  
DISCHARGED

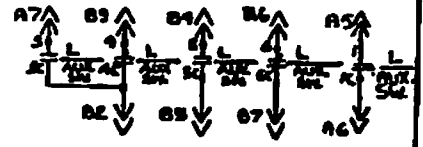
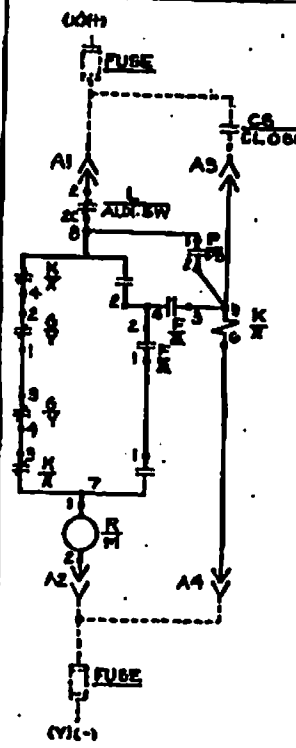
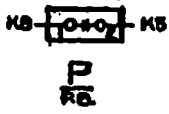
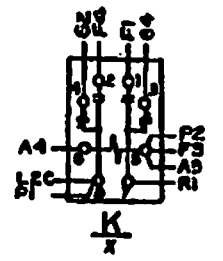
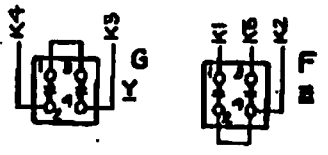
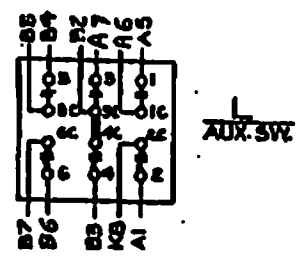
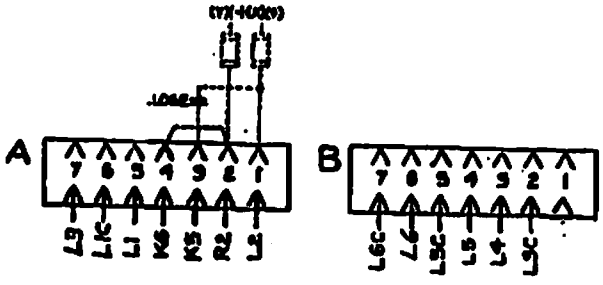
1. THE SYMBOLS SHOWN REPRESENT THE ELECTRICAL CONNECTIONS FOR THE
2. CIRCUIT AS SHOWN BY THE DRAWING AND NOT BY THE POSITION OF THE
3. CONTACTS AND THE POSITION OF THE CONTACTS IS NOT NECESSARILY
4. INDICATED BY THE POSITION OF THE CONTACTS AND THE POSITION OF THE
5. CONTACTS IS NOT NECESSARILY INDICATED BY THE POSITION OF THE
6. CONTACTS IS NOT NECESSARILY INDICATED BY THE POSITION OF THE
7. CONTACTS IS NOT NECESSARILY INDICATED BY THE POSITION OF THE

NO  
177L240D  
54

GENERAL ELECTRIC

CONN. & ELEM. DIAG.

JUST MADE FOR REG. AK-2-50,75&100



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A-SEC DISC AT TOP LEFT
- B-SEC DISC AT TOP CENTER
- F } CUT OFF SWITCHES (Y,Z)
- K-CLOSING RELAY TYPE HGA(X)
- L-AUX SW "A" & "B" CONTACTS
- TYPE SB12 (AUX SW)
- P-PUSH BUTTON CLOSING SW
- ON BKR (P,B)
- R-CLOSING SPRING CHARGING
- MOTOR (M)

CONNECTION DIAGRAM-BKR BASE-FRONT VIEW

THIS DRAWING IS THE PROPERTY OF GENERAL ELECTRIC COMPANY. IT IS LOANED TO YOU BY THE COMPANY AND IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF THE COMPANY.

MADE BY  
C. F. 240-900-11157  
200/10/27/1957

APPROVED  
C. F. 240-900-11157

LOW VOLTAGE  
SWITCHGEAR DEPARTMENT  
PHILADELPHIA

177L240D

LSPA

# FAX COVER SHEET

DATE: 11-7-97

TO: Kim Williams

COMPANY: Westinghouse Elect.

RE: CONNECTION DIAG. AK-2-50  
# 1774 240 DWG C4

## MESSAGE:

CK  
Book

MIDWEST STEEL  
GE AK-2-50  
CGEW930

FROM:



GE Supply

Don Smith  
Senior Industrial Inside Sales

# OF PAGES TO FOLLOW: 2

1951 N. Woodlawn, Griffith, IN 46319  
219 972-8206  
Fx: 219 972-8225



ISO 9002  
Cert. # RS 31946

Ruella Tisei

Page 2 of 2

Reference Don Smith

PAGE.002

FROM GES GRIFFITH 972-8225

NOV 7 '97 11:57

GENERAL ELECTRIC

177L240-D-W

NOT TO SCALE  
DRAWING BY

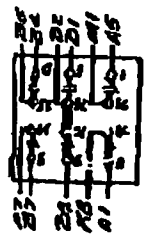
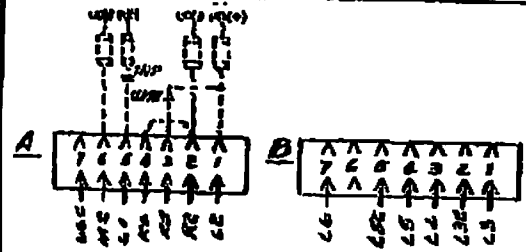
NOTE: BARS SHOWN IN  
UPPER POSITION  
WITH SPRING  
DISCHARGED

1. THE SYMBOLS FOR THE ELECTRICAL COMPONENTS SHOWN IN THIS DRAWING ARE TAKEN FROM THE LIST OF SYMBOLS LOCATED WITH THE DRAWING.  
2. ALL SYMBOLS SHALL BE USED ACCORDING TO THE LIST.

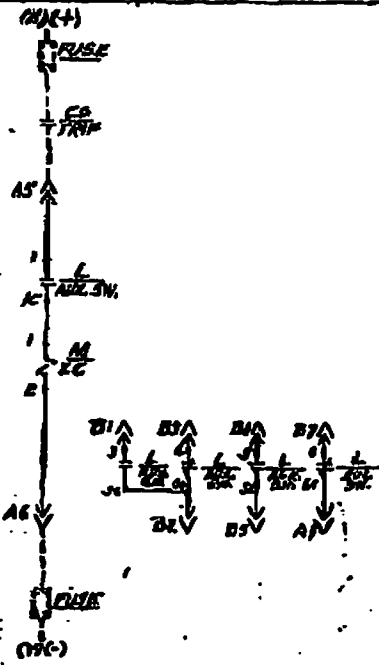
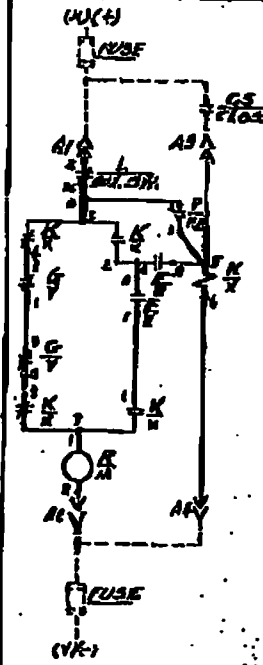
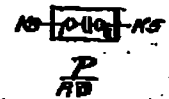
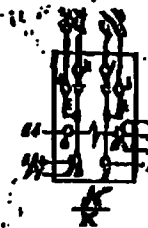
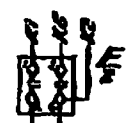
177L240-D

CONN. & ELEM. DIAG.

SEE MARK FOR M.A. AK-E-50.75/100 30



L  
AUX. SW.



TYPICAL ELEMENTARY SCHEM

LIST OF ABBREVIATIONS

- A - SEC. DISC. AT TOP LEFT
- B - SEC. DISC. AT TOP CENTER
- C - CUR-OFF SWITCHES (C.S.)
- K - CLOSING RELAY (TYPE MAIN)
- L - AUX. SW. A 'B' CONTACTS
- M - MOTOR (AUX. SW.)
- N - SHORT TRIP (S.C.)
- P - PUSH BUTTON CLOSING SW.
- QV - QV (P.B.)
- R - CLOSING SPRING CHARGING MOTOR (H)

CONNECTION DIAGRAM - DNR. BASE-FRONT VIEW

177L240-D-W

RD

RENC DON SMITH

AK-2-5075(100 DRAWING DIA.)

NOTE: DIA. SHOWN IN OPEN POSITION WITH SPRING DISCHARGED

1. THIS DRAWING IS FOR THE...  
 2. THE...  
 3. THE...  
 4. THE...  
 5. THE...

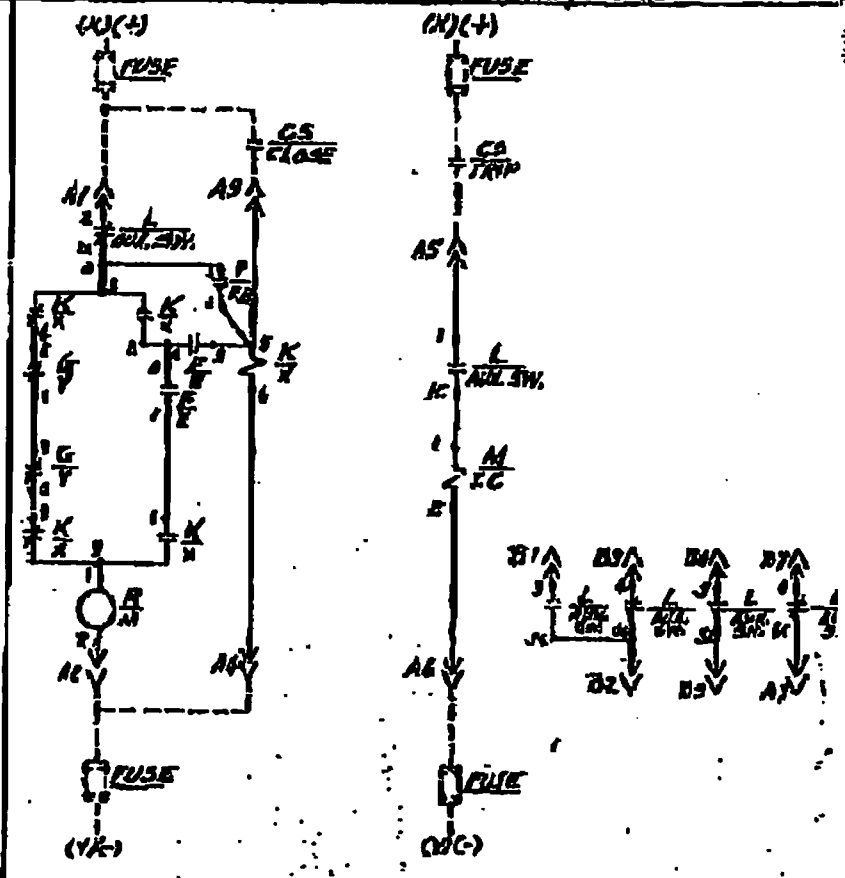
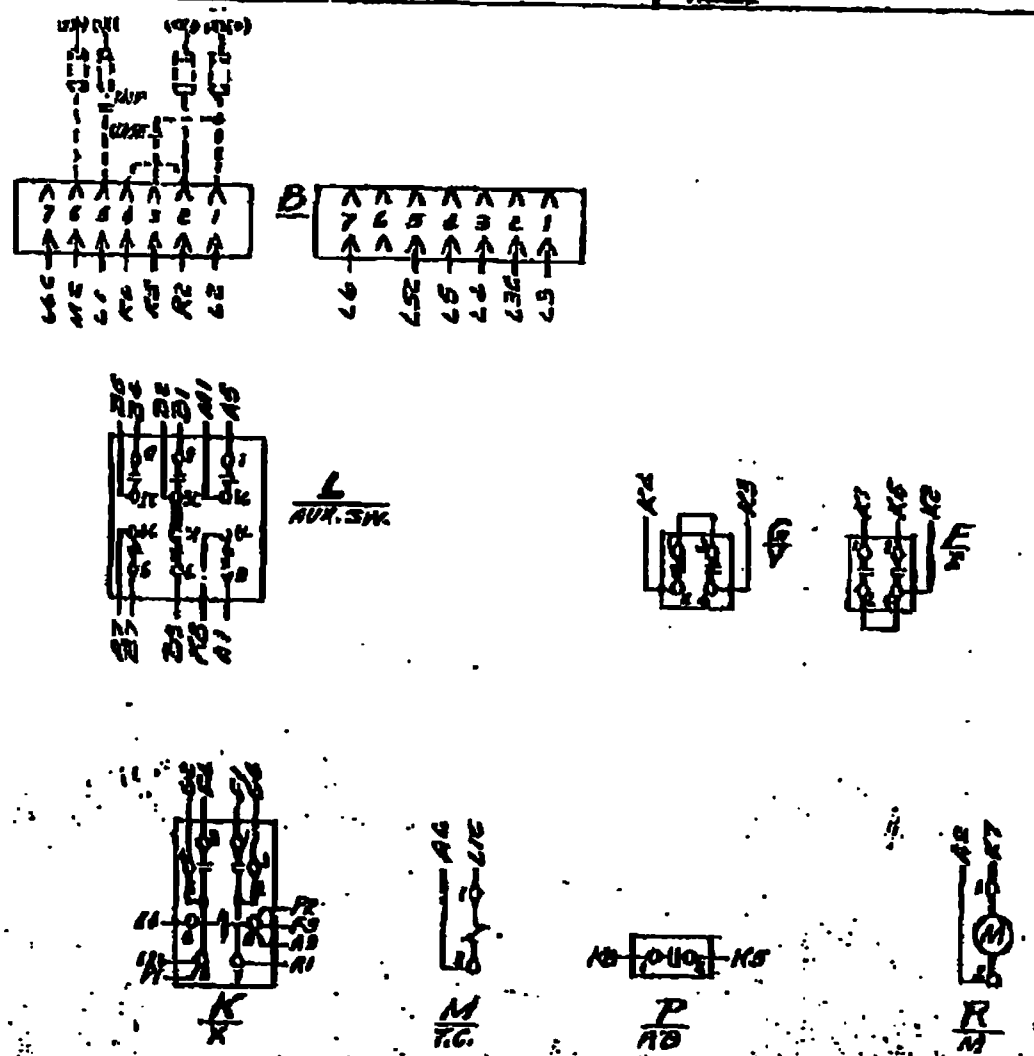
GENERAL ELECTRIC

177L240-D

CONN. & ELEMENT. DIAG.

177L240-D

177L240-D



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A - SEC. DISC. AT TOP LEFT.
- B - SEC. DISC. AT TOP CENTER.
- C - CUT-OFF SWITCHES (Y, B).
- K - CLOSING RELAY TYPE M.
- L - AUX. SW. A "P" CONTACT TYPE 50R (AUX. SW.).
- M - SHUNT TRIP (F.C.).
- P - PUSH BUTTON CLOSING ON DIA. (P.B.).
- R - CLOSING SPRING CHARGED MOTOR (M).

GENERAL ELECTRIC

177L240-D  
 CHGT ON SHEET 65 IN NO. 64

AK-2-50,75&100  
 DRAWOUT BKR.

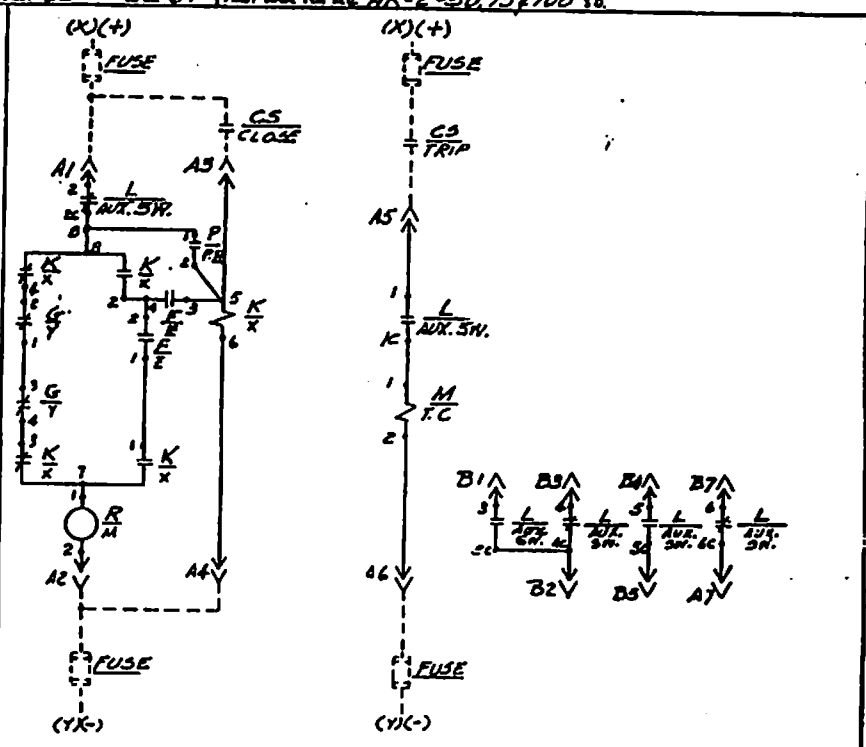
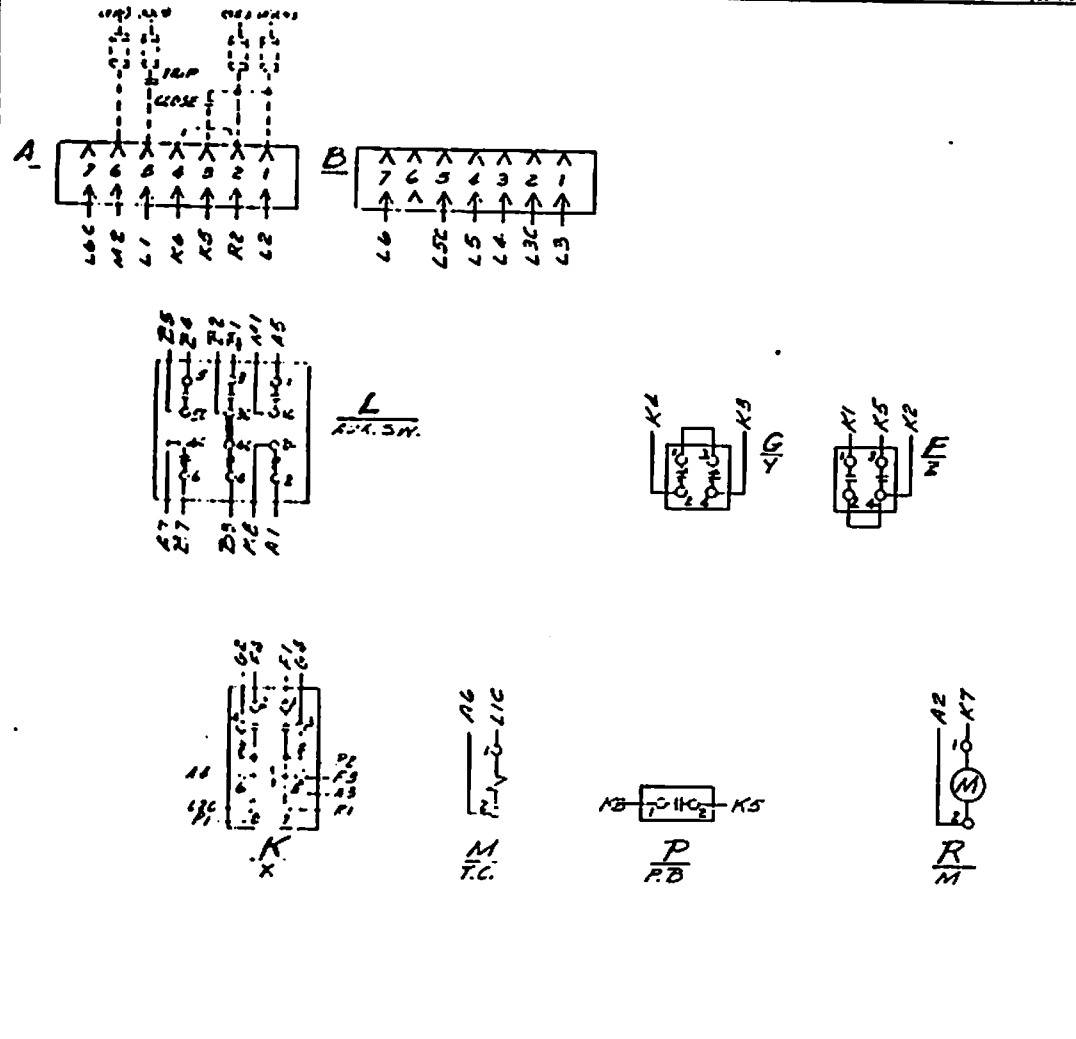
NOTE: BKR SHOWN IN  
 OPEN POSITION  
 WITH SPRING  
 DISCHARGED

1 THIS DIAGRAM SHOWS ELECTRICAL CONNECTIONS ONLY FOR  
 EXACT LOCATION OF APPROPRIATE WIRING NOT BE READ FROM IT  
 2 CONDUIT & RACE AND BUNDLE CONDUIT LOCATIONS OF  
 LEADS AND DO NOT NECESSARILY REPRESENT CONDUITS  
 3 ORIGINAL CONNECTIONS OF DEVICES ARE INCLUDED WITH THE  
 ELEMENTARY DIAGRAM  
 4 DEVICE FUNCTION NUMBERS AND ABBREVIATIONS ARE AS IN  
 STANDARDS

177L240-D  
 CHGT ON SHEET 65 IN NO. 64

CONN. & ELEM. DIAG.

FIRST MADE FOR REQ. AK-2-50,75&100 SO.



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A - SEC. DISC. AT TOP LEFT
- B - SEC. DISC. AT TOP CENTER
- F - CUT-OFF SWITCHES (Y, Z)
- G - CUT-OFF SWITCHES (Y, Z)
- K - CLOSING RELAY TYPE NGA(K)
- L - AUX. SW. "A" "B" CONTACTS TYPE 5012 (AUX. SW.)
- M - SHUNT TRIP (T.C.)
- P - PUSH BUTTON CLOSING SW. ON BKR. (P.B.)
- R - CLOSING SPRING CHARGING MOTOR (M)

CONNECTION DIAGRAM - BKR. BASE - FRONT VIEW

RETRACED	MAR 21 1959	APPROVALS	LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA	177L240-D CHGT ON SHEET 65 IN NO. 64
MADE BY C. E. LOUIS, AUG. 24, 1959	REVISED MAR 21 '59			

LIP-112 [200]

RD

AK-2-50,75, & 100  
DRAWOUT BKR

NOTE: BKR SHOWN IN  
OPEN POSITION  
WITH SPRING  
DISCHARGED

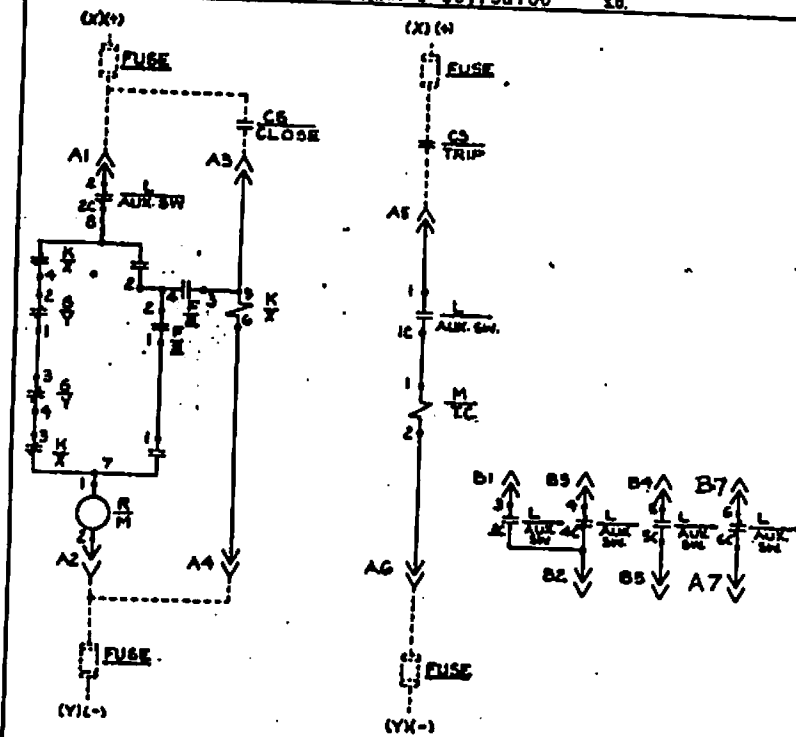
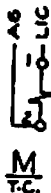
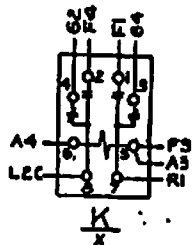
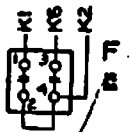
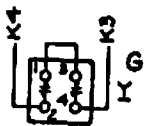
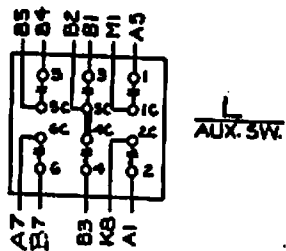
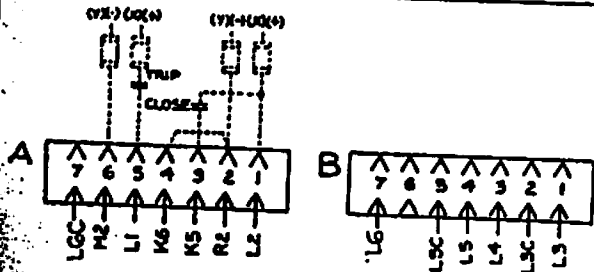
1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY THE  
EXACT LOCATION OF APPARATUS MUST NOT BE TAKEN FROM IT  
2. NUMBERED CIRCLES ARE MERELY CONVENIENT SHOWINGS OF  
LEADS AND DO NOT NECESSARILY REPRESENT SPECIFIC  
3. INTERNAL CONNECTIONS OF DEVICES ARE INCLUDED WITH THE  
ELEMENTARY DIAGRAM  
4. DEVICE FUNCTION NUMBERS AND ABBREVIATIONS ARE AS  
STANDARD

GENERAL ELECTRIC

177L240D

CONN. & ELEM. DIAG.

FIRST MADE FOR REQ. AK-2-5C, 75 & 100



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A-SEC DISC AT TOP LEFT
- B-SEC DISC AT TOP CENTER
- F } CUT OFF SWITCHES (Y, Z)
- G }
- K-CLOSING RELAY TYPE MGA(X)
- L-AUX SW "A" & "B" CONTACTS  
TYPE SB12 (AUX SW)
- M-SHUNT TRIP (T. C.)
- R-CLOSING SPRING CHARGING  
MOTOR (M)

CONNECTION DIAGRAM-BKR BASE-FRONT VIEW

CONNECTIONS  
NOTE: THIS DRAWING IS NOT TO BE TAKEN FROM IT  
FOR REPAIR OR MODIFICATION PURPOSES  
FOR REPAIR OR MODIFICATION PURPOSES  
FOR REPAIR OR MODIFICATION PURPOSES

MADE BY J.P.L.C.  
177L240D

APPROVED

LOW VOLTAGE

D4 25V/1  
L7  
PARTS TO

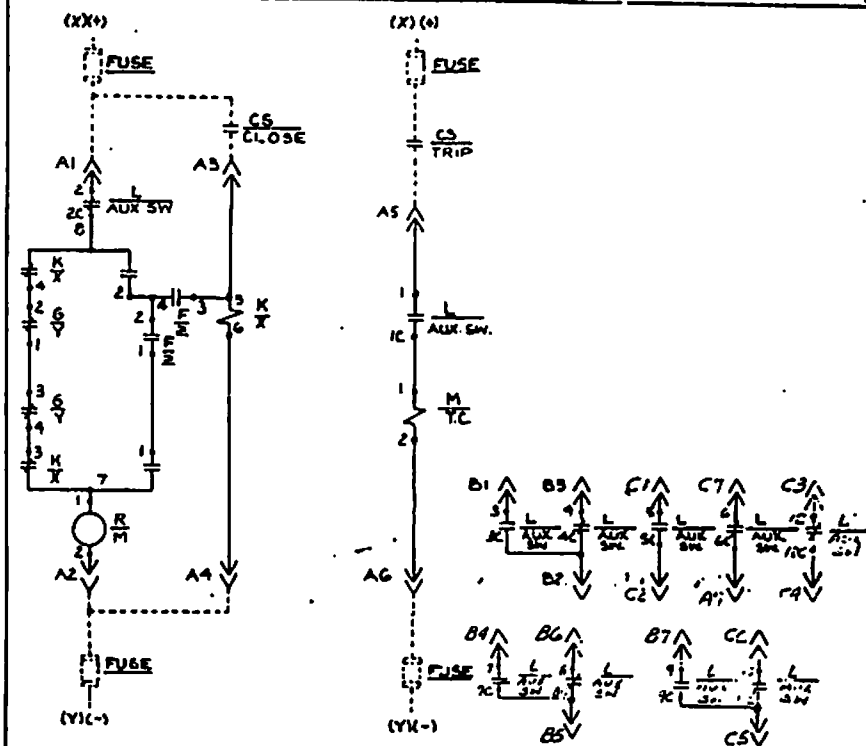
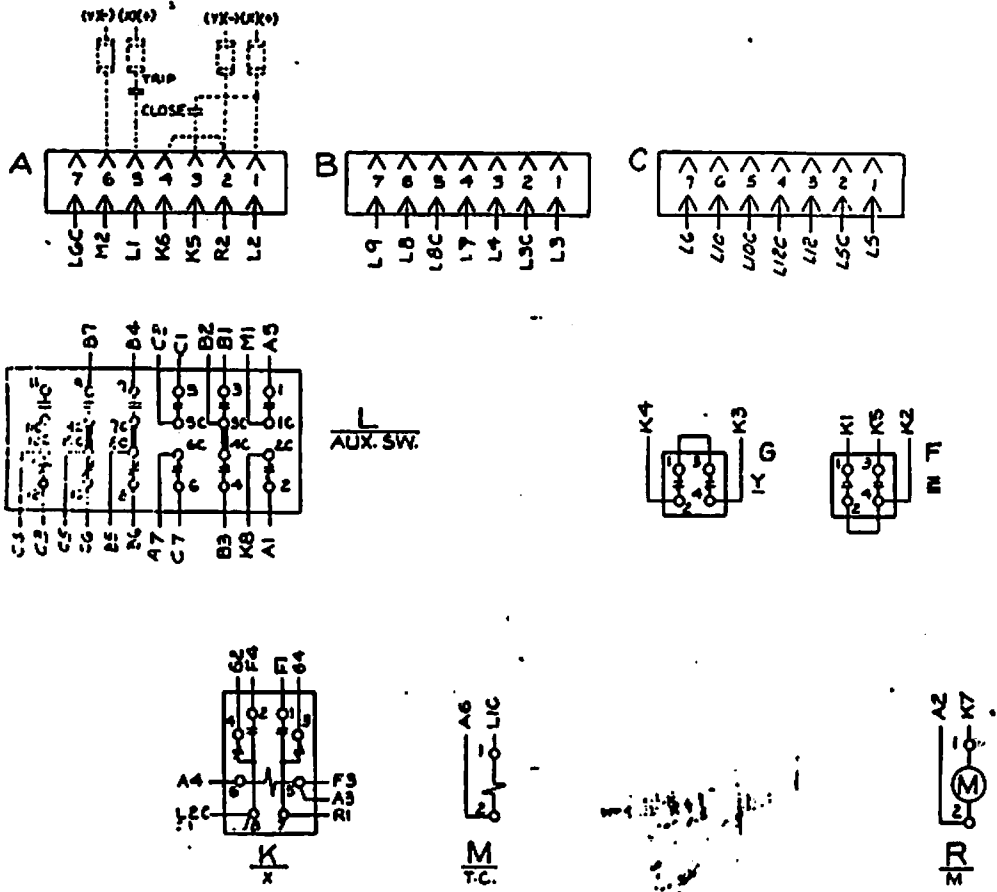
AK-2-50,75, & 100  
DRAWOUT BKR

NOTE: BKR SHOWN IN  
OPEN POSITION  
WITH SPRING  
DISCHARGED

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY THE EXACT LOCATION OF APPARATUS MUST NOT BE READ FROM IT  
2. DIMENSIONED CIRCLES ARE MECHANICAL CONNECTIONS OF LEADS AND DO NOT NECESSARILY REPRESENT CONDUITS.  
3. INTERNAL CONNECTIONS OF DEVICES ARE INCLUDED WITH THE ELEMENTARY DIAGRAM  
4. SINCE FUNCTION POWERS AND ABBREVIATIONS ARE ALL STANDARD

177L240D  
FIRST MADE FOR REQ. AK-2-50, 75 & 100

GENERAL ELECTRIC  
CONN. & ELEM. DIAG.



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A-SEC DISC AT TOP LEFT
- B-SEC DISC AT TOP CENTER
- C-SEC DISC AT TOP RIGHT
- F, G } CUT OFF SWITCHES (Y,Z)
- K-CLOSING RELAY TYPE HGA(X)
- L-AUX SW "A" & "B" CONTACTS TYPE SB12 (AUX SW)
- M-SHUNT TRIP (T.C.)
- R-CLOSING SPRING CHARGING MOTOR (M)

CONNECTION DIAGRAM-BKR BASE-FRONT VIEW



MRCR 842-1  
SW - KANSAS CITY

2 OPD  
AK-2A-100

PAGE. 002

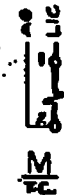
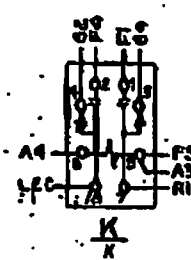
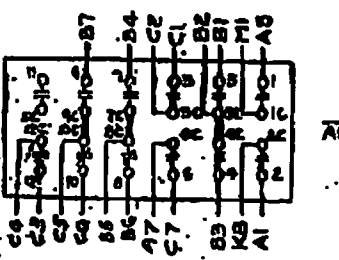
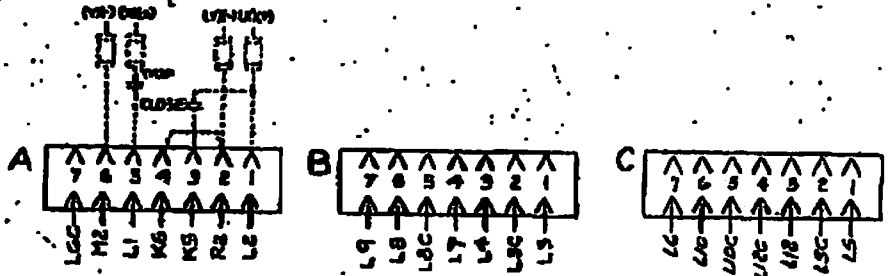
AK-2-50,75,100  
DRAWOUT BKR

NOTE: BKR SHOWN IN  
OPEN POSITION  
WITH SPRING  
DISCHARGED

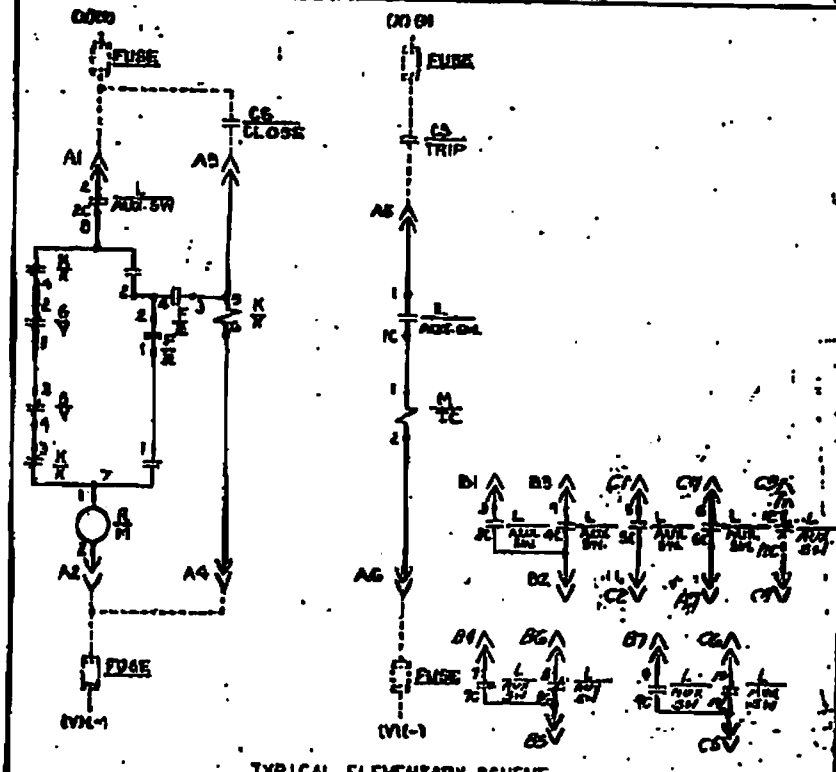
1. THE FOLLOWING CIRCUIT DIAGRAMS APPLY TO ALL ONE  
2. THE CIRCUITRY IS SUBJECT TO CHANGE WITHOUT NOTICE  
3. THE CIRCUITRY IS SUBJECT TO CHANGE WITHOUT NOTICE

177L240D

CONN. & ELEM. DIAG.



CORRECTION DIAGRAM-BKR BASE-FRONT VIEW



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- |                          |                                     |
|--------------------------|-------------------------------------|
| A-SEC DISC AT TOP LEFT   | K-CLOSING RELAY TYPE HBA(X)         |
| B-SEC DISC AT TOP CENTER | L-AUX SW "A" & "B" CONTACTS         |
| C-SEC DISC AT TOP RIGHT  | TYPE SB12 (AUX SW)                  |
| F-...                    | M-SHUNT TRIP (T. C)                 |
| G-...                    |                                     |
|                          | R-CLOSING SPRING CHARGING MOTOR (M) |

319 753 8478 PAGE.002

APR 9 '97 11:57 FROM GES GRIFFITH 972-8225

APP 9 '97 R:54

LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA

LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA  
177L240D  
REV 20 1959 100-1110-100

LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA

177L240D

Wave Kasart

GENERAL ELECTRIC

AK-2A-50/75/100

DRAWOUT BKR NOTE: ALL FIG. ARE FRONT VIEWS

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY. THE EXACT LOCATION OF APPARATUS MUST BE READ FROM IT.  
 2. NUMBERED CIRCLES ARE SHEET'S COMPONENT GROUPINGS. LEADS ARE NOT NECESSARILY REPRESENTED.  
 3. INTERNAL CONNECTIONS OF DEVICES ARE INDICATED WITH THE ELEMENTARY DIAGRAM.  
 4. GIVE PHONE NO. NUMBER AND ABBREVIATIONS ARE ASA STANDARDS.

177L240 R

HARNESS  
 CONN. & ELEM. DIAG.

FIRST MADE FOR REQ. AK-2A-50/75/100 20.

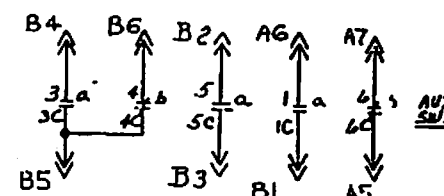
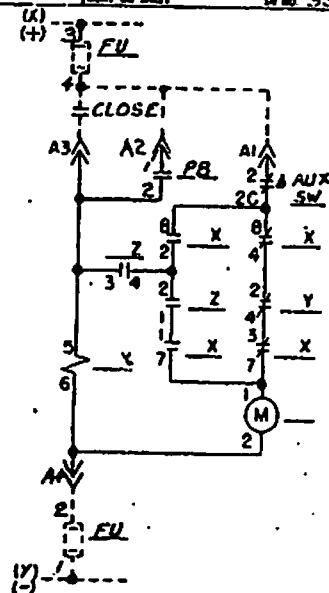
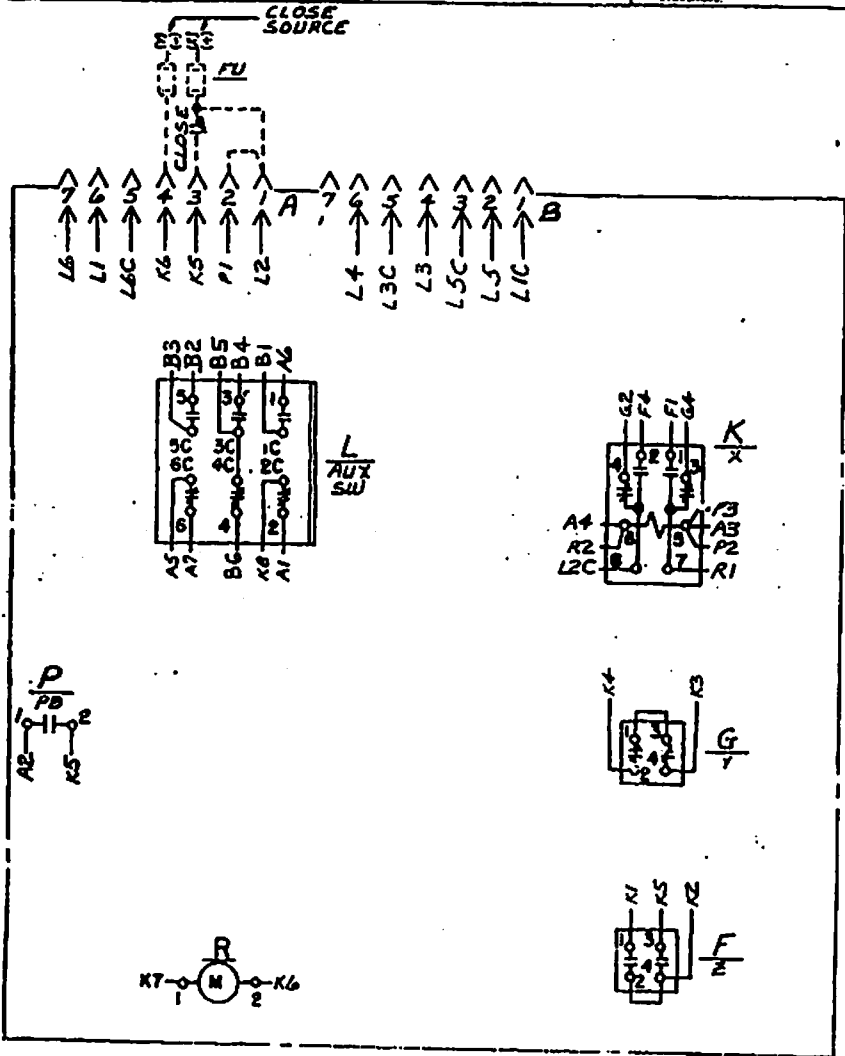
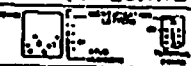


FIG. 2 ELEMENTARY DIAGRAM

- LIST OF ABBREVIATIONS  
 A-SEC DISC. LOCATED TOP LEFT, FT. VIEW  
 B-SEC DISC. LOCATED TOP CENTER, FT. VIEW  
 F-(Z) CUT-OFF SW.  
 G-(Y) CUT-OFF SW.  
 K-(X) CLOSING RELAY  
 L-(AUX SW) 3 "A" & 3 "B" CONTACTS (SPECIAL)  
 R- CLOSING SPRING CHARGING MOTOR  
 P-(P.B) CLOSING SWITCH ON BKR.

CONNECTIONS  
 BOTH ENDS OF LEADS ARE IDENTIFIED AS TO DISTRIBUTION. SWITCH INDICATES CONNECTIONS FROM OTHER SHEETS TO THIS DRAWING. PHONE & TERMINAL NO.



DATE: 9/19/33  
 BY: H. M. ...

LOW VOLTAGE  
 SWITCHGEAR DEPARTMENT  
 PHILADELPHIA

177L240 R

LSP.A RE

JOE MICHALAC

GENERAL ELECTRIC

AK-2A-50/75/100

DROUGHT BKR NOTE: ALL ARE FRONT VIEWS

177L240 R

HARNES  
CONN & ELEM DIAG

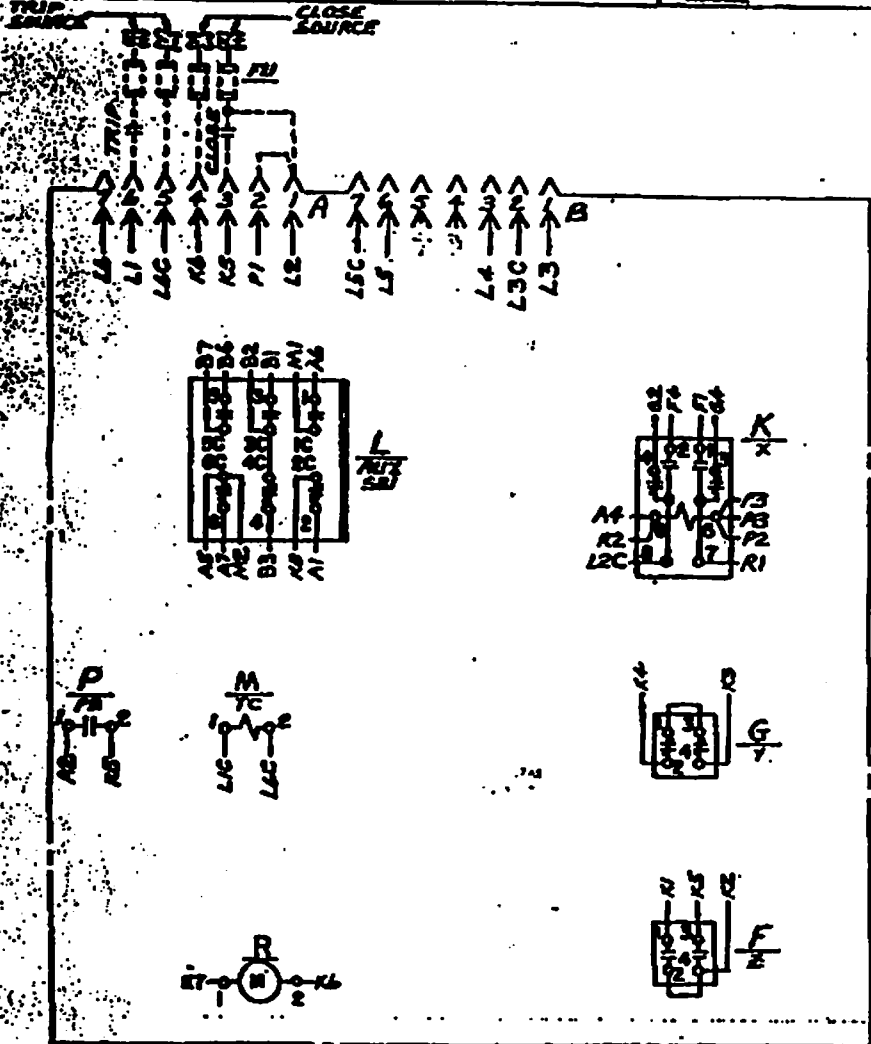


FIG. 1 CONNECTION DIAGRAM

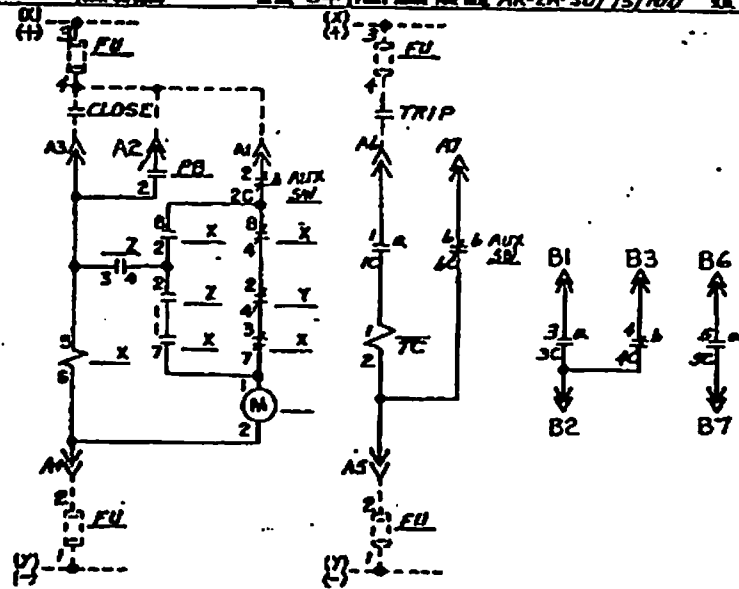


FIG. 2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS  
A-SEC DISC. LOCATED TOP LEFT, FT/VIEW  
B-SEC DISC. LOCATED TOP CENTER, FT. VIEW

F-(Z) CUT-OFF SW.  
G-(Y) CUT-OFF SW.

K-(X) CLOSING RELAY  
L-(AUX SW) 3 "A" & 3 "B" CONTACTS (SPECIAL)  
M-(T.C.) SHUNT TRIP DEV  
R- CLOSING SPRING CHARGING MOTOR  
P-(P.B) CLOSING SWITCH ON BKR

LOW VOLTAGE  
SWITCHGEAR DEPARTMENT  
PHILADELPHIA

177L240 R

4SP-A RE

JOE MICHALAK

IN CABINET

GENERAL ELECTRIC

AK-2A-50/75/100

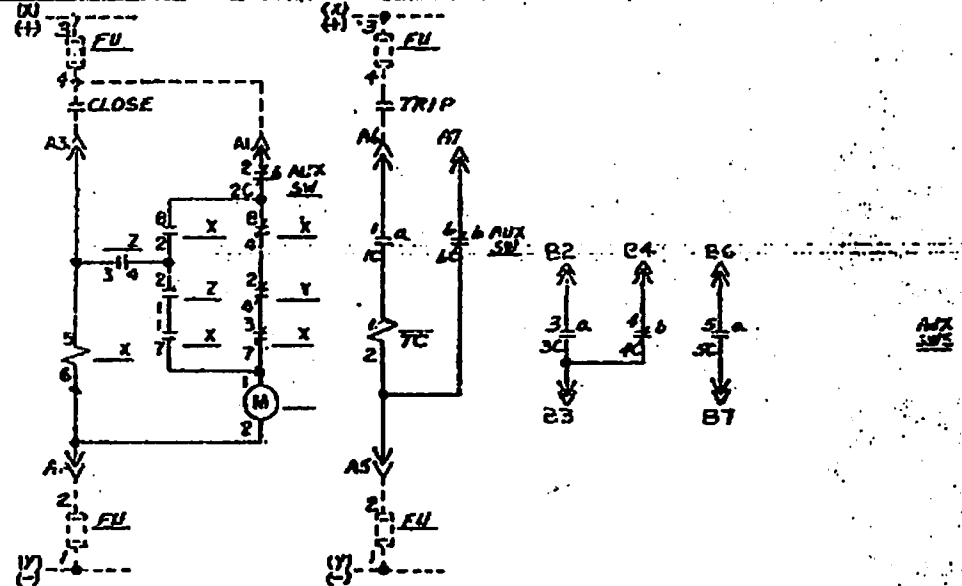
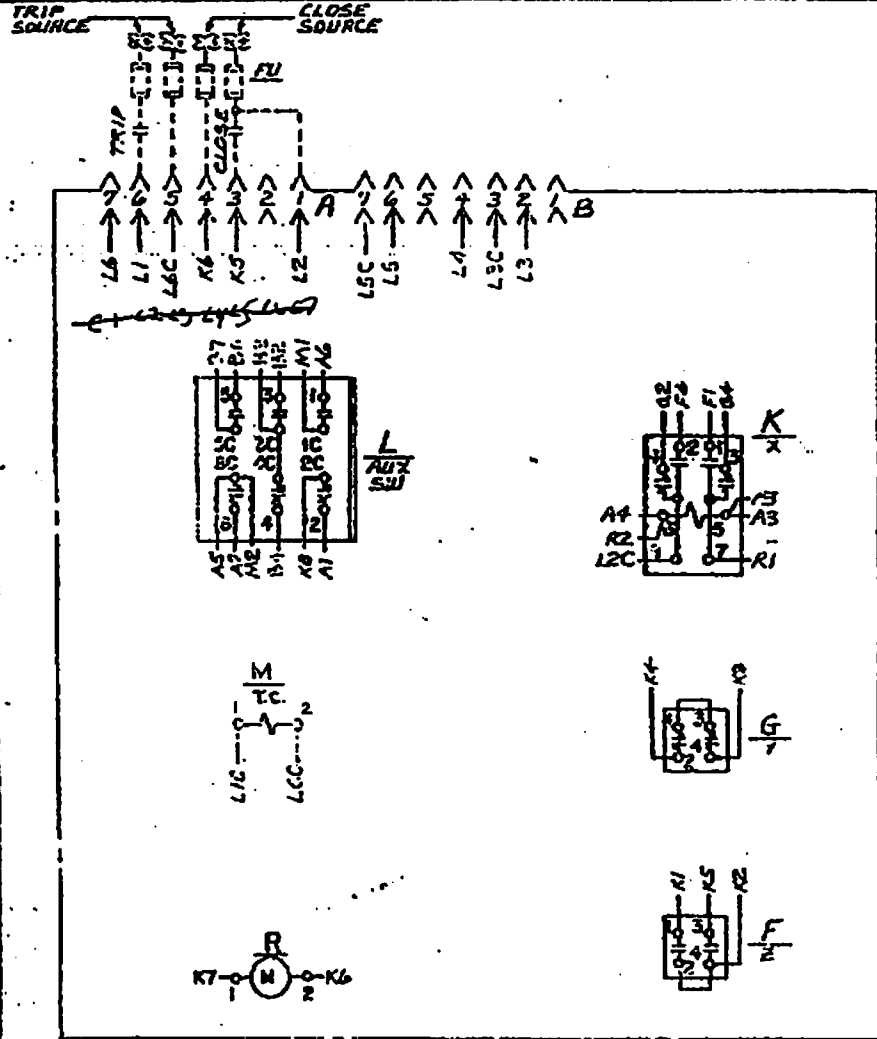
DRAWING BKR NOTE: ALL FIG. ARE FRONT VIEWS

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY. THE EXACT LOCATION OF APPARATUS MUST BE AS SHOWN IN FIG. 1.
2. SWITCHES, CONTACTS AND RELAYS SHOWN ARE OF THE TYPE SHOWN IN THE DRAWING UNLESS OTHERWISE SPECIFIED.
3. MUTUAL INTERLOCKING OF SWITCHES IS INDICATED BY THE INTERLOCKING SWITCHES.
4. SPECIAL FUNCTION SYMBOLS AND ABBREVIATIONS ARE AS SHOWN IN FIG. 2.

177L240 R

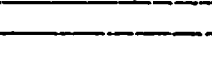
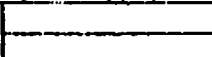
HARNESS  
CONN & ELEM. DIAG.

THIS DRAWING FOR REF. AK-2A-50/75/100



- LIST OF ABBREVIATIONS
- A-SEC DISC. LOCATED TOP LEFT, FT. VIEW
  - B-SEC DISC. LOCATED TOP CENTER, FT. VIEW
  - F-(Z) CUT-OFF SW.
  - G-(Y) CUT-OFF SW.
  - K-(X) CLOSING RELAY
  - L-(AUX SW) 2 "A" & 2 "B" CONTACTS (SPECIAL)
  - M-(T.C) SHUNT TRIP DEV
  - R- CLOSING SPRING CHARGING MOTOR

REVISIONS



REVISIONS

DATE

LOW VOLTAGE SWITCHGEAR DEPARTMENT

177L240 R

JOE

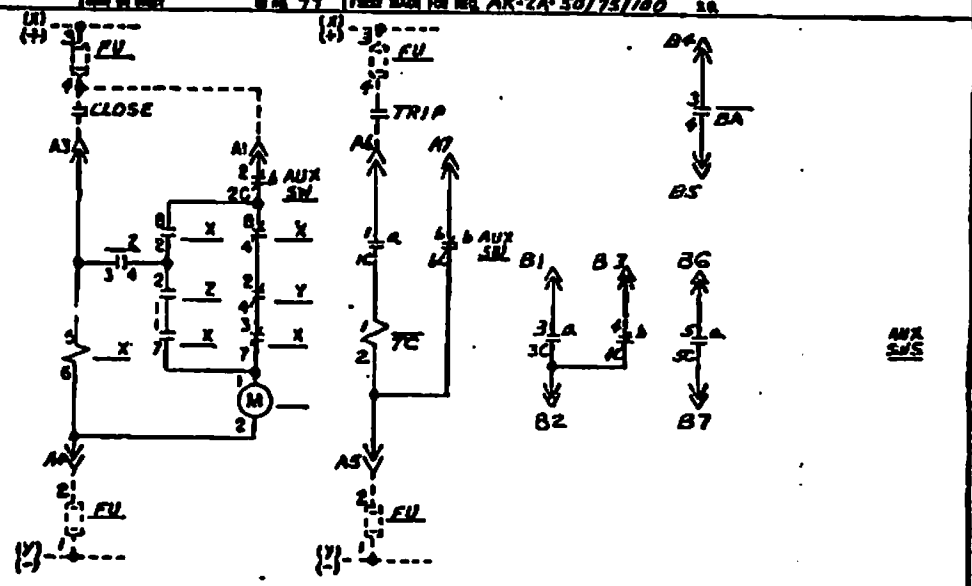
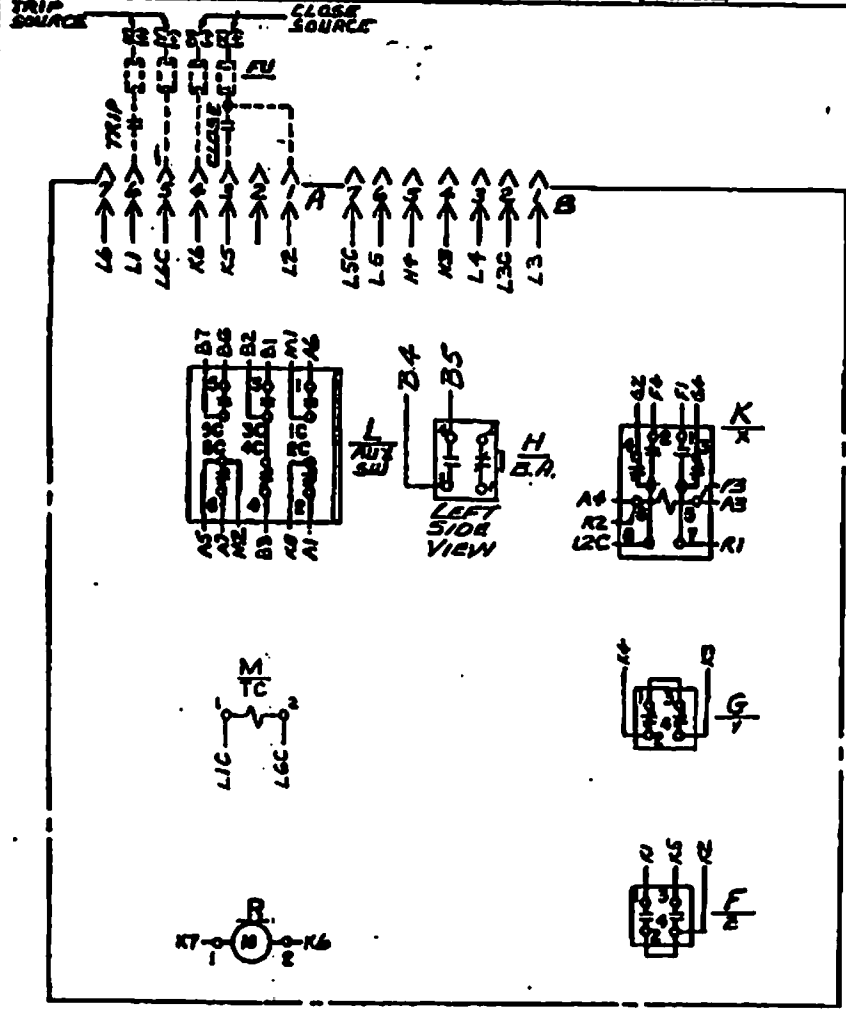
GENERAL ELECTRIC

AK-2A-50/75/100

DRAWING BKR NOTE: ALL FIG. ARE FRONT VIEWS

177L240 R.

HARNES  
CONN & ELEM DIAG



- LIST OF ABBREVIATIONS
- A-SEC DISC. LOCATED TOP LEFT, FT. VIEW
  - B-SEC DISC. LOCATED TOP CENTER, FT. VIEW
  - F-(Z) CUT-OFF SW.
  - G-(Y) CUT-OFF SW.
  - N-BELL ALARM OR LOCKOUT DEVICE OPERATES WHEN BKR IS TRIPPED BY ANY MEANS OTHER THAN SHUNT TRIP AND MANUAL TRIP "A" & "B" DEVICE SHOWN IN RESET POSITION (NORMAL OPERATION)
  - K-(X) CLOSING RELAY
  - L-(AUX SW) 3 "A" & 3 "B" CONTACTS (SPECIAL)
  - M-(T.C.) SHUNT TRIP DEV
  - R- CLOSING SPRING CHARGING MOTOR

<p>APR 11 1961</p> <p>177L240 R.</p>	<p>LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA</p>	<p>177L240 R.</p>
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LSP:A RE.

FEB 15 '95 02:50PM

AK-2A-50/75/100

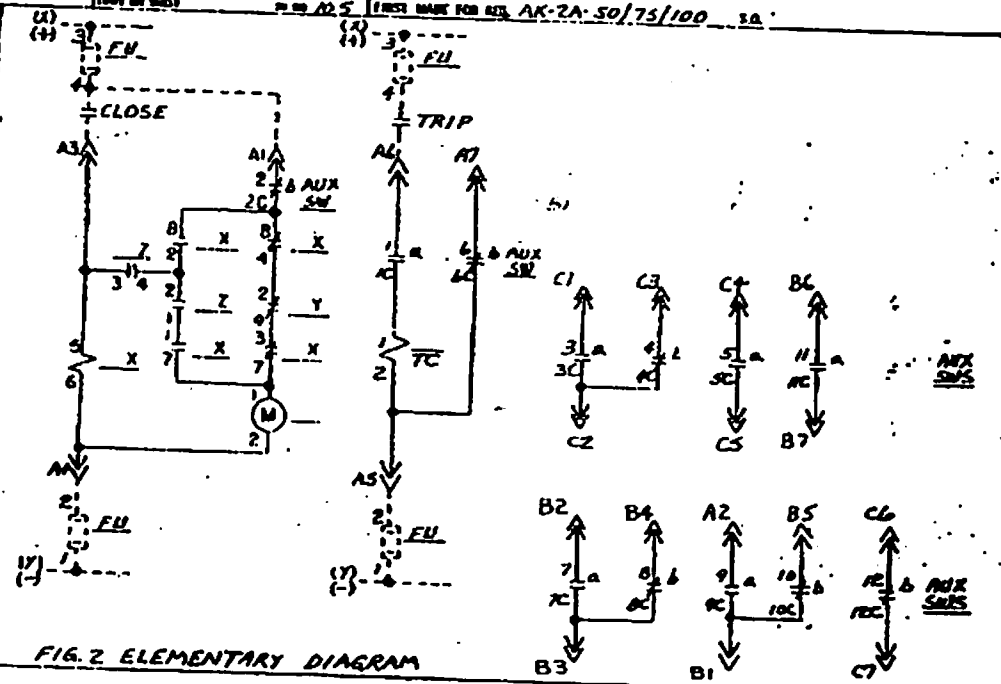
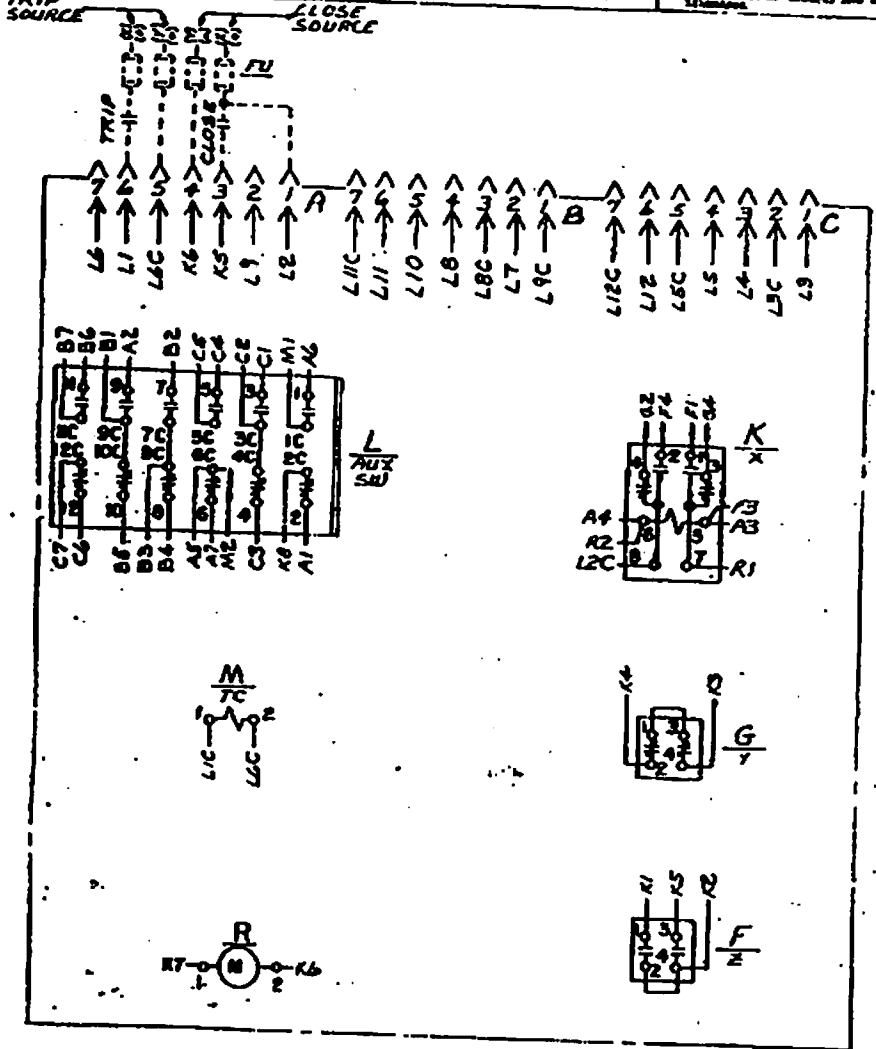
DRAWING BKR NOTE: ALL FIG. ARE FRONT VIEWS

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY THE EXACT LOCATION OF APPARATUS MUST BE OBTAINED FROM THE 2. APPROVED WIRING AND SERVICE STANDARDS LISTINGS OF LISTED AND IN THE APPLICABLE NATIONAL ELECTRICAL CODES AND THE APPLICABLE LOCAL AND STATE ELECTRICAL CODES 3. ALL ELECTRICAL SYMBOLS AND CONNECTIONS ARE AS SHOWN UNLESS OTHERWISE NOTED

GENERAL ELECTRIC

177L240 R.1

HARNESS  
CONN & ELEM DIAG



LIST OF ABBREVIATIONS  
 A-SEC DISC. LOCATED TOP LEFT, FT. VIEW  
 B-SEC DISC. LOCATED TOP CENTER, FT. VIEW  
 C-SEC DISC. LOCATED TOP RIGHT, FT. VIEW  
 F-(Z) CUT-OFF SW.  
 G-(Y) CUT-OFF SW.  
 K-[X] CLOSING RELAY  
 L-[AUX SW] 6 "A" & 6 "B" CONTACTS (SPECIAL)  
 M-[T.C.] SHUNT-TRIP DEV  
 R- CLOSING SPRING CHARGING MOTOR

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FIG. 1 CONNECTION DIAGRAM

REV. NO. 0-1-  
**77L240 R**  
 CONT ON SHEET SH NO. 110

TITLE  
**WARNSS**  
**CONN & ELEM DIAG**  
 FIRST MADE FOR REQ. AK-2A-50/75/100 S.O.

REVISED  
 F. LOCK CO.  
 HOSPITAL

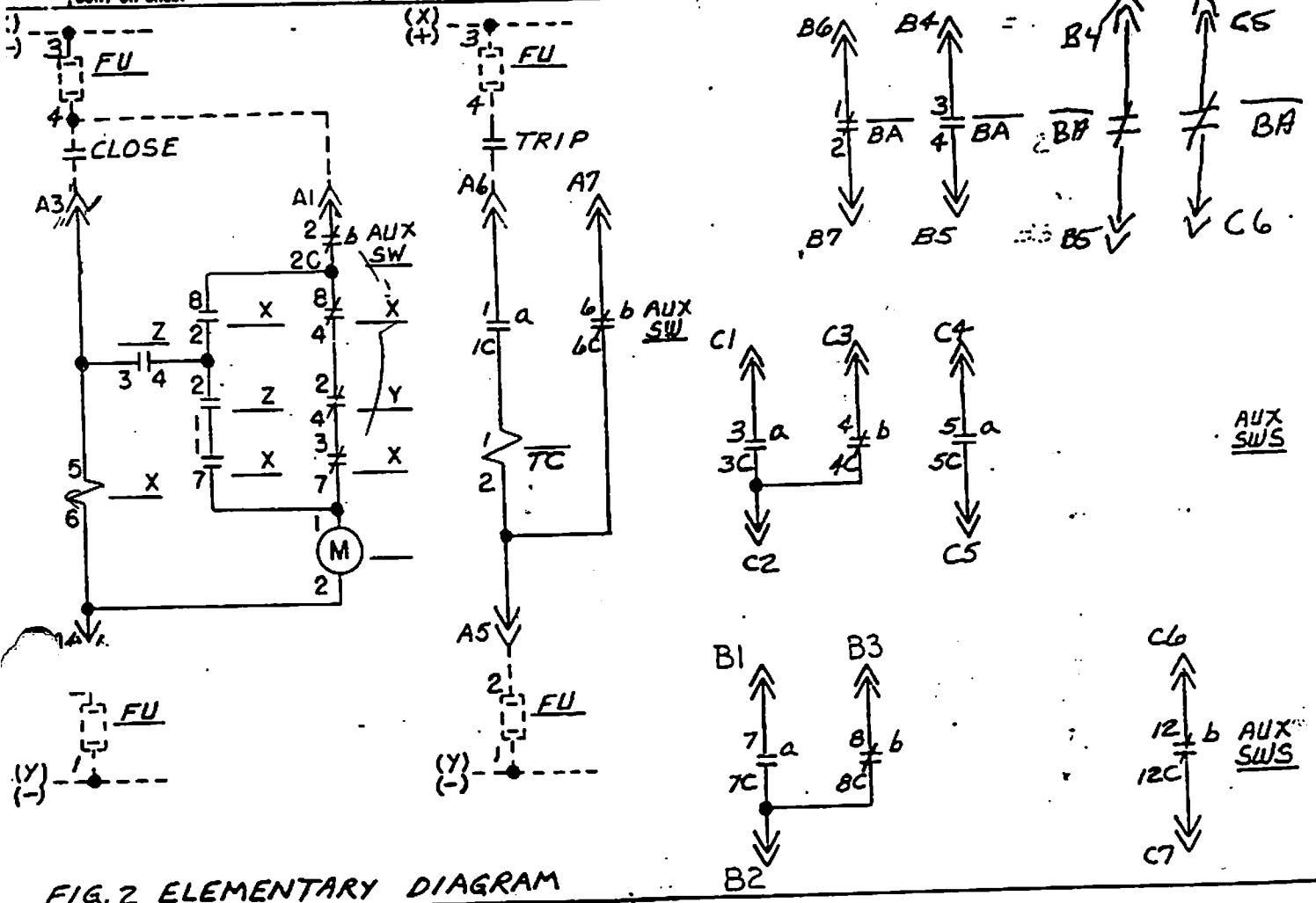


FIG. 2 ELEMENTARY DIAGRAM

LIST OF ABBREVIATIONS

- A-SEC DISC. LOCATED TOP LEFT, FT. VIEW
- B-SEC DISC. LOCATED TOP CENTER, FT. VIEW
- C-SEC DISC. LOCATED TOP RIGHT, FT. VIEW
- F-(Z) CUT-OFF SW.
- G-(Y) CUT-OFF SW.
- H=BELL ALARM OR LOCKOUT DEVICE OPERATES WHEN BKR. IS TRIPPED BY ANY MEANS OTHER THAN SHUNT TRIP & MANUAL TRIP "A" & "B" DEVICE SHOWN IN RESET POSITION (NORMAL OPERATION)
- K-(X) CLOSING RELAY
- L-(AUX SW) 6 "A" & 6 "B" CONTACTS (SPECIAL)
- M-(T.C.) SHUNT TRIP DEV.
- R- CLOSING SPRING CHARGING MOTOR

PRINTS

AK-2A-50/75/100

DRAWOUT BKR NOTE: ALL FIG. ARE FRONT VIEWS

1. THIS DRAWING SHOWS ELECTRICAL CONNEC. EXACT LOCATION OF APPARATUS MUST NOT.
2. NUMBERED CIRCLES ARE MERELY CONVENIENCE LEADS AND DO NOT NECESSARILY REPRESENT ELEMENTARY DIAGRAM.
3. INTERNAL CONNECTIONS OF DEVICES ARE IN ELEMENTARY DIAGRAM.
4. DEVICE FUNCTION NUMBERS AND ABBREVI STANDARDS.

REVISED F/  
LOOK CO. HOSPITAL

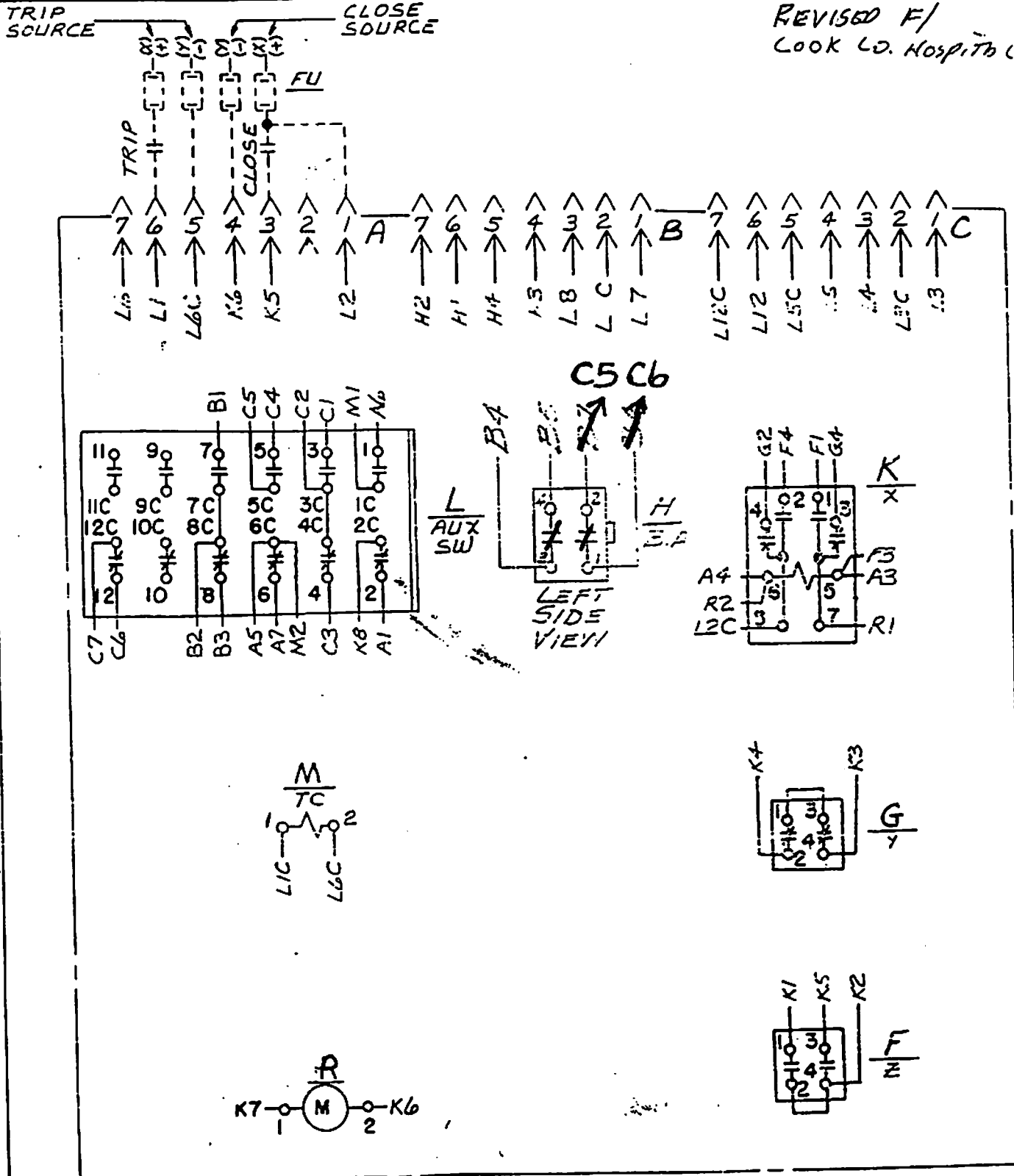


FIG. 1 CONNECTION DIAGRAM

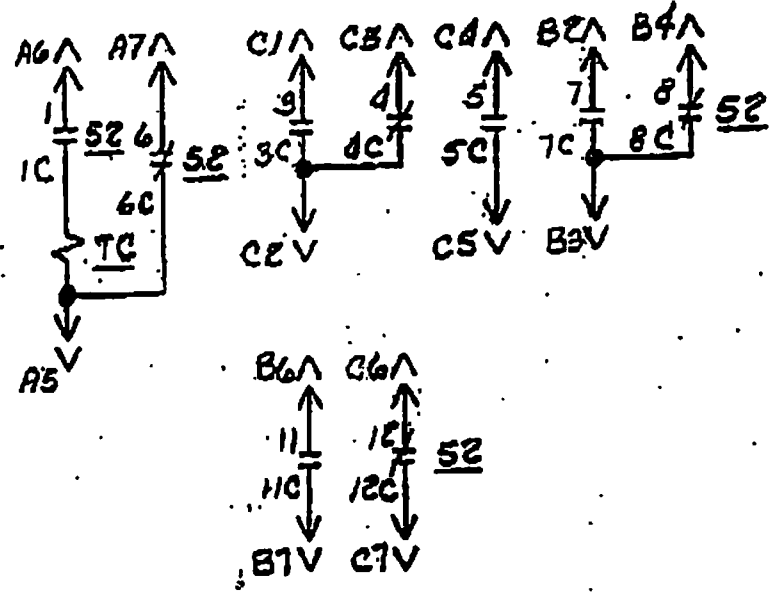
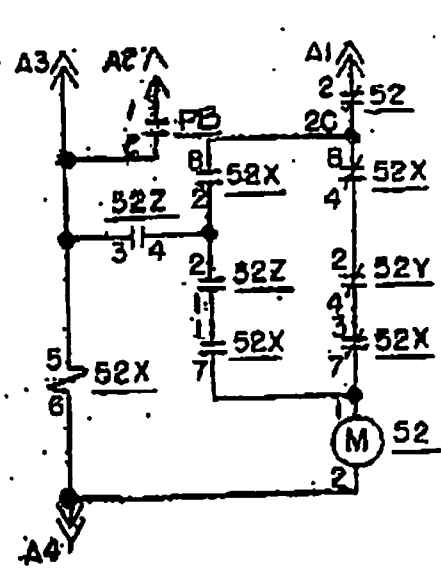
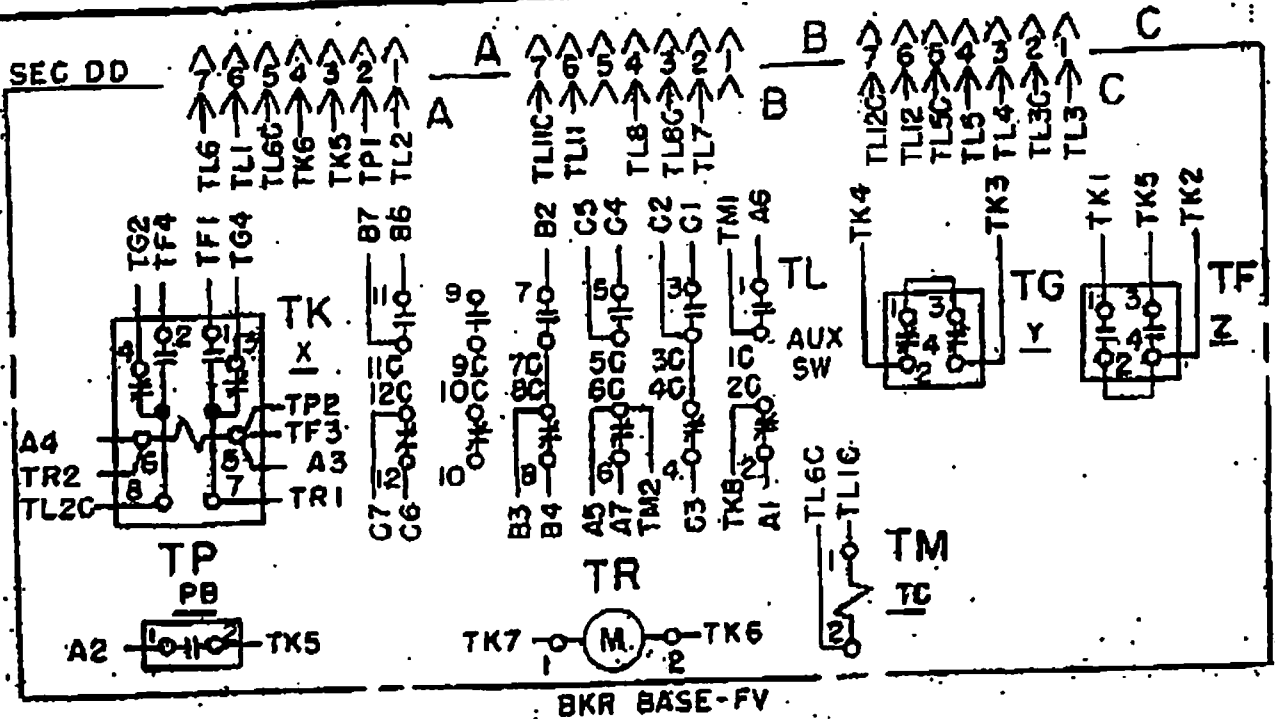
CONNECTIONS  
BOTH ENDS OF WIRE ARE IDENTIFIED AS TO DESTINATION. SKETCH INDICATES

DEVICE	IDENTIFICATION LETTERS
	A
	B
	C
	D
	E
	F
	G
	H
	I
	J
	K
	L
	M
	N
	O
	P
	Q
	R
	S
	T
	U
	V
	W
	X
	Y
	Z

CH 9, LSC 9 NOTE 6, 7, 8



177L240 RWG 14



GENERAL ELECTRIC  
LOW VOLTAGE  
SWITCHGEAR DEPARTMENT  
PHILADELPHIA

D/O ACB  
AK-2A-50/75/100

AUG 19 00 06:39PM CUSTOMER SERV BURL

*CHINO*

# GENERAL ELECTRIC

REV NO. 0

TITLE

CONT ON SHEET

SH NO.

## 177L240 RW-G112

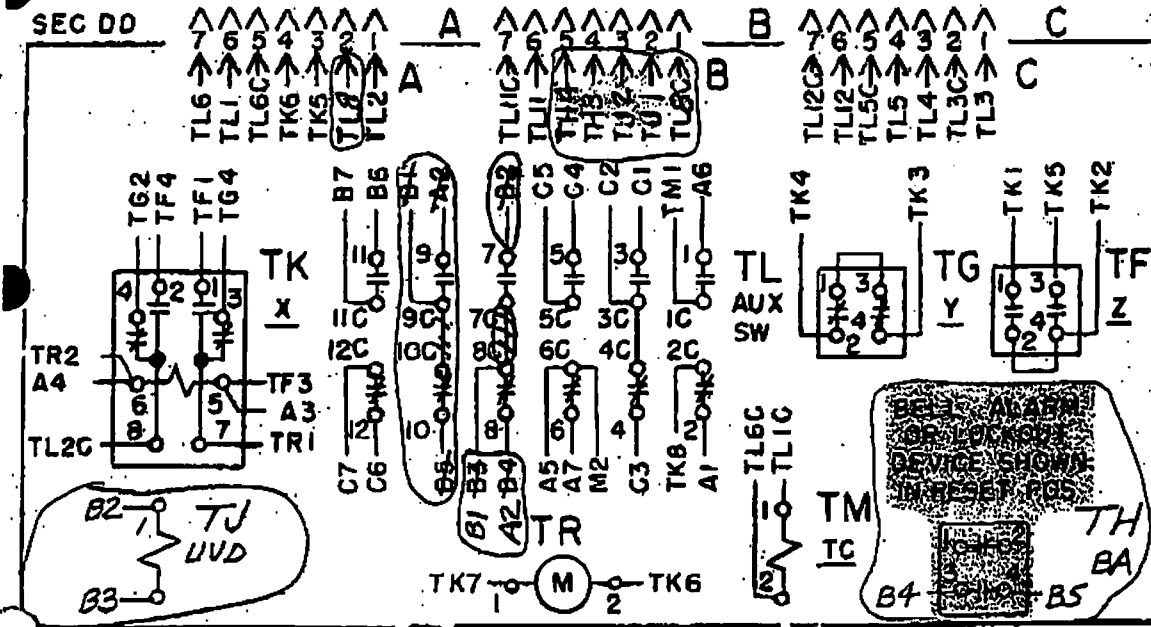
CONT ON SHEET

SH NO.

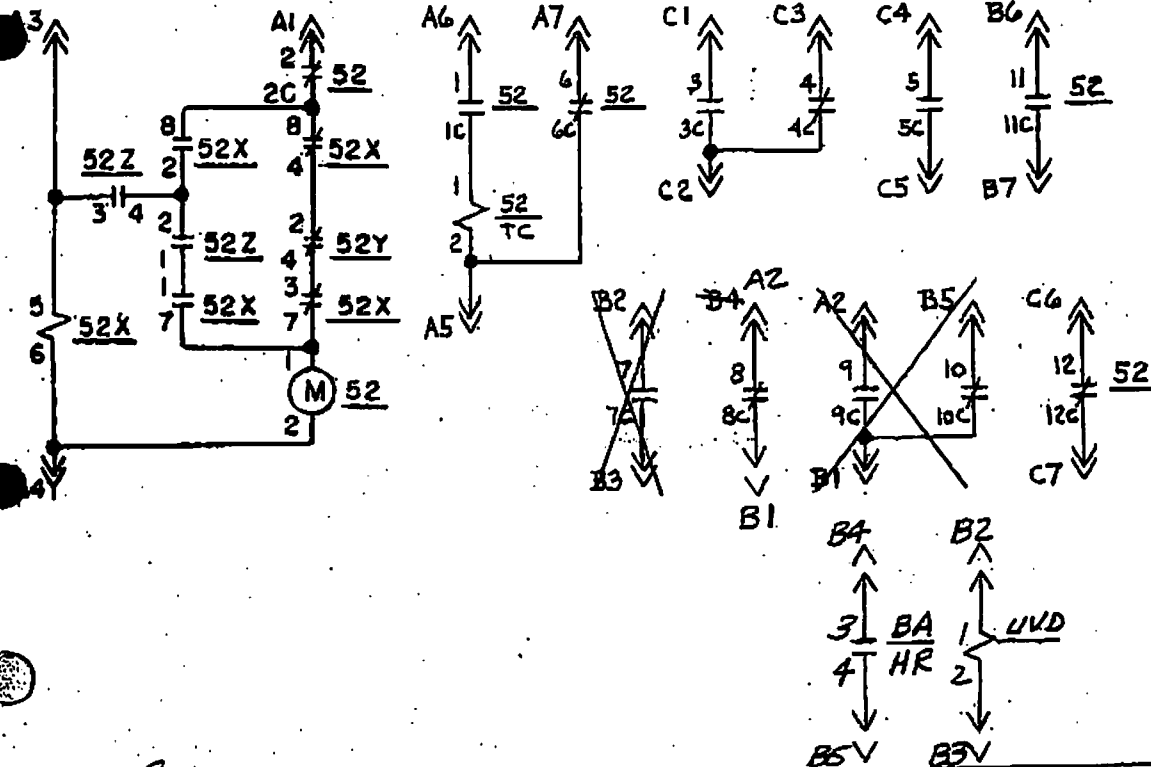
FIRST MADE FOR AK-2A-50/75/100 D/O ACB

USE LRP394 2A50-G105

REVISIONS



BKR BASE-FV



PRINTS TO

*Signature*  
ISSUED

APPROVALS

DIV OR DEPT.

WZ-29

LOCATION CONT ON SHEET

SH NO.

GENERAL ELECTRIC

177L240-S  
COPY ON SHEET 40 NO. 32

AK-2-50.75 & 100  
STATIONARY B.R.

NOTE: BKR SW CAN IN OPEN  
POSITION WITH  
SPRING DISCHARGED

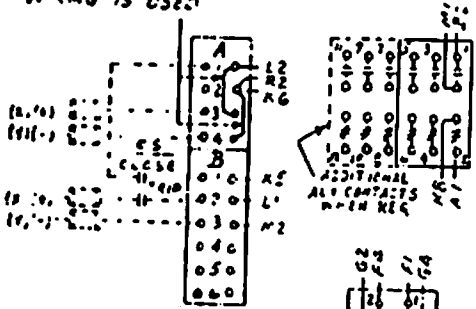
1 THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY THE  
EXACT LOCATION OF ATTACHMENT POINTS IS TO BE FOUND ON  
2 NUMBERED CARDS AND MUST BE CORRECTLY LOCATED ON  
3 LEADS AND ON THE INCREASED CURRENT CONTACTS  
4 INITIAL CONNECTIONS OF DEVICES ARE INDICATED WITH THE  
5 INITIAL LETTERS OF THE DEVICE SYMBOLS  
6 DEVICE FUNCTIONS SYMBOLS AND ABBREVIATIONS ARE AS  
7 INDICATED

177L240-S  
COPY ON SHEET 40 NO. 32

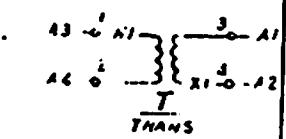
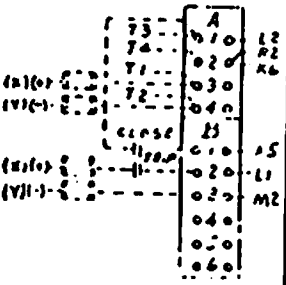
CONN. & ELEM DIAG

FIRST MADE FOR USE AK-2-50.75 & 100

NOTE: REMOVE JUMPERS A1-A5  
& A2-A6 WHEN ALTERNATE  
WIRING IS USED

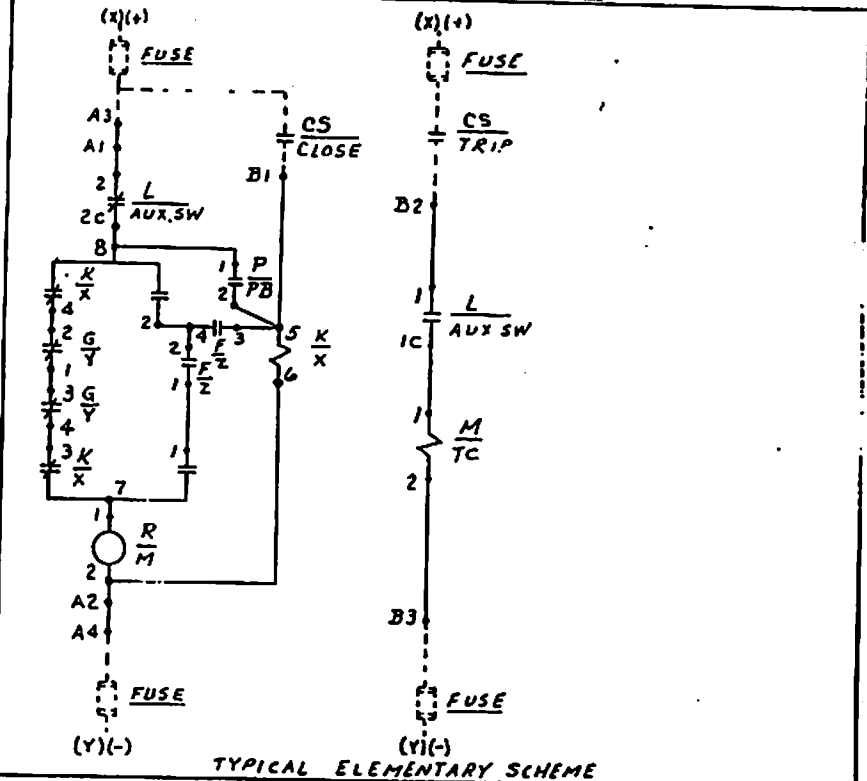
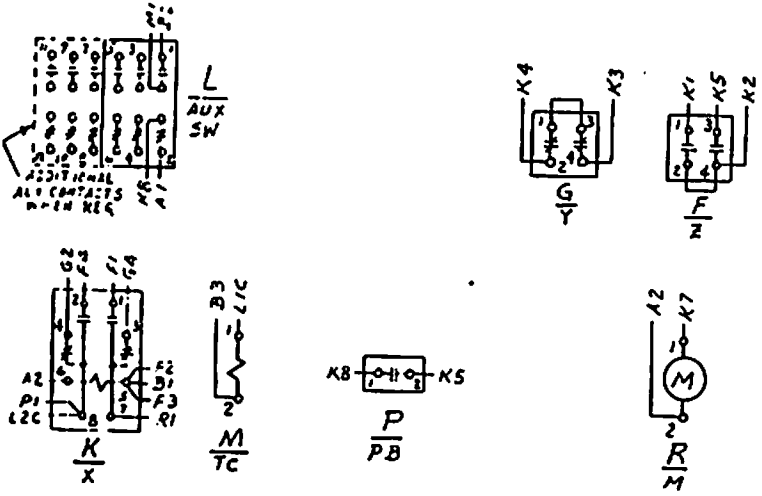


ALTERNATE WIRING



ALL WIRING USED WITH  
FOLLOWING POWER VOLTAGE  
RATING

380/230 VAC	50 N
460/280 VAC	25 N
460/230 VAC	50 N
460/230 VAC	60 N
575/230 VAC	25 N
575/230 VAC	50 N
575/230 VAC	60 N



- LIST OF ABBREVIATIONS
- A - TERMINAL BOARD LOCATED LEFT SIDE - F.V.
  - B - TERMINAL BOARD LOCATED LEFT SIDE - F.V.
  - FG - CUT OFF SWITCHES (Y)(Z)
  - K - CLOSING RELAY TYPE HGA (X)
  - L - AUXILIARY SW "A" "E" "B" CONTACTS TYPE SB12 (AUX SW)
  - M - SHUNT TRIP (T.C.)
  - P - PUSH BUTTON CLOSING SW. ON BKR (P.B)
  - R - CLOSING SPRING CHARGING MOTOR (M)
  - T - AUXILIARY POWER TRANSFORMER (TRANS)

CONNECTION DIAGRAM - B.R. BASE - FRONT VIEW

DATE: 1/2/59  
DRAWN BY: C.F. LOBIS SEPT. 1 '59  
CHECKED: 1/2/59  
APPROVALS: PETRACED  
LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA  
177L240-S  
COPY ON SHEET 40 NO. 32

AK-2-50, 75 & 100  
STATIONARY BRK

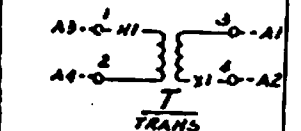
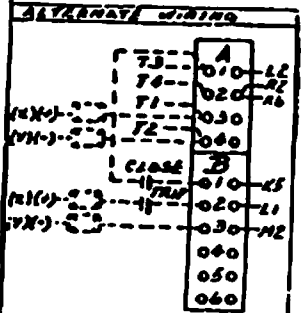
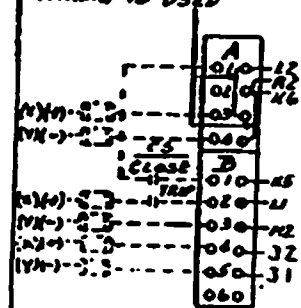
NOTE: BRK SHOWN IN OPEN  
POSITION WITH  
SPRING DISCHARGED

- 1 THE DRAWING SHOWS TYPICAL CONNECTIONS ONLY. THE EXACT WIRING OF ANY PARTICULAR UNIT MUST BE DETERMINED BY THE MANUFACTURER'S DATA SHEET AND BY THE WIRING DIAGRAMS WHICH ARE SUPPLIED WITH THE UNIT.
- 2 ALL WIRING MUST BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES.
- 3 THE WIRING OF THIS UNIT IS SUBJECT TO CHANGE WITHOUT NOTICE.
- 4 OTHER CONNECTIONS AND ARRANGEMENTS ARE NOT RECOMMENDED.

177L240 S

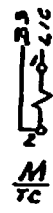
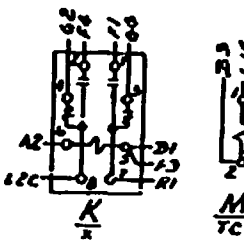
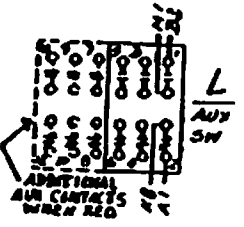
CONN'G ELEM DIAG

NOTE: REMOVE JUMPERS AT A3  
& A2-A3 WHEN ALTERNATE  
WIRING IS USED

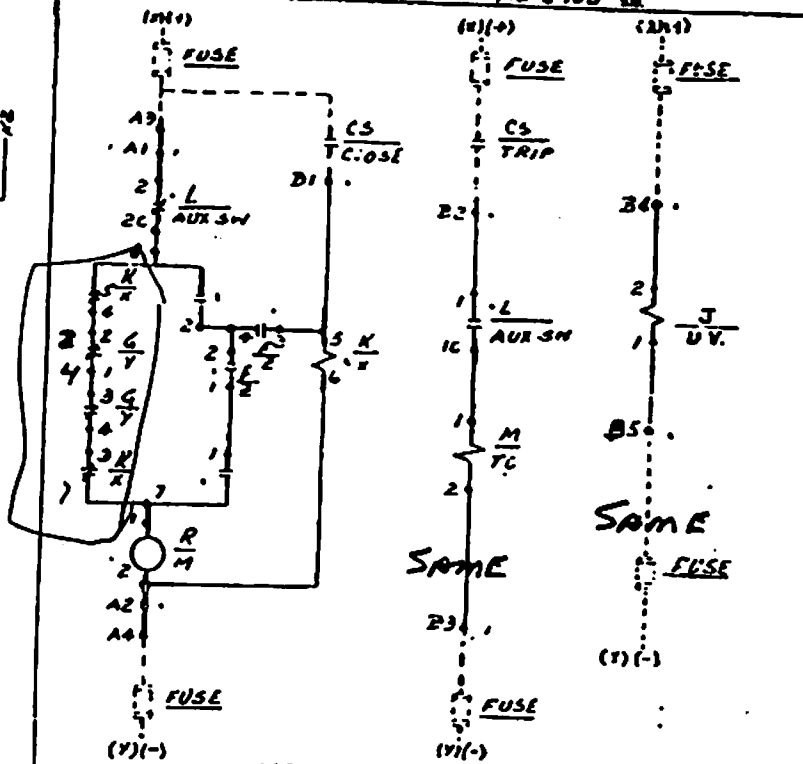


ALT. WIRING USED WITH FOLLOWING POWER VOLTAGE RATING

300/230 V.A.C.	50 W
400/230 V.A.C.	25 W
460/230 V.A.C.	50 W
480/230 V.A.C.	60 W
525/230 V.A.C.	25 W
575/230 V.A.C.	50 W
575/230 V.A.C.	60 W



A1-A2 CHARGE  
A1 OR A3 - B1 CLOSE  
B2 - B-3 TRIP  
B4 + B5 UV DEVICE  
MUST HAVE UV UNWIRING  
TO CLOSE THE BREAKER  
BREAKER WILL TRIP WHEN  
U.V. IS DEENERGIZED



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A - TERMINAL BOARD LOCATED LEFT SIDE - F.V.
- B - TERMINAL BOARD LOCATED RIGHT SIDE - F.V.
- CG - CUT OFF SWITCHES (Y, Z)
- J - UNDERVOLTAGE DEVICE TIME OR INSTANTANEOUS (UV)
- K - CLOSING RELAY TYPE H
- L - AUXILIARY SW. A.E.D.C. TYPE SB12 (AUX SW)
- M - SHUNT TRIP (T.C.)
- R - CLOSING SPRING CHARG MOTOR (M)
- T - AUXILIARY POWER TRANSFORMER (TRANS)

CONNECTION DIAGRAM - BRK BASE - FRONT VIEW

GENERAL ELECTRIC

AK-2-50, 75 & 100  
STATIONARY DXR

NOTE: DXR SHOWN IN OPEN  
POSITION WITH  
SPRING DISCHARGED

1. THIS DRAWING SHOWS (TYPICAL CONNECTIONS ONLY THE EXACT CONNECTIONS OF THIS DRAWING MUST BE USED IN ALL CASES OF REPAIRS OR MODIFICATIONS TO THIS DRAWING TO BE MADE BY THE USER.)
2. CONTACTS SHOWN ARE RELAY CONTACTS UNLESS OTHERWISE SPECIFIED.
3. CONTACTS SHOWN ARE NOT NECESSARILY INSTANTANEOUSLY CLOSING.
4. CONTACTS SHOWN ARE NOT NECESSARILY INSTANTANEOUSLY OPENING.
5. OTHER FUNCTION CONTACTS AND CONNECTIONS ARE NOT SHOWN.

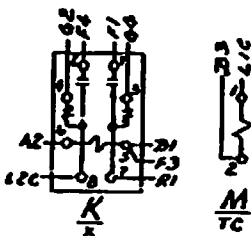
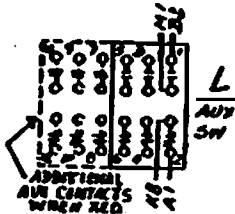
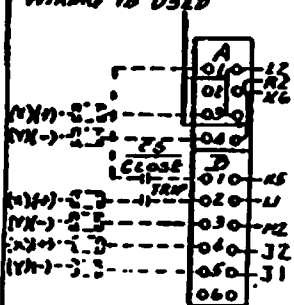
177L240 S

CONN & ELEM DIAG

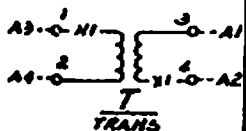
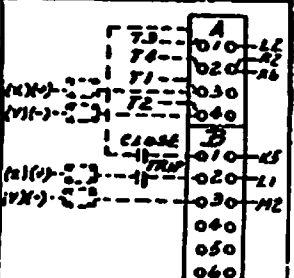
REV. 50 44 44

FIRST BASE FOR REG. AK-2-50, 75 & 100 S.B.

NOTE: REMOVE JUMPERS A1-A3  
& A2-A4 WHEN ALTERNATE  
WIRING IS USED



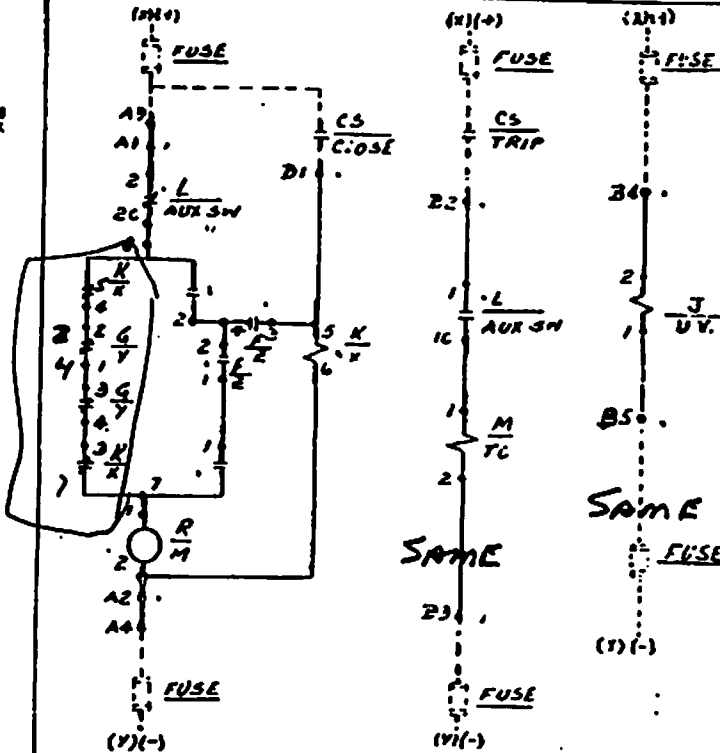
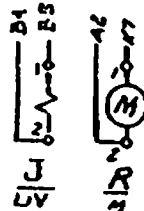
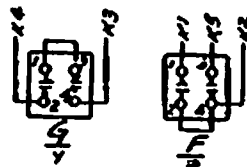
ALTERNATE WIRING



ALT. WIRING USED WITH  
FOLLOWING POWER VOLTAGE  
RATING

300/230 V.A.C.	50 V
460/230 V.A.C.	25 V
460/230 V.A.C.	50 V
460/230 V.A.C.	60 V
575/230 V.A.C.	25 V
575/230 V.A.C.	50 V
575/230 V.A.C.	60 V

CONNECTION DIAGRAM - DXR BASE - FRONT VIEW



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A - TERMINAL BOARD LOCATED LEFT SIDE - F.V.
- B - TERMINAL BOARD LOCATED LEFT SIDE - F.V.
- CG - CUT OFF SWITCHES (Y/2)
- J - UNDERVOLTAGE DEVICE TIME OR INSTANTANEOUS (UV)
- K - CLOSING RELAY TYPE H
- L - AUXILIARY SW A-E-D-C TYPE SDIZ (AUX SW)
- M - SHUNT TRIP (P.C.)
- R - CLOSING SPRING CHARG MOTOR (M)
- T - AUXILIARY POWER TRANSFORMER (TRANS)

REVISIONS  
NO. 1 OF 10  
DATE  
BY  
APPROVED



DATE OF REV. 11/25/50  
BY G.F. [signature]  
APPROVED [signature]  
DATE 11/25/50

LOW VOLTAGE  
SWITCHGEAR DEPARTMENT  
PHILADELPHIA

177L240  
REV. 50

177L240  
REV. 50

LSP-A

Handwritten initials and marks at the top right of the page.

AR-2-50, 75 & 100  
STATIONARY DMR

NOTE: DMR SHOWN IN OPEN  
POSITION WITH  
SPRING DISCHARGED

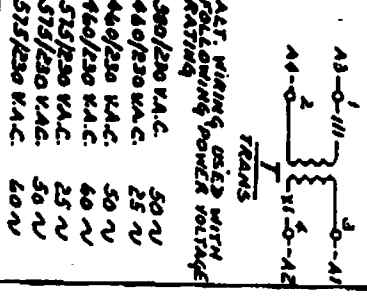
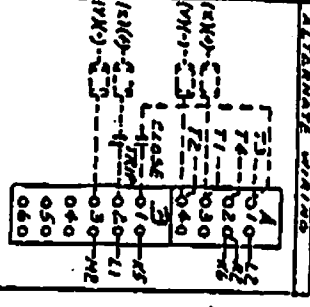
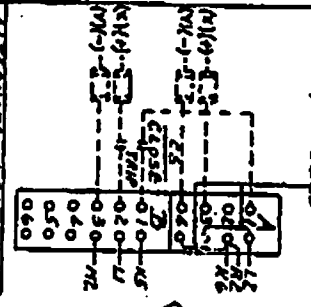
1. Fuses are located in the terminal board.
2. Motor is shown in the open position.
3. The spring is shown in the open position.
4. The spring is shown in the closed position.

177L2405

CONN & ELEM. DIAG

GENERAL ELECTRIC

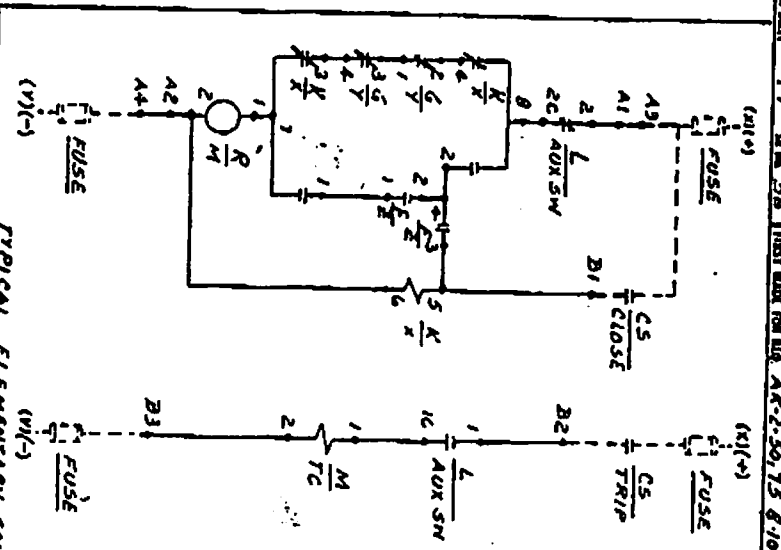
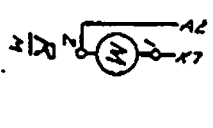
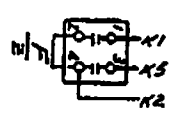
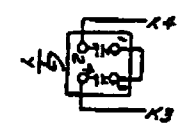
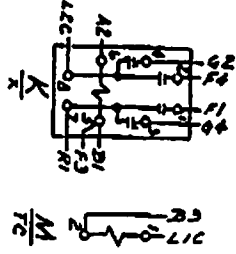
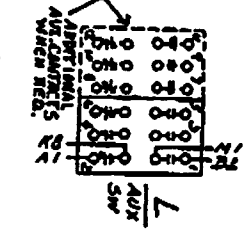
NOTE: REMOVE DAMPERS A1-A3  
& A2-A4 WHEN ALTERNATE  
WIRING IS USED



ALL WIRING, USED WITH  
FOLD-OVER POWER VOLTAGE  
RATING

300/250 V.A.C.	50 V
440/230 V.A.C.	25 V
460/230 V.A.C.	50 V
575/230 V.A.C.	60 V
575/230 V.A.C.	25 V
575/230 V.A.C.	50 V

CONNECTION DIAGRAM-DMR BASE - FRONT VIEW



TYPICAL ELEMENTARY SCHEME

- LIST OF ABBREVIATIONS
- A-TERMINAL BOARD LOCATED
  - B-LEFT SIDE BOARD LOCATED
  - C-LEFT SIDE BOARD LOCATED
  - D-CUT OFF SWITCHES (V)(2)

- K-CLOSING RELAY TYPE (M)(A)(S)
- L-AUXILIARY SW. A, E, B CONTACTS
- M-SHUNT TRIP (T, S)
- R-CLOSING, SPRING CHARGING MOTOR (M)
- T-AUXILIARY POWER TRANSDUCER (TRANS)

DATE: 10/15/55

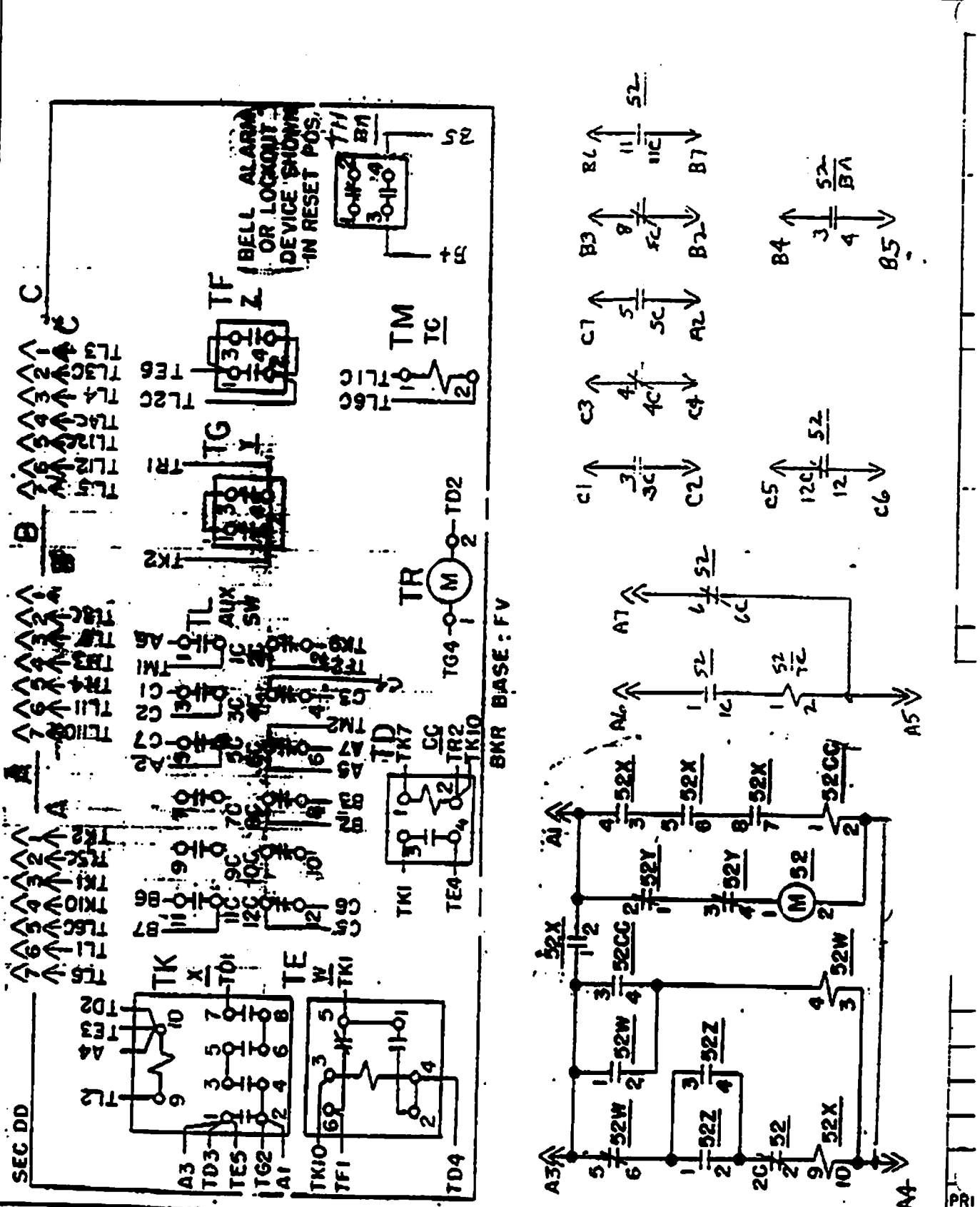
DESIGNED BY: [Signature]

LOW VOLTAGE SWITCHING DEPARTMENT

177L2405

PRINTS TO

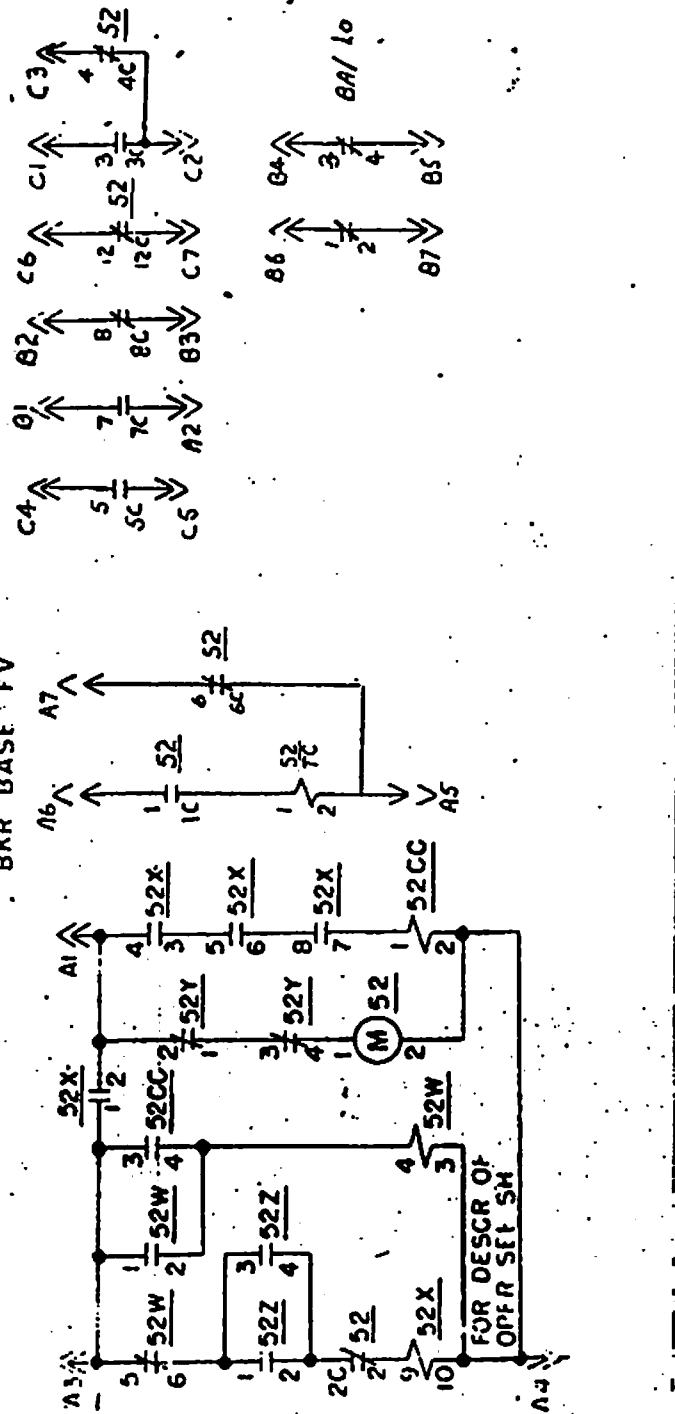
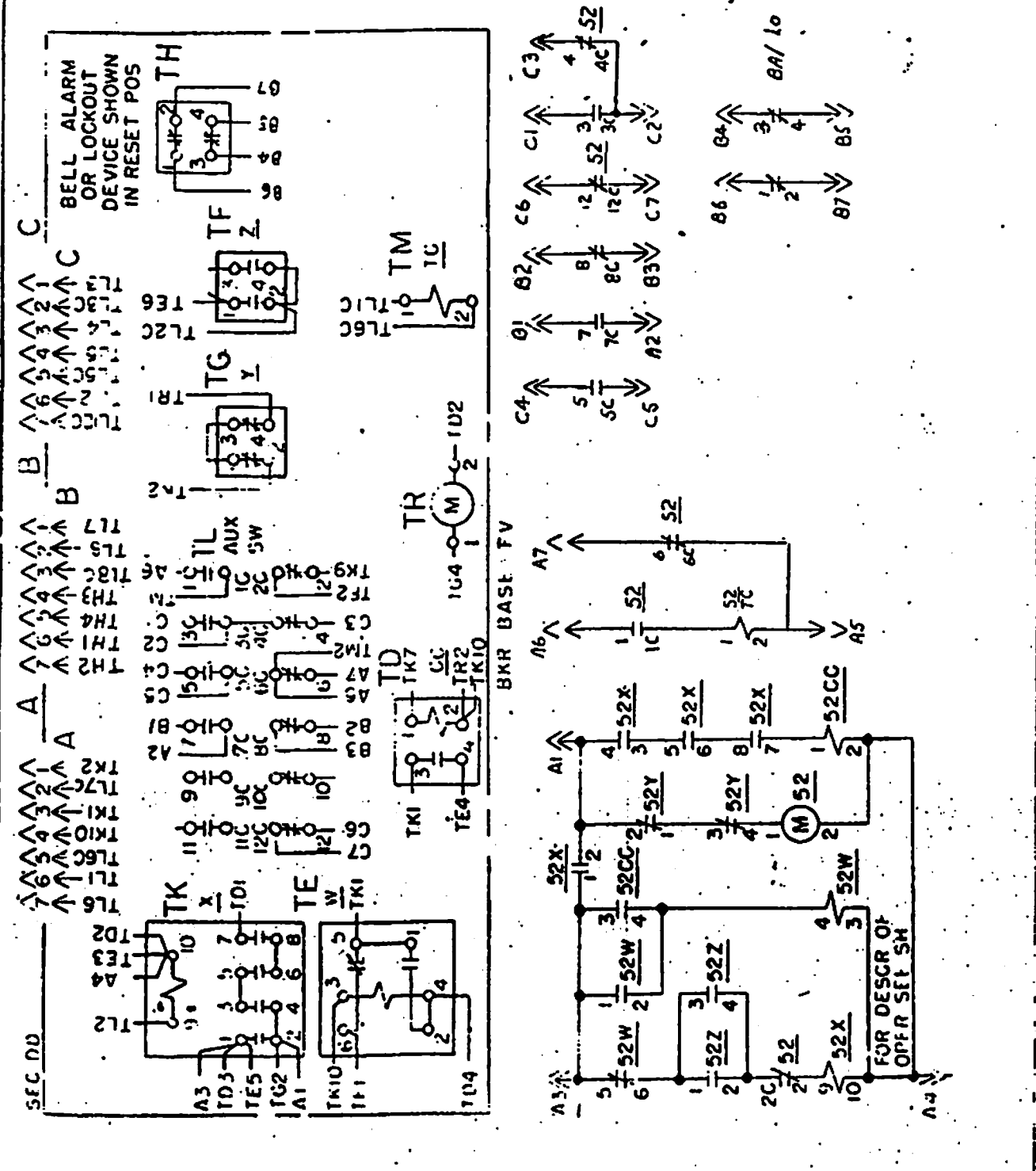
FIRST MADE FOR ELEM IN CONN DIAG



*Joe Michalak*

GENERAL ELECTRIC

REV. NO. <b>0195A5159</b>	TITLE <b>AK-2A-50/75/100S D/O ACB</b>	CONT ON SHEET	OR NO.
CONT ON SHEET	FIRST MADE FOR REG.	S O.	



MADE BY	APPROVALS	SWITCHGEAR DEPARTMENT	0195A5159
		PHILADELPHIA	CONT ON SHEET



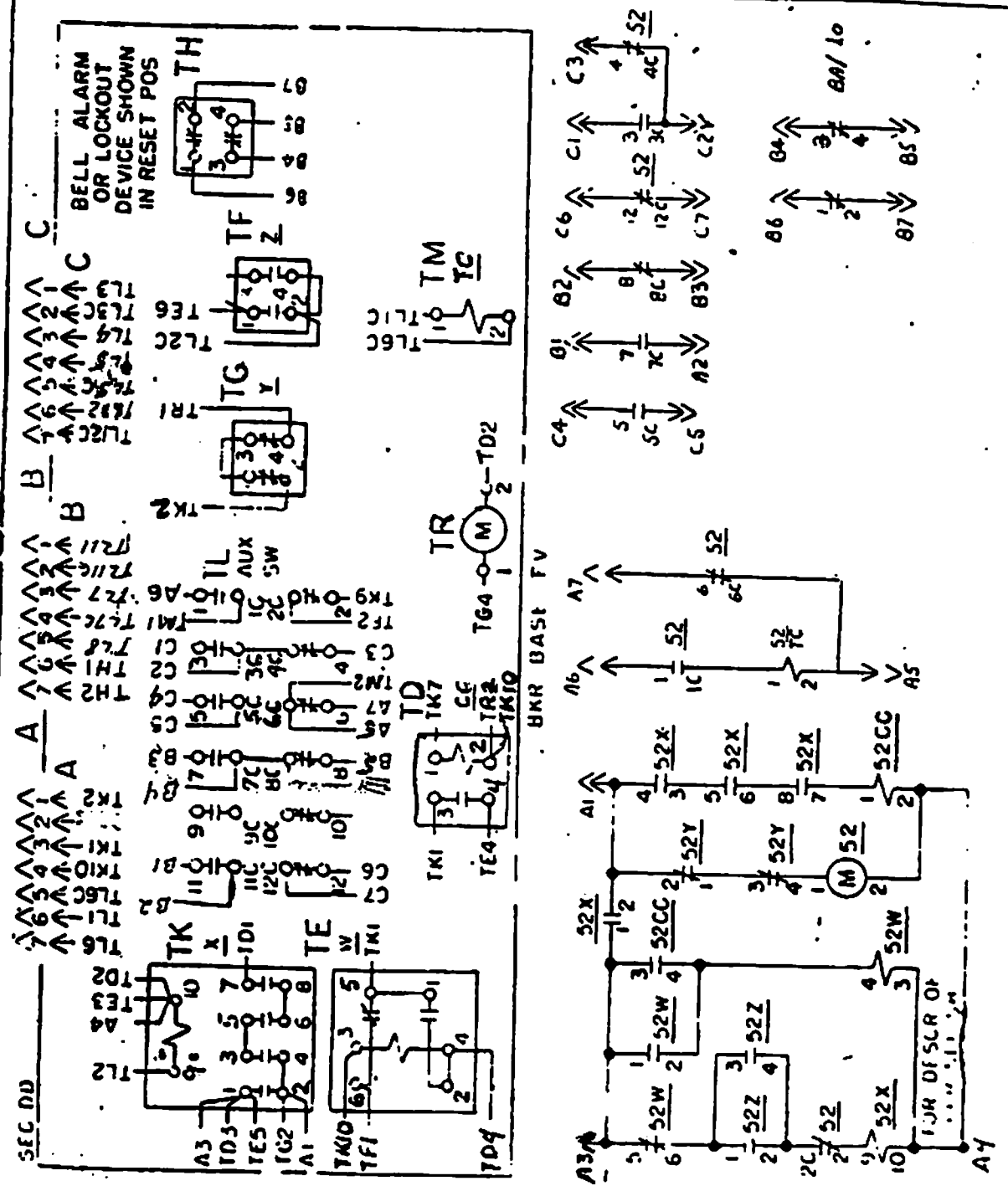
Joe Michalak

REVISED FOR LIBBY OWENS FUND

GENERAL ELECTRIC

REV. NO. L. O. F. 0195A5159

TITLE AK-2A-50/75/1005 D/O ACB FIRST MADE FOR REG.



MADE BY  
 APPROVALS  
 SWITCHGEAR DEPARTMENT  
 PHILADELPHIA  
 0195A5159

JOE

GENERAL ELECTRIC

0207A8966

D/O ACB

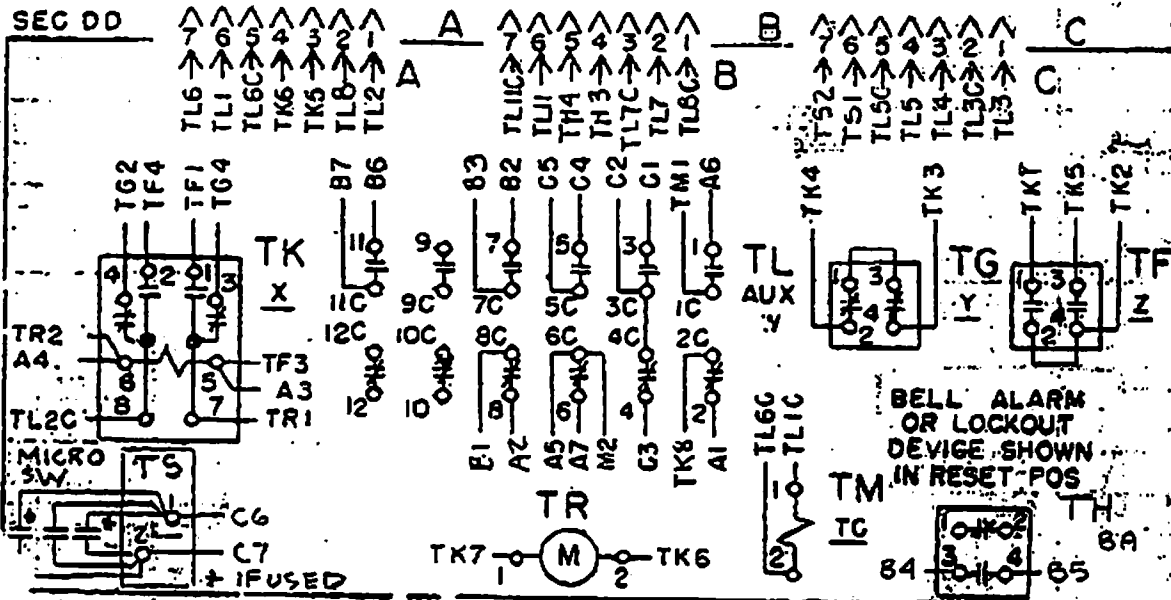
CONT ON SHEET

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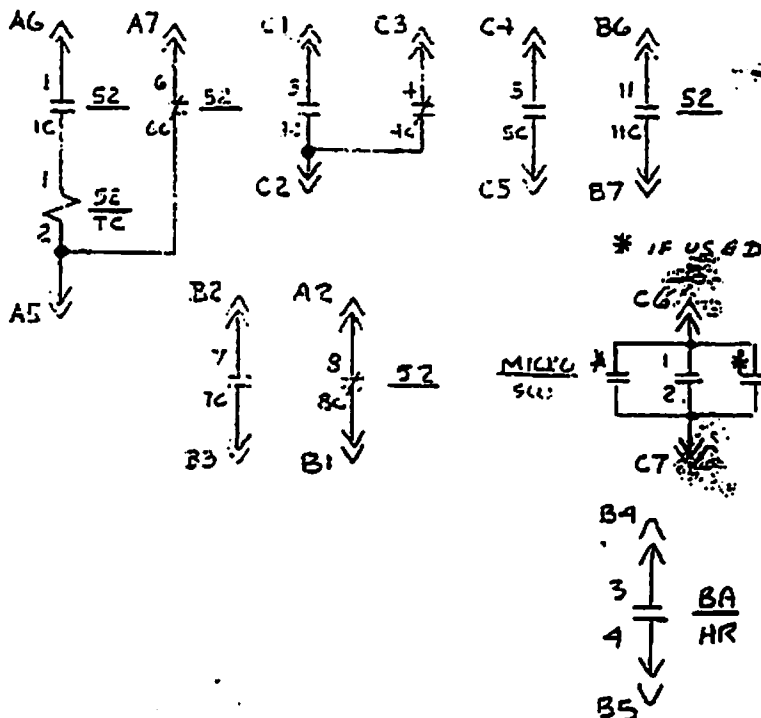
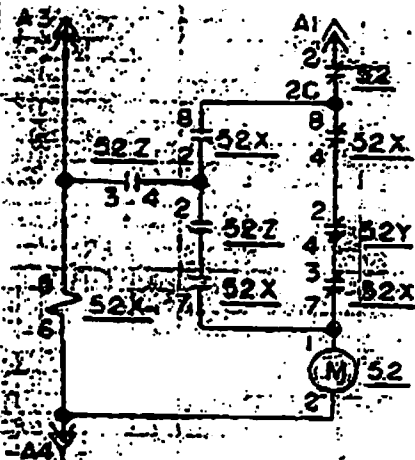
FIRST MADE FOR AK-2A-50/75/100

USE LRP304 2A50-G105

REVISIONS



BKR BASE-FV



Best Workman 3/12/62  
more h24 1/9/69

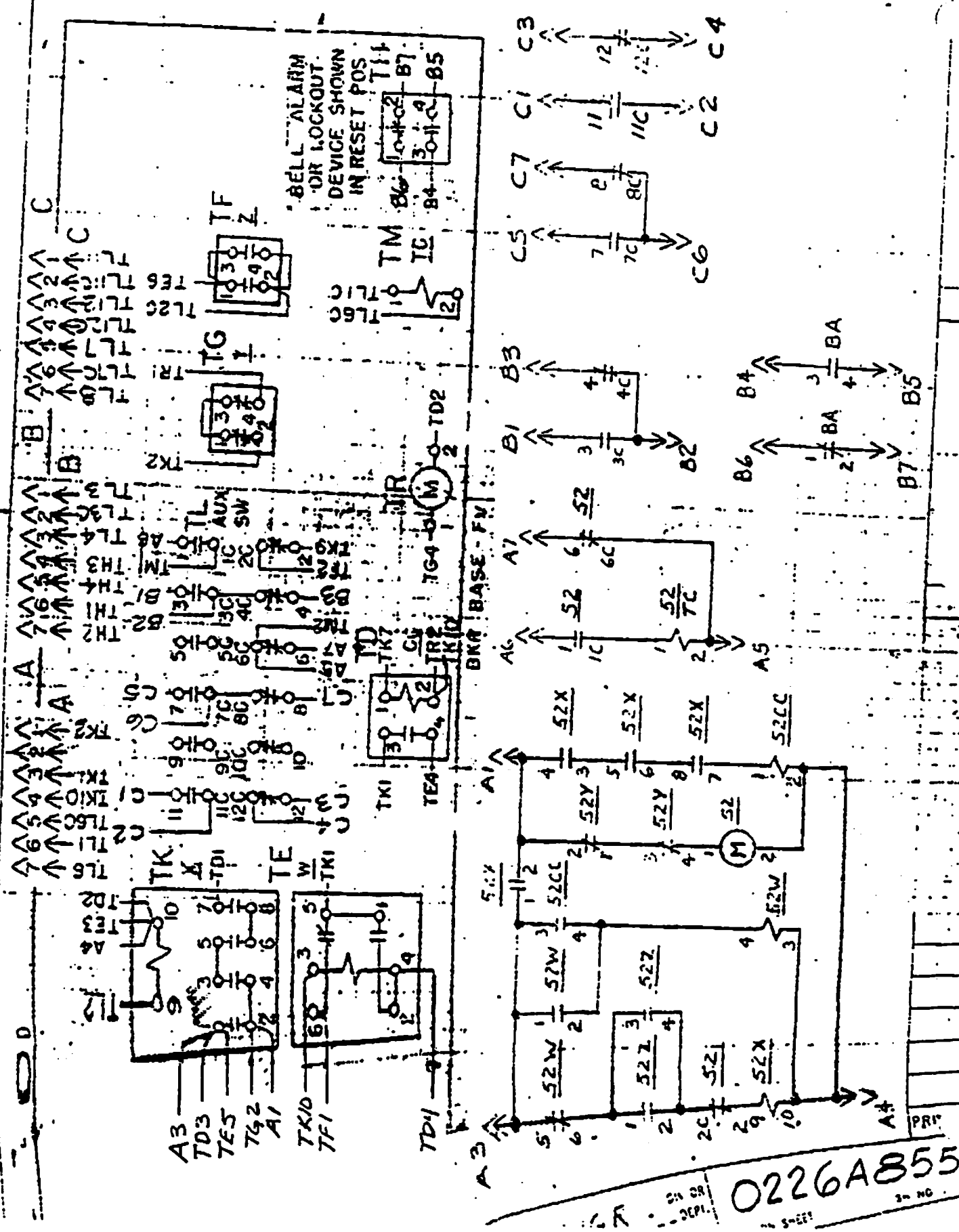
APPROVALS  
3.18.69

SWITCHGEAR  
PHILADELPHIA

0207A8966

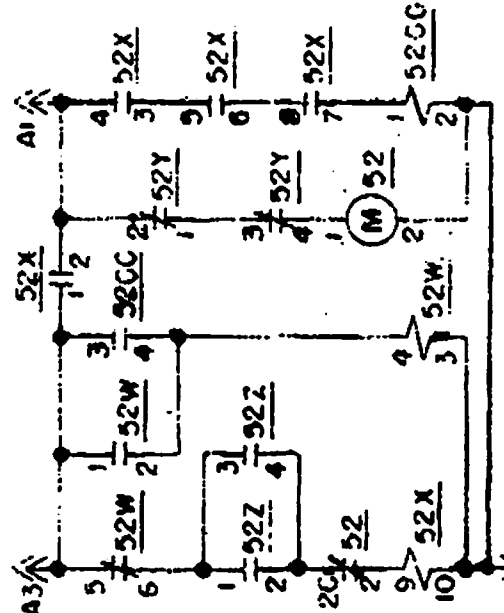
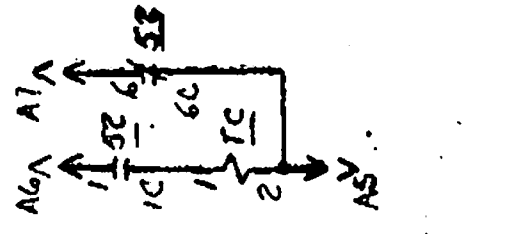
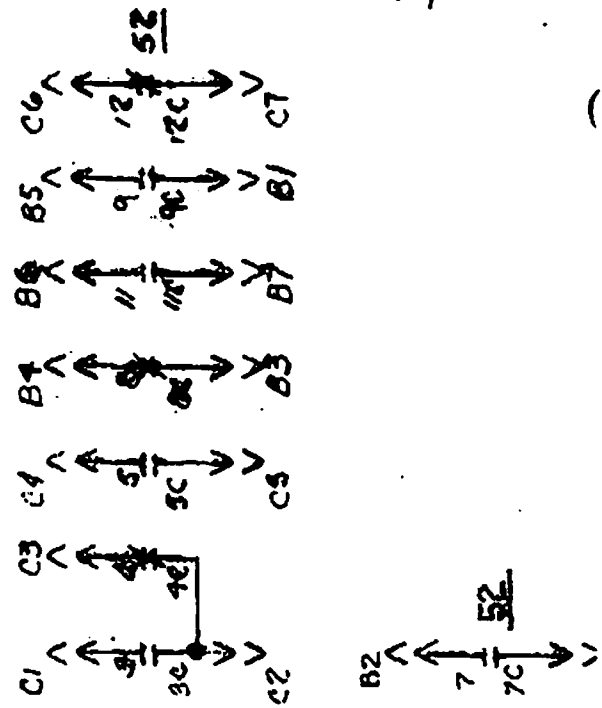
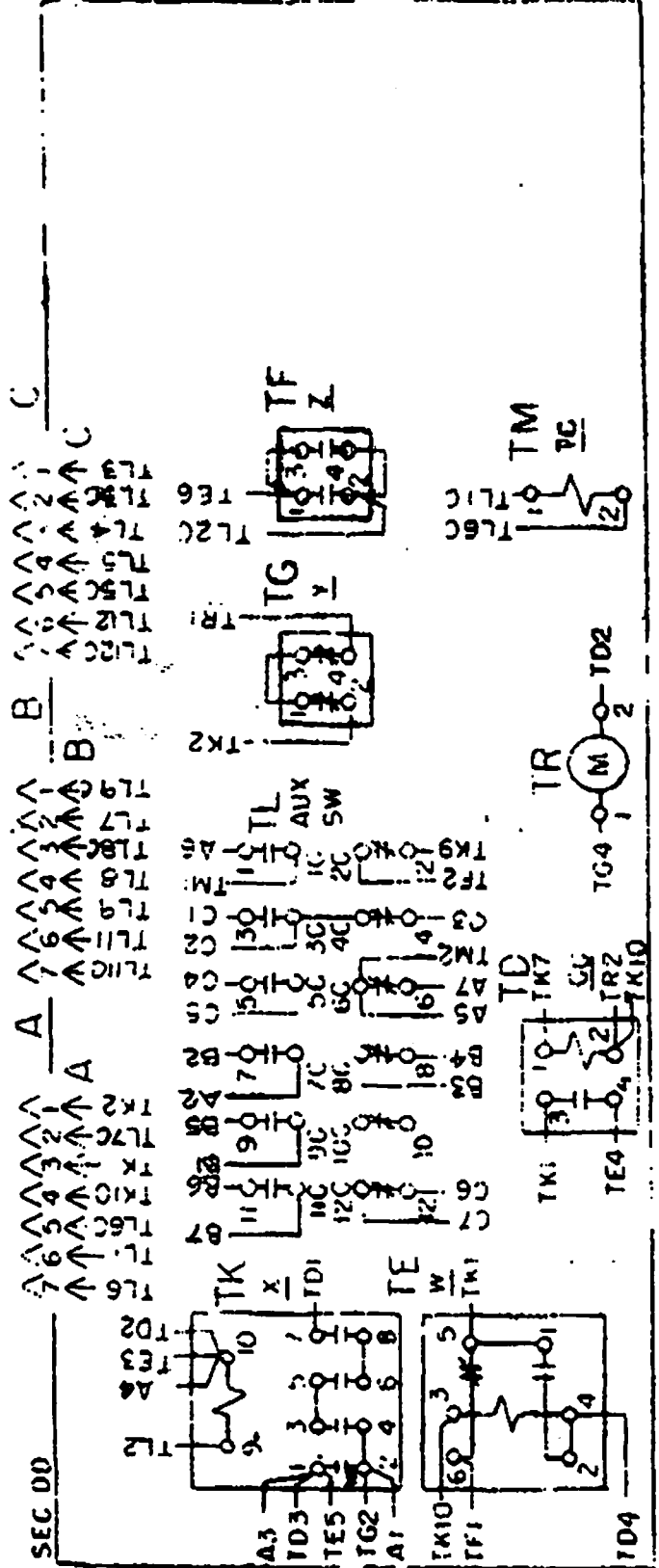
0226A8555

AK-2A - 50, 75, 100S D/C ER-2  
CONNECTION DIAGRAM  
STONE & WEBSTER



0226A8555

0341



<p><i>J. L. Hand</i> 12-27-73</p>	<p>912841</p>	<p>GENERAL ELECTRIC LOW VOLTAGE SWITCHES DEPARTMENT PHILADELPHIA</p>	<p>DIO ACB AK-2A-50/75/100S</p>	<p>0227A4608</p>
---------------------------------------	---------------	----------------------------------------------------------------------------------	-------------------------------------	------------------

REV 50

TITLE

0227A4651

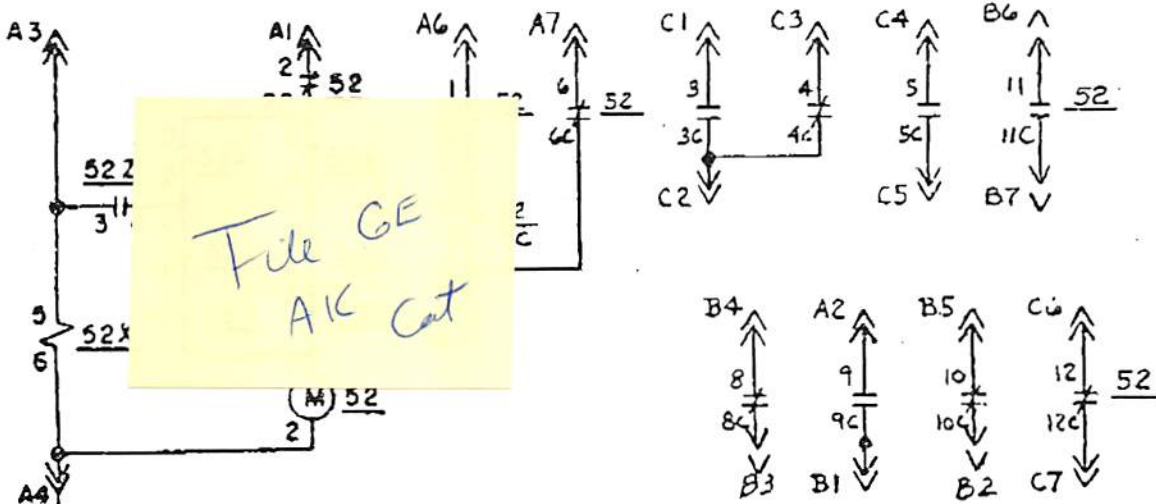
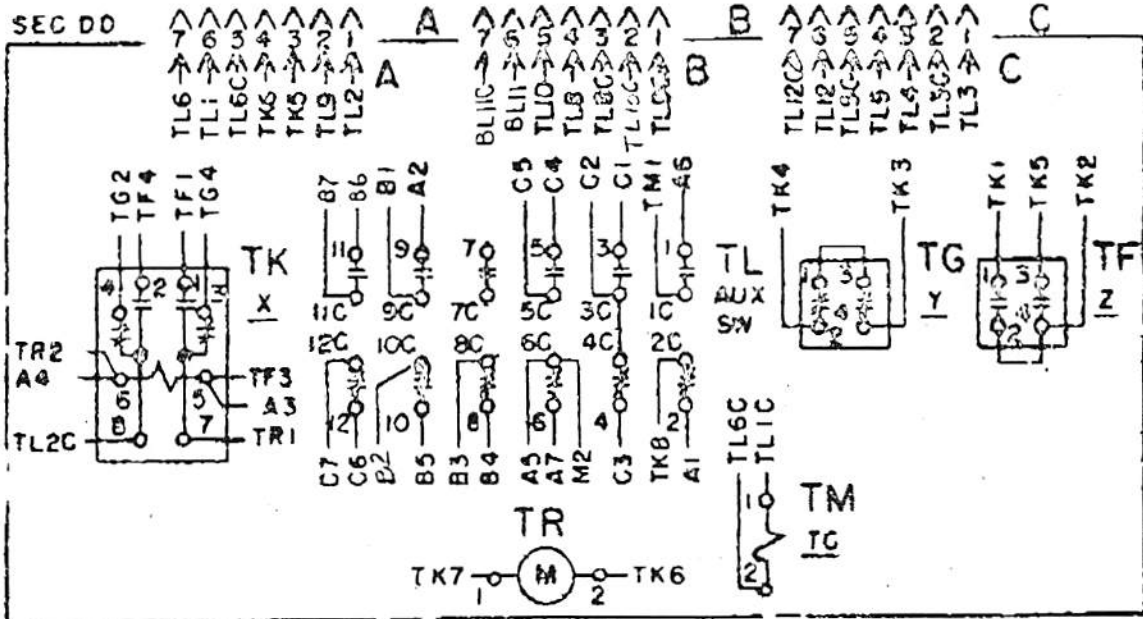
CONT ON SHEET

SH NO.

FIRST MADE FOR AX-2A, 3A-50/75/100 D/O ACB S.O. 912888

USE LRP394 2A50-G105

REVISIONS



GE AK-3A-50 U.V. Device - Connection Diagram

MADE BY <b>TU. PARKER</b>	APPROVALS	SWITCHGEAR	DIV OR DEPT	0227A4651
ISSUED <b>9-20-74</b>		PHILADELPHIA	LOCATION	CONT ON SHEET
		LSP-EB		CH NO.

# GENERAL ELECTRIC

0227A4651

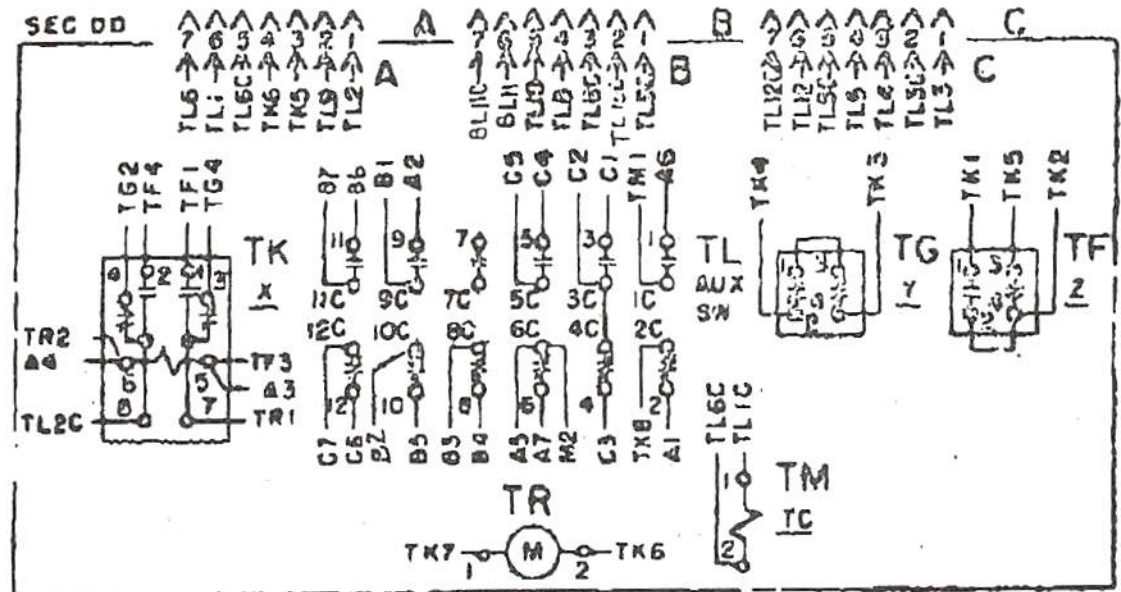
TITLE

CONT. ON SHEET SHE. NO.

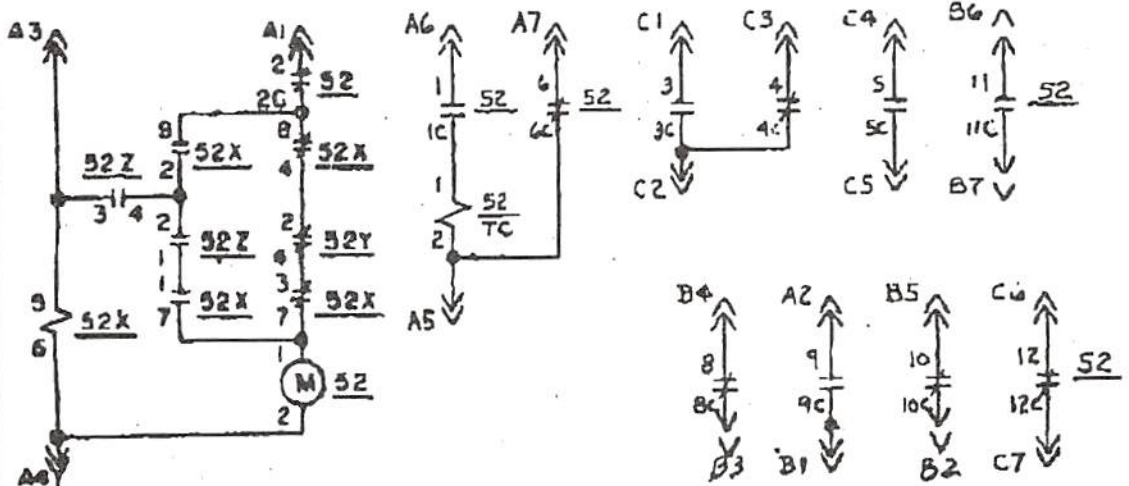
CONT. ON SHEET SHE. NO.

FIRST MADE FOR AK-2A, 3A-50/75/100 D/O ACB S.O. 9/2588

USE LRP994 2A50-G105



BKR BASE-FV



File -  
GE AK50  
book  
(Ref XR189)

MADE BY T.V.	DIV OF SWITCHGEAR	0227A4651
ISSUED 9-20-74	LOCATION PHILADELPHIA	CONT. ON SHEET
	LSP-EB	SHE. NO.

10: Kim Williams

~~Crouch, Stanley (IndSys, MKT)~~

4870  
2-433 - ~~8243~~

From: Schley, Julie L (SUPP)  
Sent: Monday, April 23, 2001 8:23 AM  
To: Crouch, Stanley (IndSys, MKT)  
Subject: FW: Connection Diagram #227A4651

Stan.

Can you please fax this to the customer?

Thanks,  
Julie Schley

-----Original Message-----

From: Williams, Kim [mailto:Kim.Williams@sea.siemens.com]  
Sent: Friday, April 20, 2001 11:11 AM  
To: Schley, Julie L (SUPP)  
Subject: RE: Connection Diagram #227A4651

Julie:

I still have not received this connection diagram. Can you please check & advise? Thanks....

Kim Williams  
SIEMENS-Westinghouse  
708-418-0260

~~AA~~ TO: 2 pages  
NO answer

-----Original Message-----

From: Schley, Julie L (SUPP) [mailto:Julie.Schley@gesupply.com]  
Sent: Friday, April 06, 2001 4:25 PM  
To: Williams, Kim  
Cc: Crouch, Stanley (IndSys, MKT)  
Subject: FW: Connection Diagram #227A4651  
Importance: High

Kim,

I will forward this to the factory to fax you a copy of the diagram.

Thanks,

Julie

-----Original Message-----

From: Williams, Kim [mailto:Kim.Williams@sea.siemens.com]  
Sent: Friday, April 06, 2001 3:57 PM  
To: Schley, Julie L (SUPP)  
Subject: Connection Diagram #227A4651  
Importance: High

Can you advise if I can obtain a copy of this connection diagram? It is for

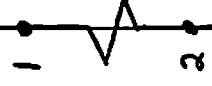
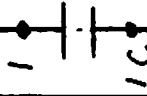
X - Control Relay

F, Y - Cut off switches

AUX - Auxiliary Switch

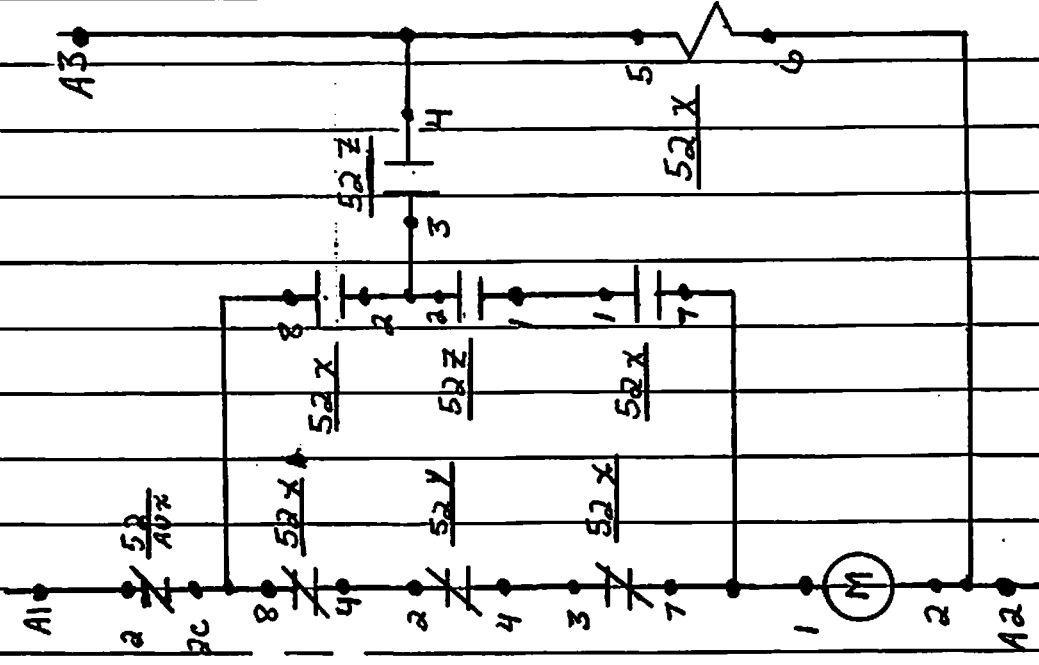
TC - Trip Coil

B1



B2

227A4642





0227A9652

LA SALLE County  
Nuclear

SH NO.

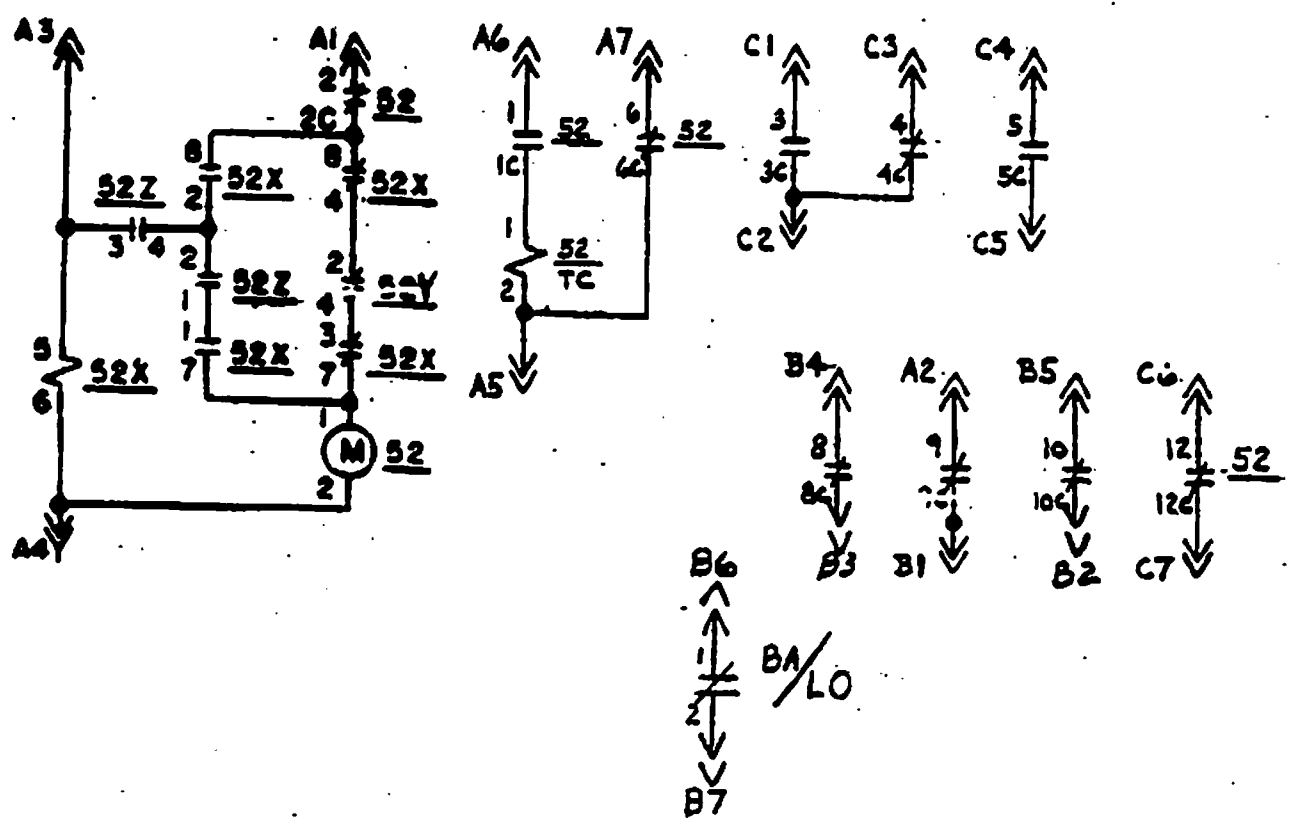
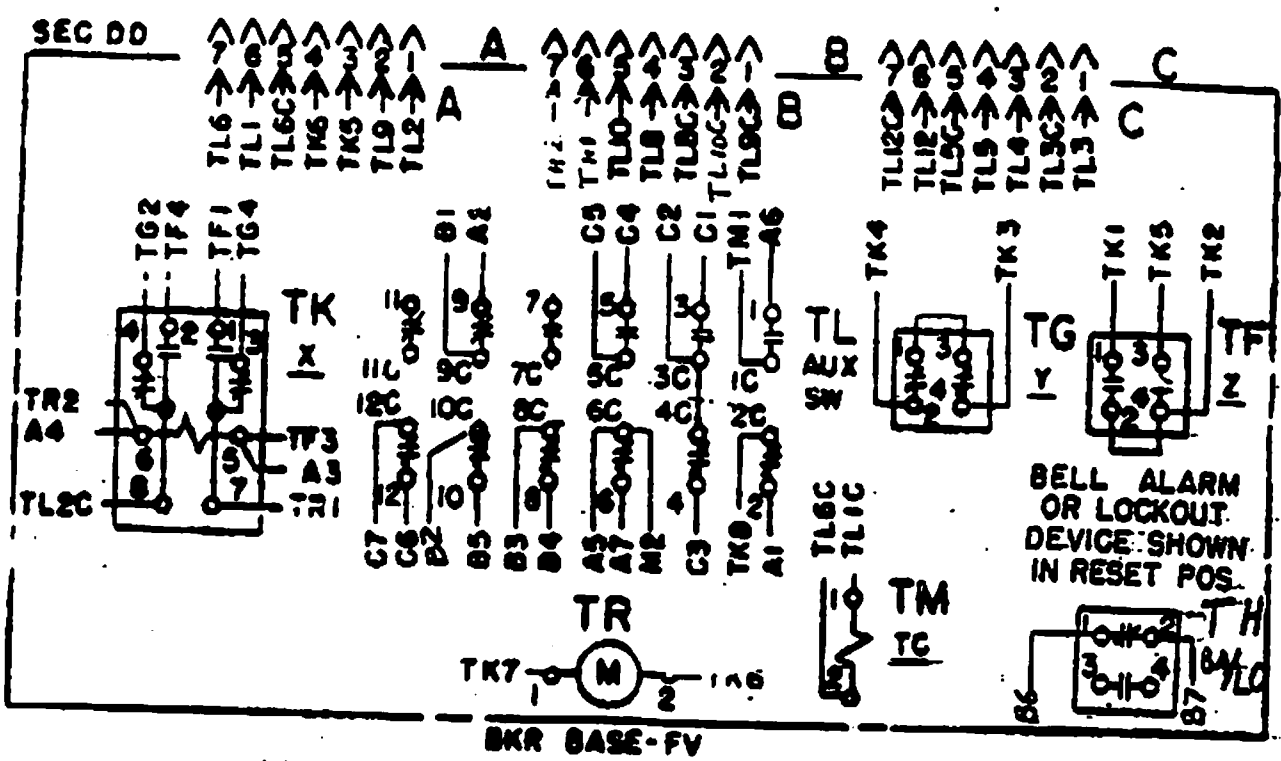
CONT ON SHEET

SH NO.

FIRST MADE FOR AK-2A, 3A-50/75/100 D/O ACB SO. 91283

USE LRP394 2A50-G105

REVI



MADE BY  
**T. J. PARKER**  
ISSUED  
**9-20-74**

APPROVALS

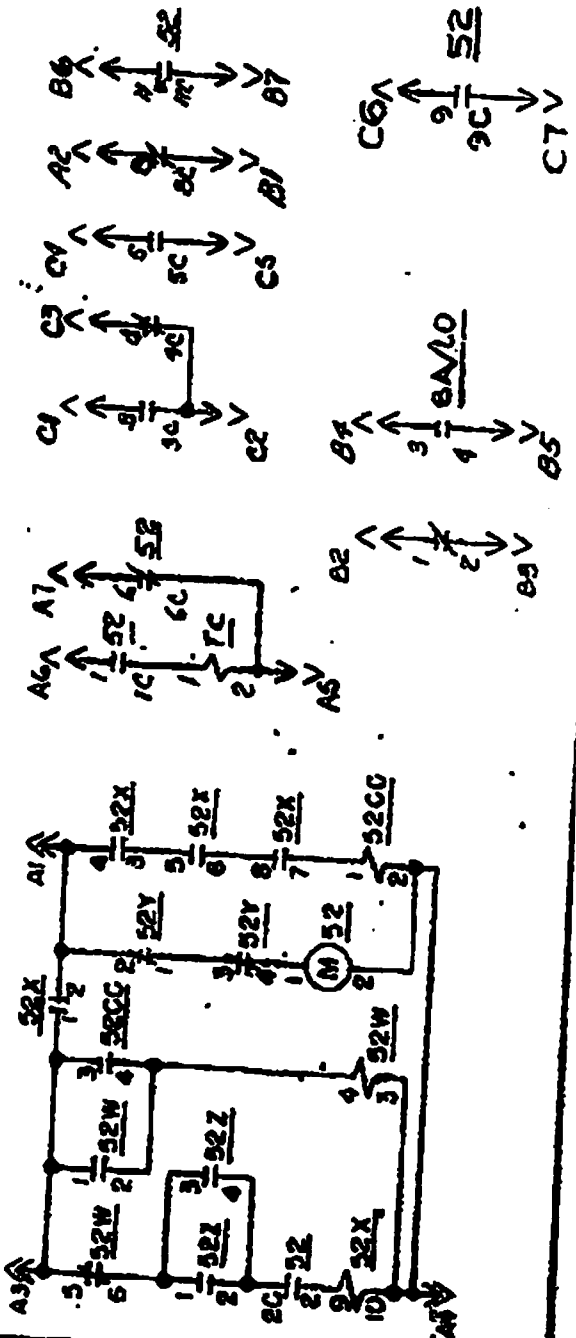
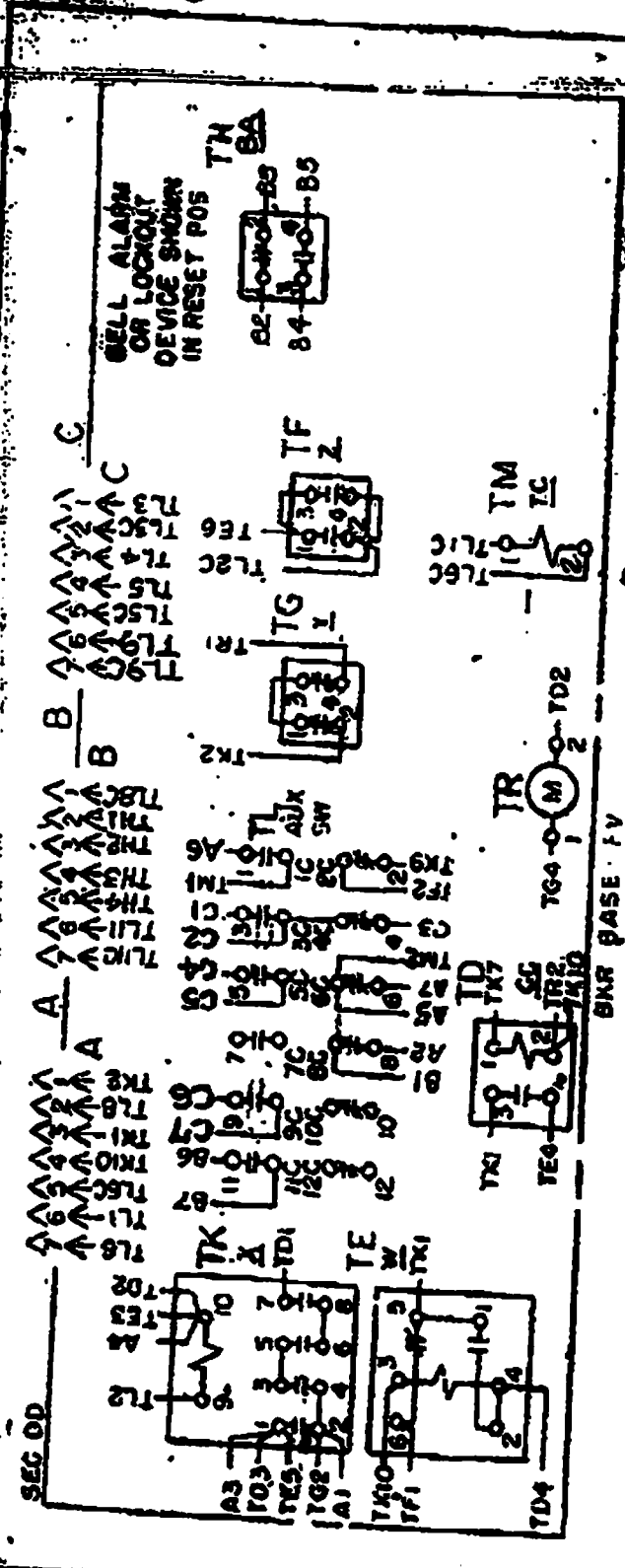
**SWITCHGEAR** DIV OR DEPT.  
**PHILADELPHIA** LOCATION

0227A9652

PRINTS

SH NO.

*Joe M.*



914707  
 M. RUSHER 6-15-76  
 6-15-76

GENERAL ELECTRIC

DIO ACB  
 AK-2A-50/75/100S

B2L4A220

569B215R

GENERAL ELECTRIC

569B215R

NOTE-BKR SHOWN IN OPEN POSITION WITH SPRING DISCHARGED  
DRAWOUT-BKR

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY. THE EXACT LOCATION OF APPARATUS MUST BE SHOWN ON DRAWING.
2. UNWARRANTED CONTACTS AND UNUSUAL CONNECTIONS SHOULD BE INDICATED BY LETTERS AND SHOWN NEARLY EQUIVALENT CONNECTIONS.
3. INTERNAL CONNECTIONS OF DEVICES ARE INDICATED BY THE CHARACTERISTICS SYMBOL.
4. DEVICE FUNCTIONS PLANNED AND APPROVED BY THE DESIGNER.

TITLE  
CONN & ELEM DIAGRAM  
FIRST MADE FOR AKS-50 ELEC.

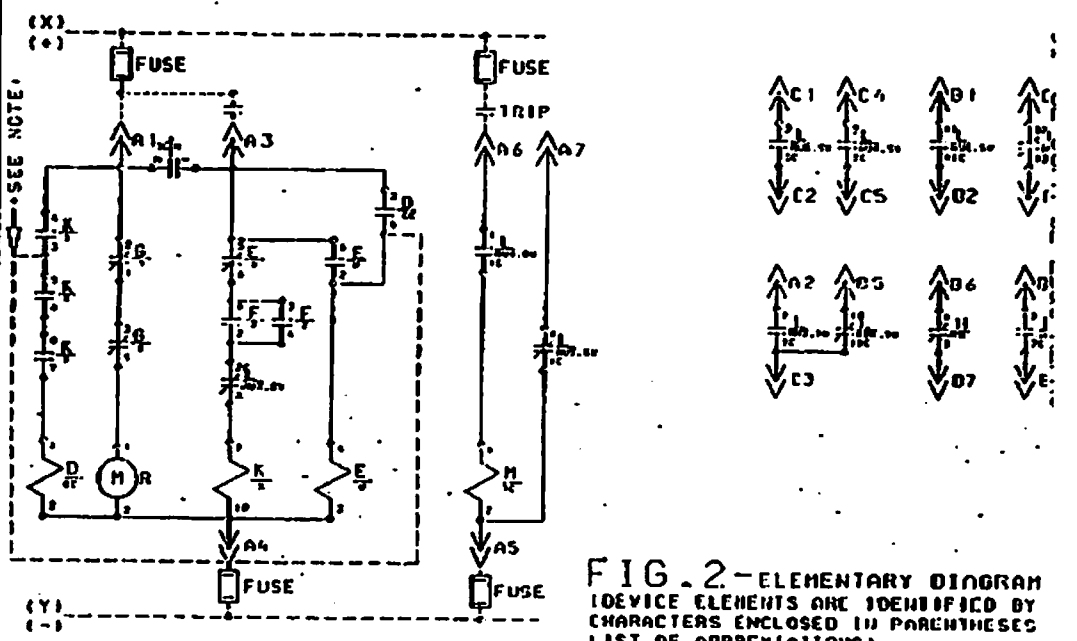
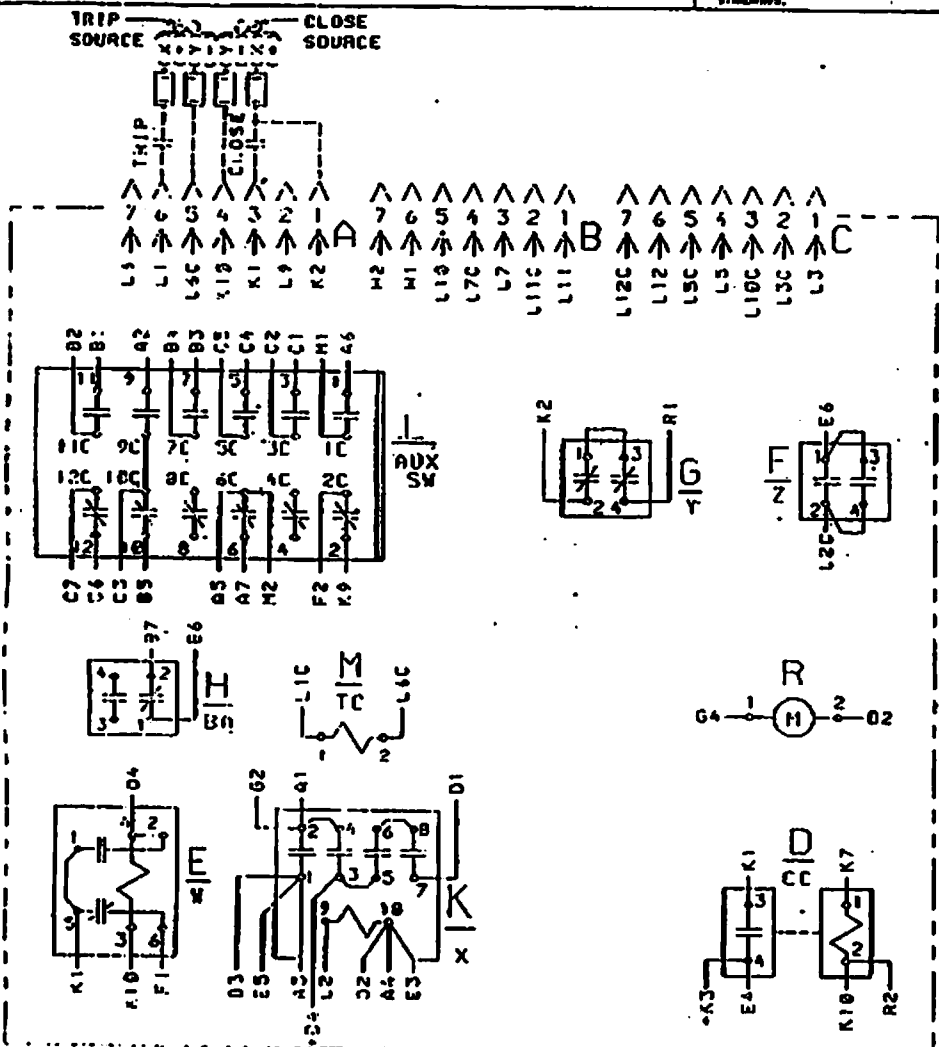


FIG. 2 - ELEMENTARY DIAGRAM  
DEVICE ELEMENTS ARE IDENTIFIED BY CHARACTERS ENCLOSED IN PARENTHESES  
LIST OF ABBREVIATIONS

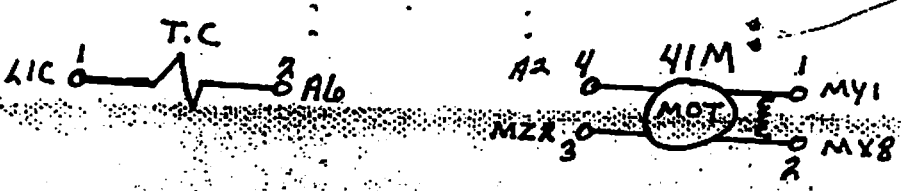
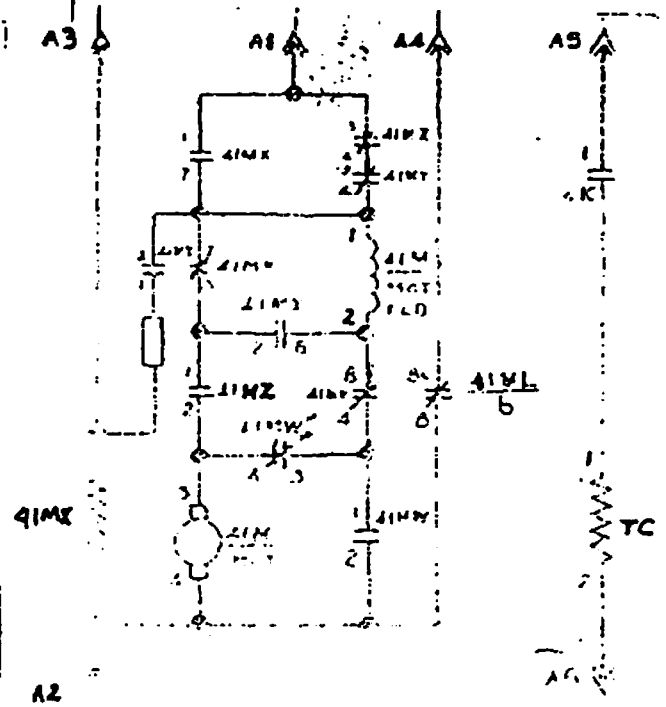
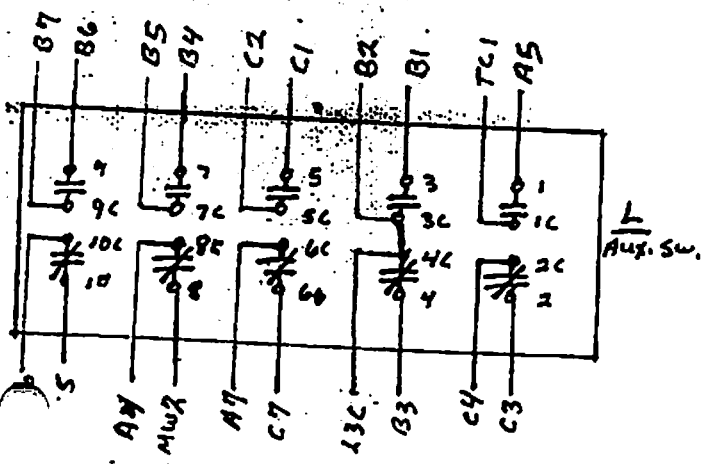
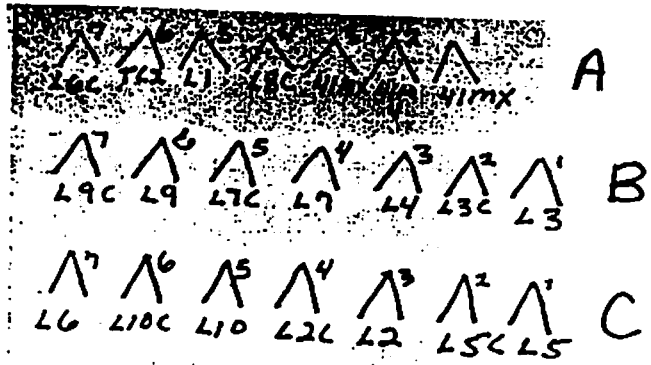
- STANDARD LIST OF ABBREVIATIONS (SOME DEVICES MAY NOT BE INCLUDED IN DIAGRAMS)
- (A) - SEC. DISC. LOCATED TOP LEFT, FRONT VIEW
  - (B) - SEC. DISC. LOCATED TOP CENTER, FRONT VIEW
  - (C) - SEC. DISC. LOCATED TOP RIGHT, FRONT VIEW
  - F - (Z) CUT-OFF SWITCH
  - B - (Y) CUT-OFF SWITCH
  - H - (DA) BELL ALARM OR LOCKOUT DEVICE OPERATED WHEN BKR IS TRIPPED BY ANY MEANS OTHER THAN SHUNT OR MANUAL TRIP. CONTACTS SHOWN IN RESET POSITION. CONNECTIONS ARE SHOWN WHETHER SWITCHES ARE BOTH NORMALLY OPEN, BOTH NORMALLY CLOSED, OR ONE OF EACH TYPE.
  - J - (UV) UNDERVOLTAGE TRIP DEVICE. TIME DELAY OR INSTANTANEOUS
  - K - (X) CLOSING RELAY
  - L - (AUX SV) "A" CONTACTS TAKE POSITION OF BKR CONTACTS. "B" CONTACTS OPPOSITE TO BKR CONTACTS
  - M - (TC) SHUNT TRIP DEVICE
  - R - (M) CLOSING SPRING CHARGING MOTOR
  - P - (PB) PUSH BUTTON CLOSING SWITCH ON BKR
  - D - (CC) CLOSING RELAY
  - E - (V) ANTI-PUMP RELAY
- \*NOTE: THIS CONNECTION USED ON ALL D.C. CONTROL VOLTAGE RATINGS ONLY.

FIG. 1 - CONNECTION DIAGRAM (FRONT VIEW)

REVISION	DATE	BY	CHKD	APP'D	REV.	MADE BY	APPROVALS	DISTRIBUTION EQUIPMENT DIVISION PLAINVILLE, CONN.	569B215R (CONT ON SHEET) SH. NO. 2
						G. I.			

*Keller*

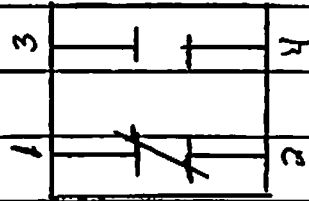
801B/56-F/62



41M - MOTOR  
 41MX - CLOSING RELAY COIL  
 41MZ - CUTOFF SWITCH  
 41MY CUTOFF SWITCH  
 41MW CUTOFF SWITCH  
 T.C. TRIP COIL  
 L. AUX. SWITCH

Bolt in AK-50 converted  
To AKL-50

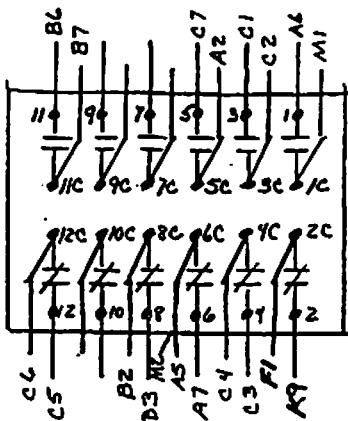
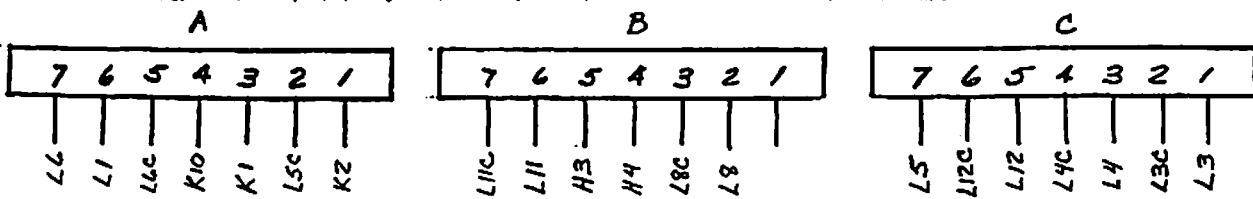
A1	A2	A3	B3	B1	B2	H4	H3	L3	L3C	L4	L4C	L5	L5C	H2	H1
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4



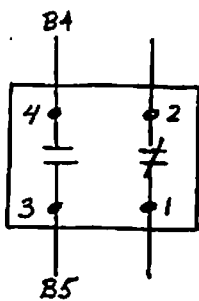
BELL  
ALARM  
H

AUX  
Switch  
L

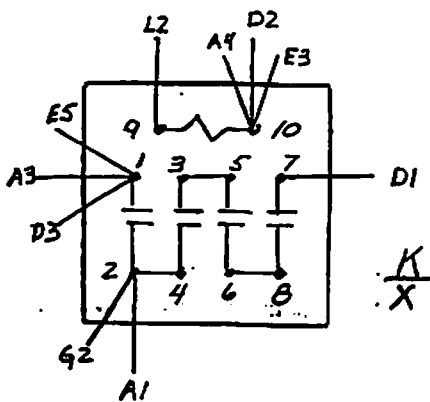
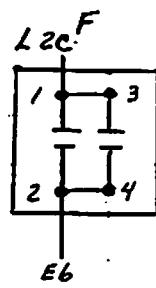
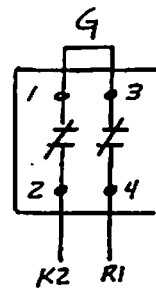
AK-3A-100 QUICK-CLOSE (VISCASE)



L  
AUX. SW.



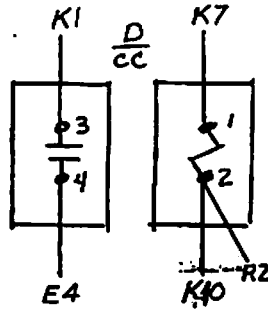
H  
BA



K  
X



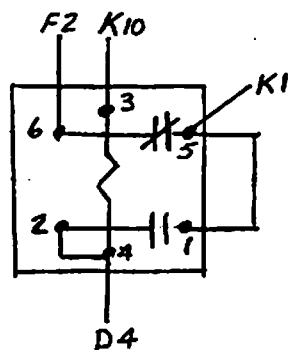
M  
TC



D  
CC



R  
M

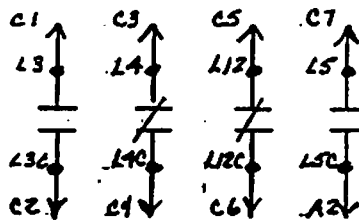
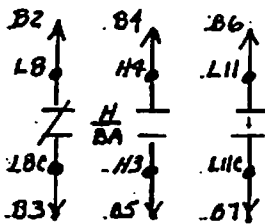
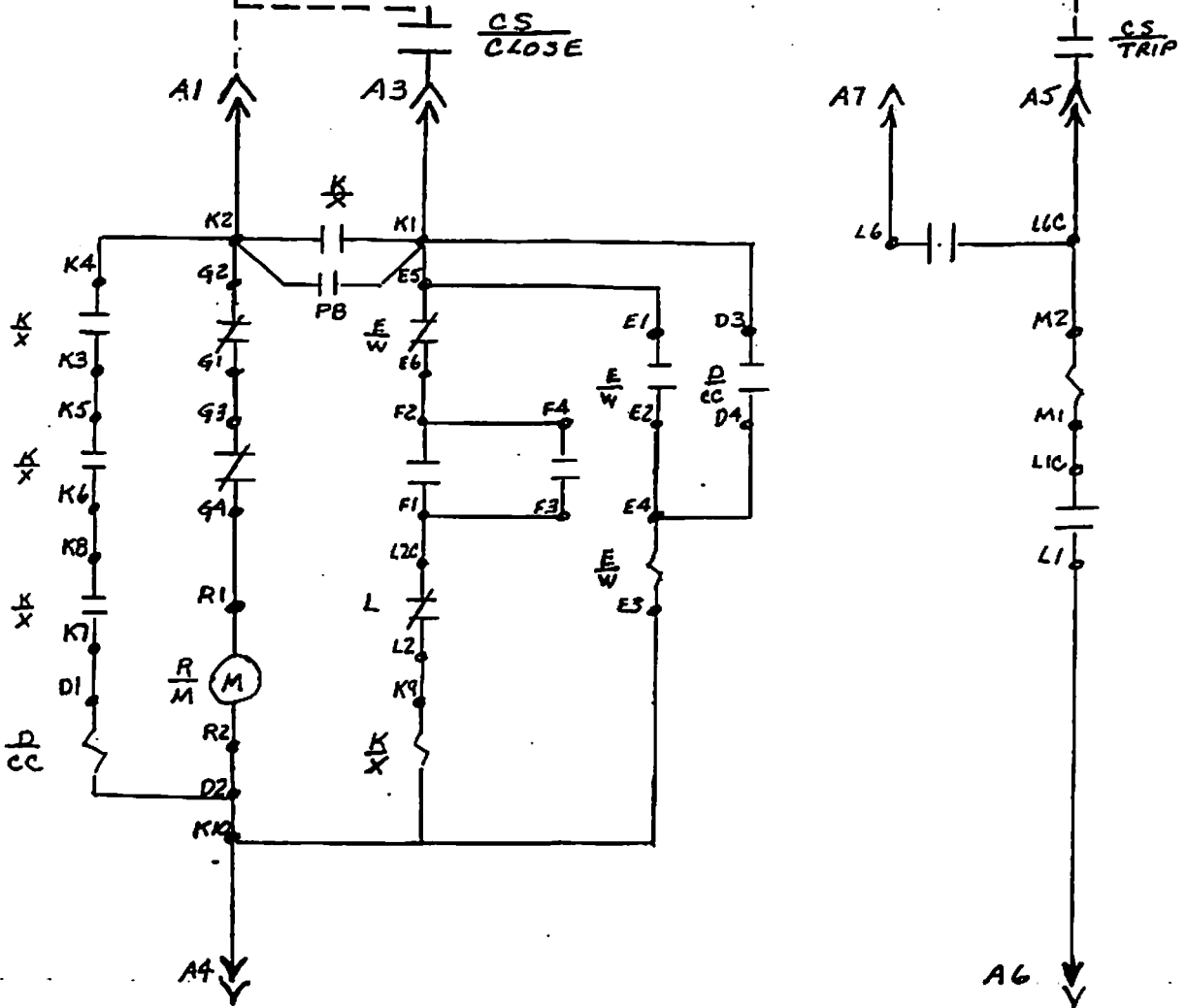


E  
W

- L AUXILIARY SWITCH
- H/BA BELL ALARM
- G-F CUT OFF SWITCHES
- K/X CONTROL (X) RELAY
- A/TC SHUNT TRIP
- D/CC QUICK CLOSE COIL & SWITCH
- R/M MOTOR
- E/W ANTI-PUMP RELAY (Y)

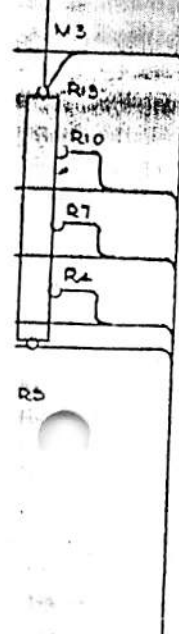
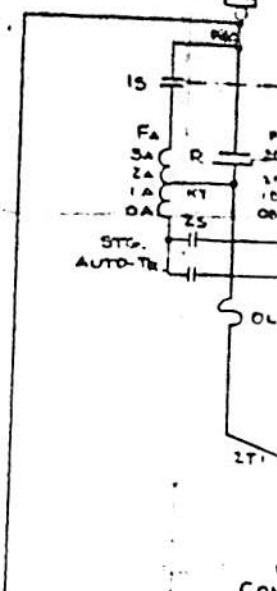
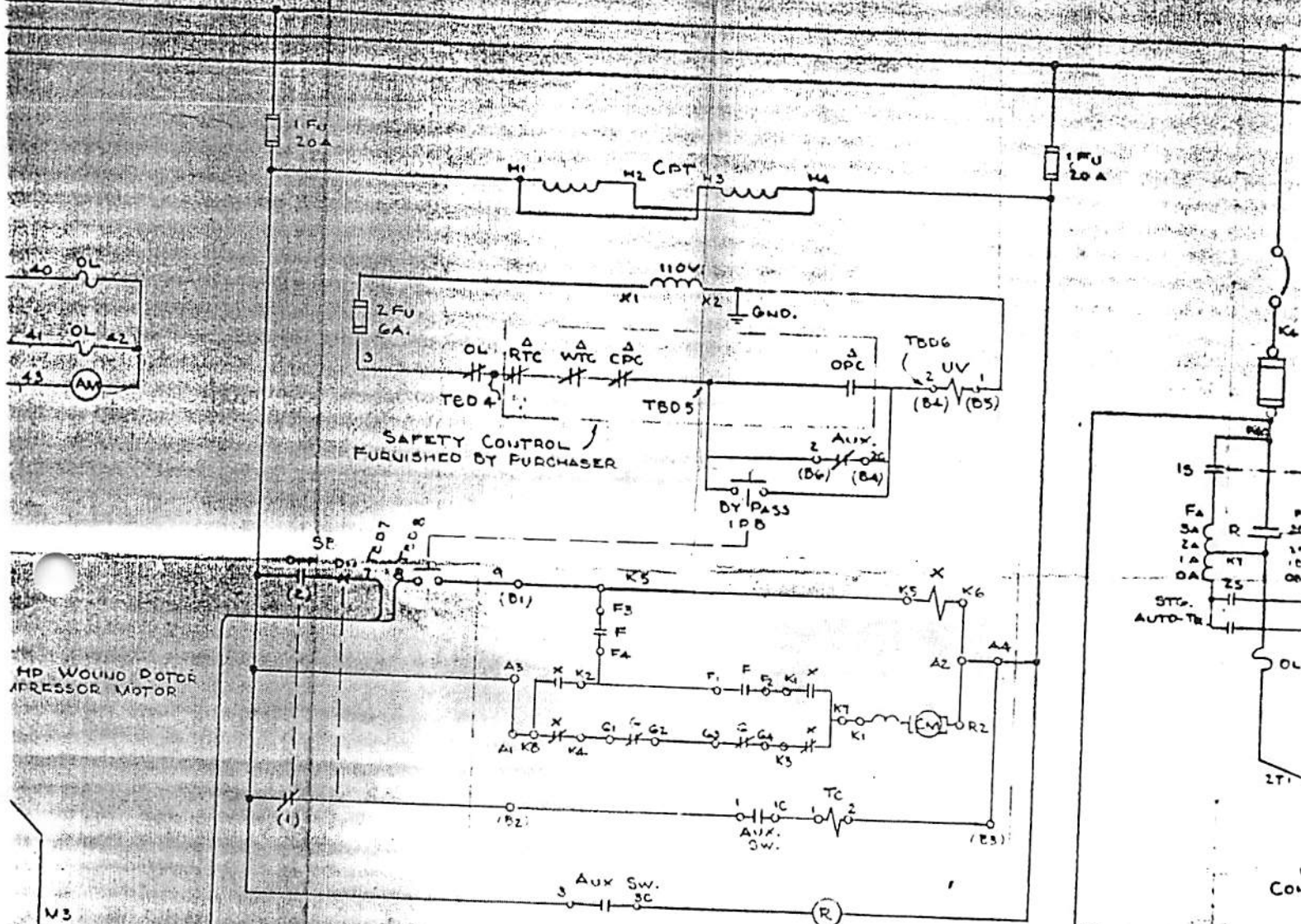
TEST STAND - USE 2A SETTING

# AK-3A-100 QUICK CLOSE (VISCASE)



- L AUXILIARY SWITCH
- H/BA BELL ALARM
- G-F CUT OFF SWITCHES
- K/X CONTROL (X) RELAY
- R/M SHUNT TRIP
- D/CC QUICK CLOSE COIL & SWITCH
- R/M E CHARGING MOTOR
- E/W ANTI-PUMP (Y) RELAY
- PB CLOSING PUSH BUTTON ON BREAK

TEST STAND - USE 2A SETTING



AK 75  
BIT IN

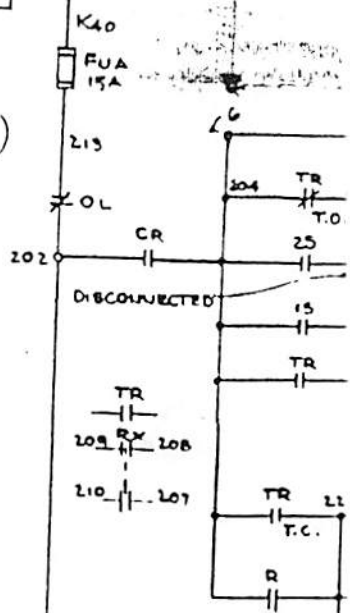
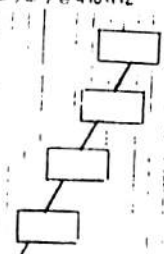
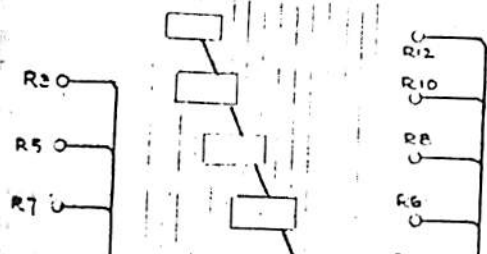
M5

POSITIVE BLOC.  
(DRAPER / KRAMER)  
GCCR453

IC 3204 - A117BC5 MANUALLY OPERATED DRUM SW.

COUNTER CLOCKWISE  
12110987654321  
CLOCKWISE  
123456789101112

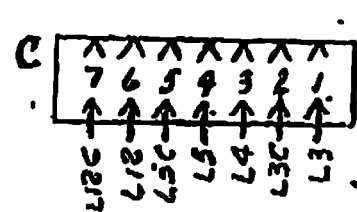
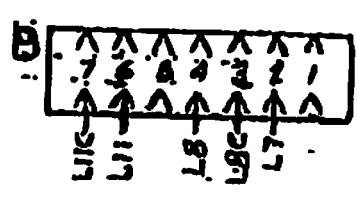
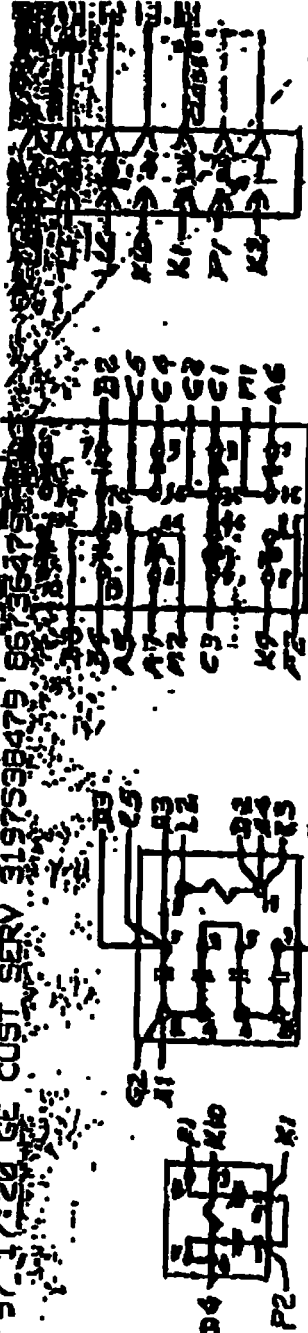
COUNTER CLOCKWISE  
12110987654321  
CLOCKWISE  
123456789101112





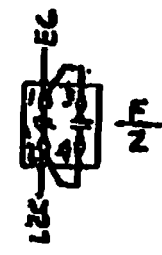
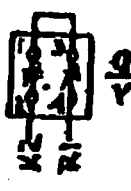
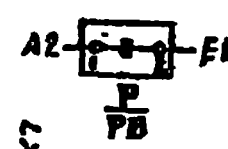
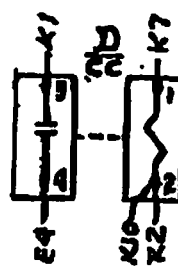
APR 16 '97 11:32 FROM GES GRIFFITH 972-8225

97 17:20 GE CUST. SERV. 3197598479 86736475



L  
AUX. SW

M  
L20

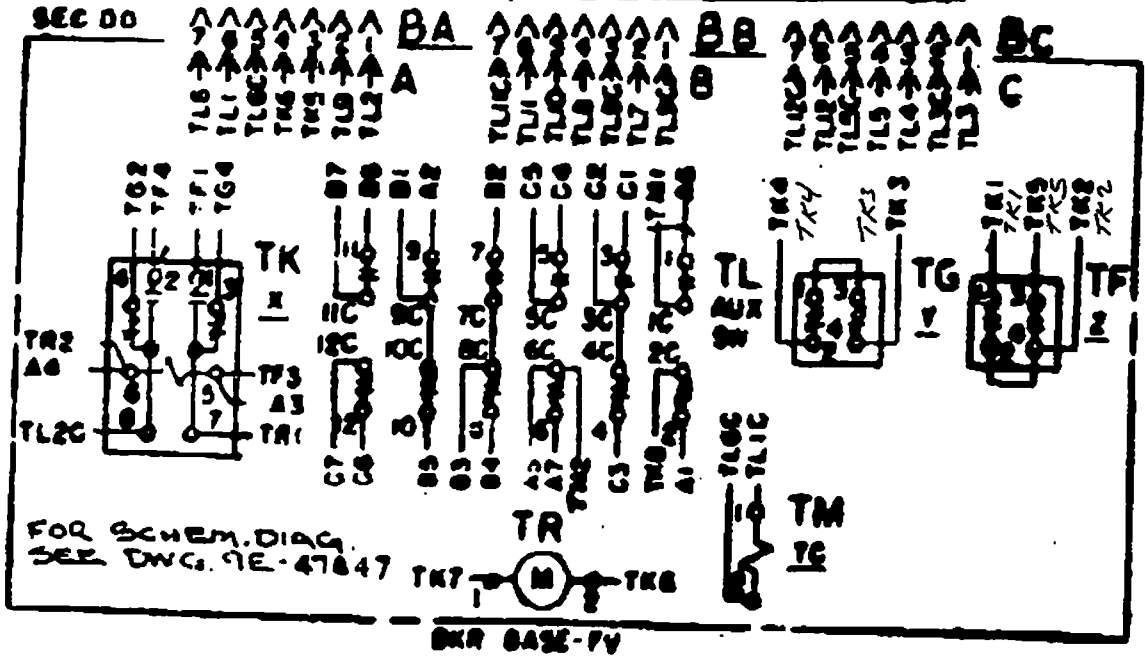


- A. SEC. DIS
- B. SEC. DIS
- C. SEC. DIS
- D. CROSSING
- E. ANY - P
- F. CUT OFF

CONNECTION DIAGRAM - BKR BASE FRONT VIEW



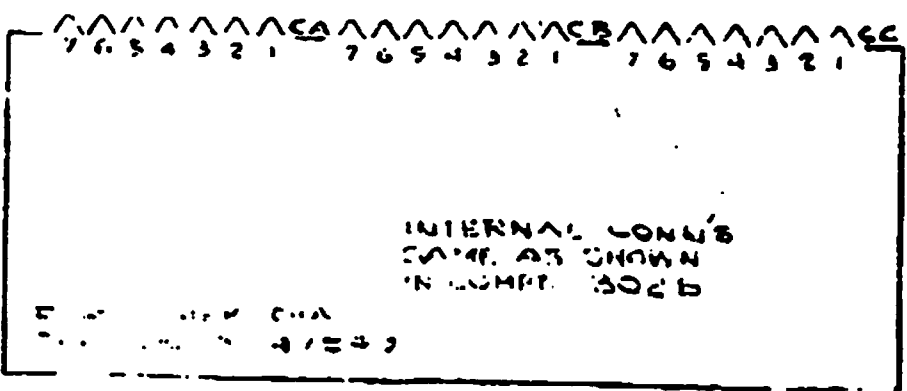
COAL HANDLING TRANSFORMER 7



B

A } TO ROW 303  
 B } DWG 9E-47820  
 C }

D2 CRUSHER



52  
 AK-2A-50  
 1200A

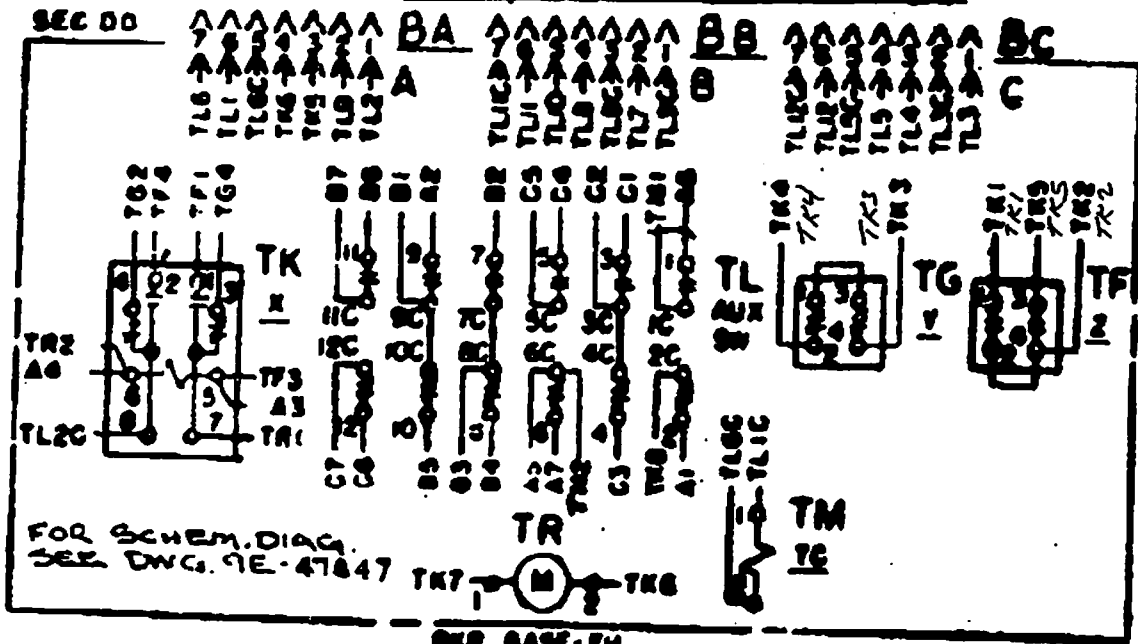
Post-It® Fax Note	7871	Date	5-15	# of pages	1
To	Kim Williams	From	Row Pearson		
Co./Dept.	WESTINGHOUSE	Co.	COM ED.		
Phone #		Phone #			
Fax #		Fax #			

POWER CIRCUIT - EV

480V. C.H. BUS (H. 7)

C

COAL HANDLING TRANSFORMER 7



BW

AK-2A-50  
1200A

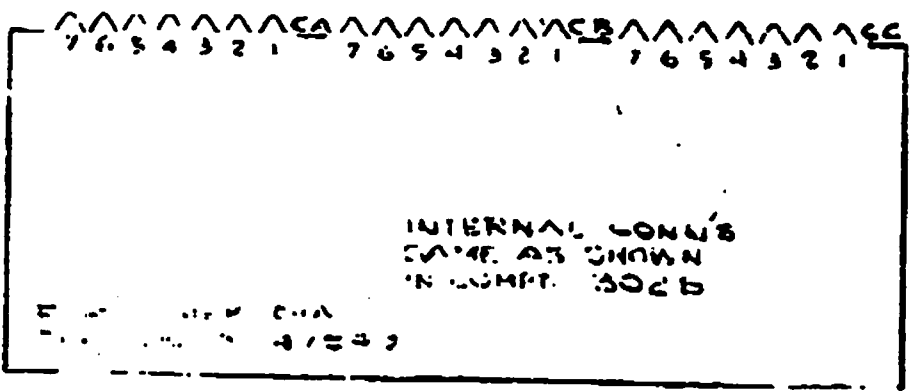
FOR SCHEM. DIAG.  
SEE DWG. 9E-47847

DKR BASE-FV

B

A } TO ROW 303  
B } DWG 9E-47826  
C }

D2 CRUSHER



52  
AK-2A-50  
1200A

INTERNAL CONN'S  
MADE AS SHOWN  
IN COMP. 302B

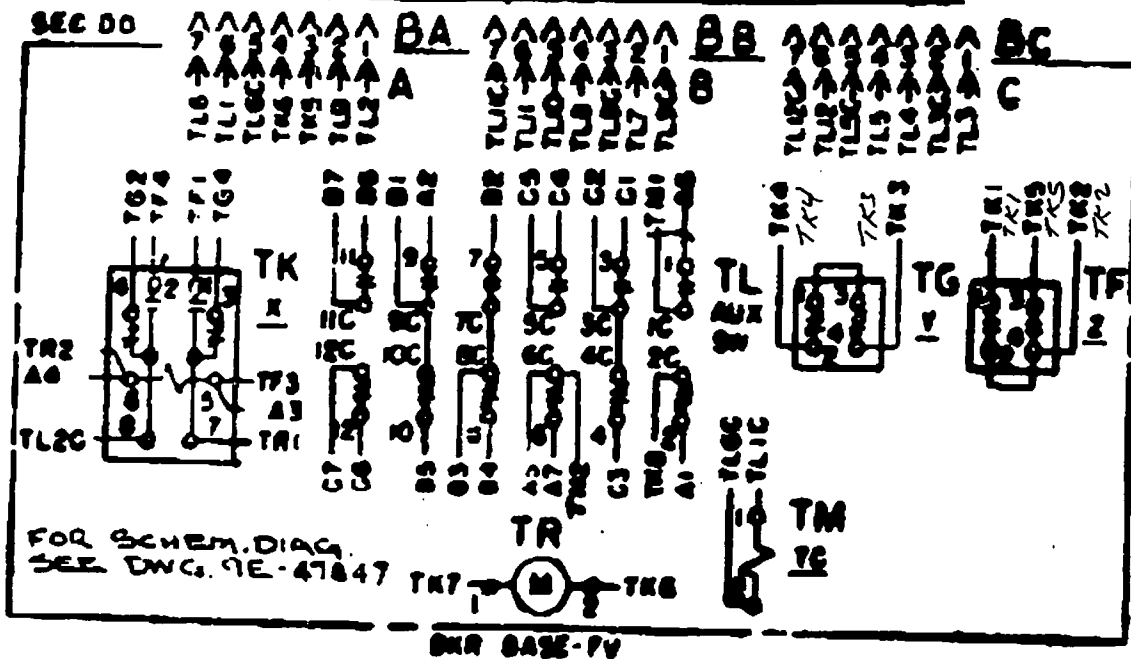
Post-It® Fax Note	7871	Date	5-15	Page	1
To	Kim Williams	From	Row Pearson		
Co./Dept.	Westinghouse	Co.	Com Ed.		
Phone #		Phone #			
Fax #		Fax #			

POWER CIRCUIT - EV

480V. C.H. P.S. C.H. 7

C

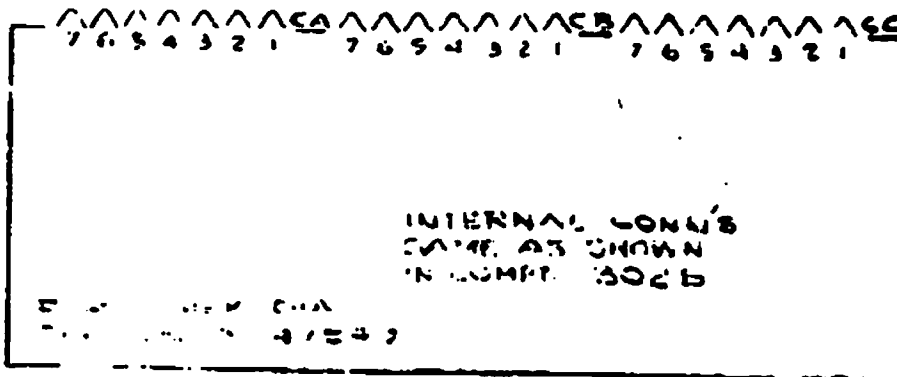
COAL HANDLING TRANSFORMER 7



B

A } TO ROW 303  
 B } DWG 9E-47820  
 C }

D2 CRUSHER

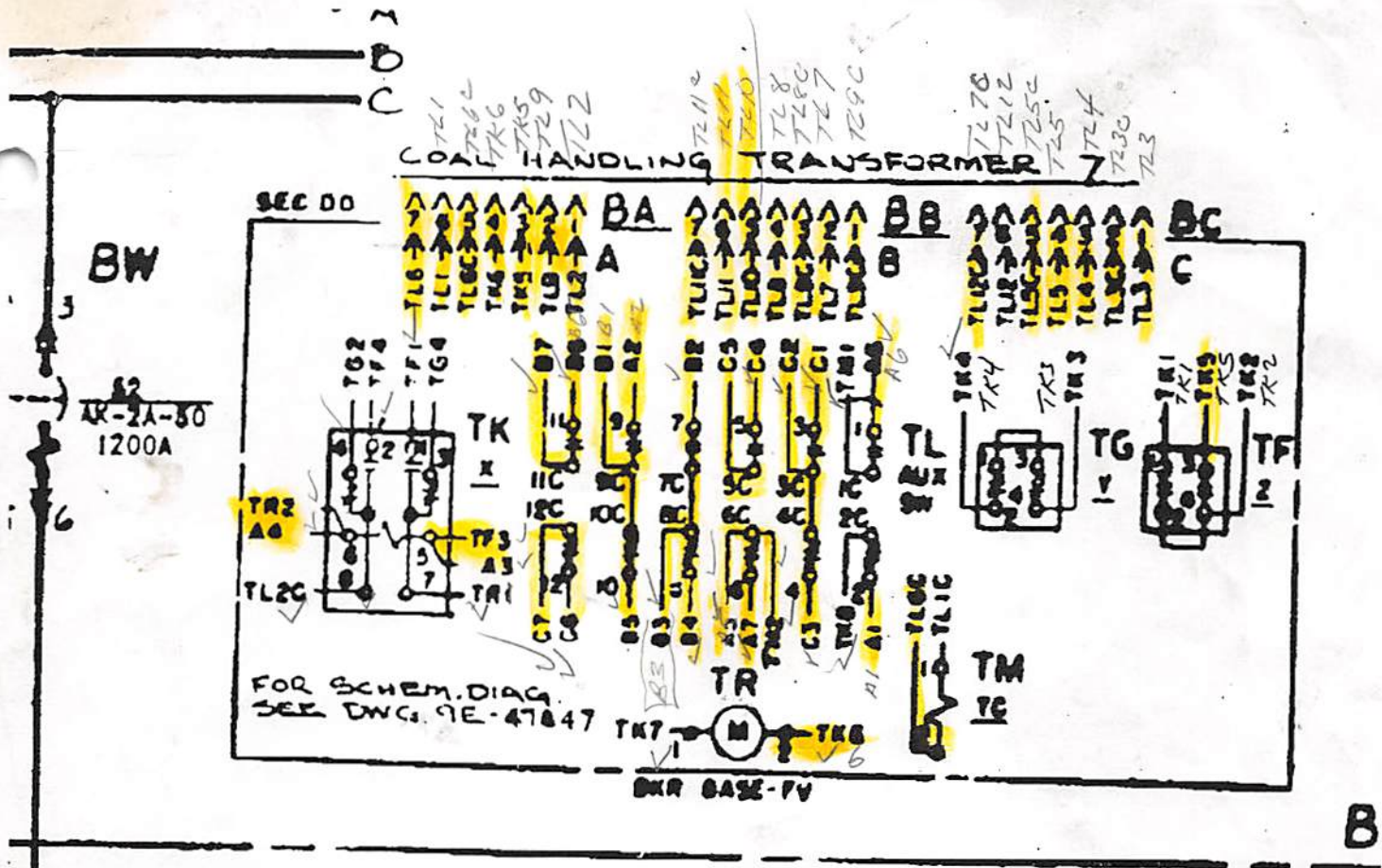


Post-It® Fax Note	7871	Date	5-15	# of pages	1
To	Kim Williams	From	RON PEARSON		
Co./Dept.	WESTINGHOUSE	Co.	COM ED.		
Phone #		Phone #			
Fax #		Fax #			

POWER CIRCUIT - EV

480V. C.H. 9/15 C.H. 7

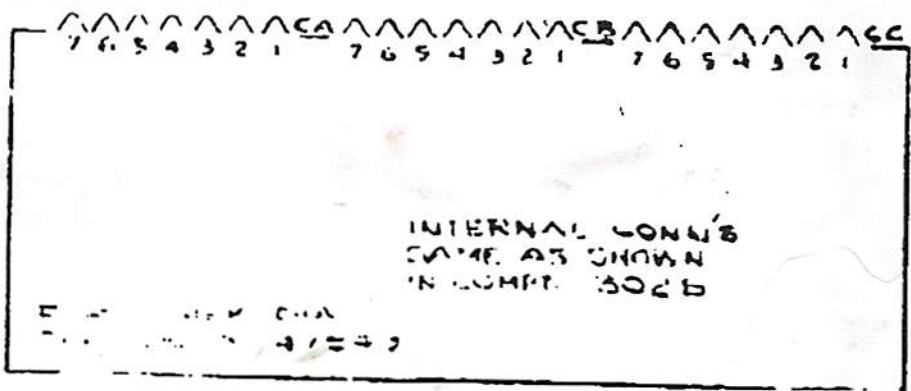
C



B



D2 CRUSHER



52  
AK-2A-50  
BXDA

11" CF  
012

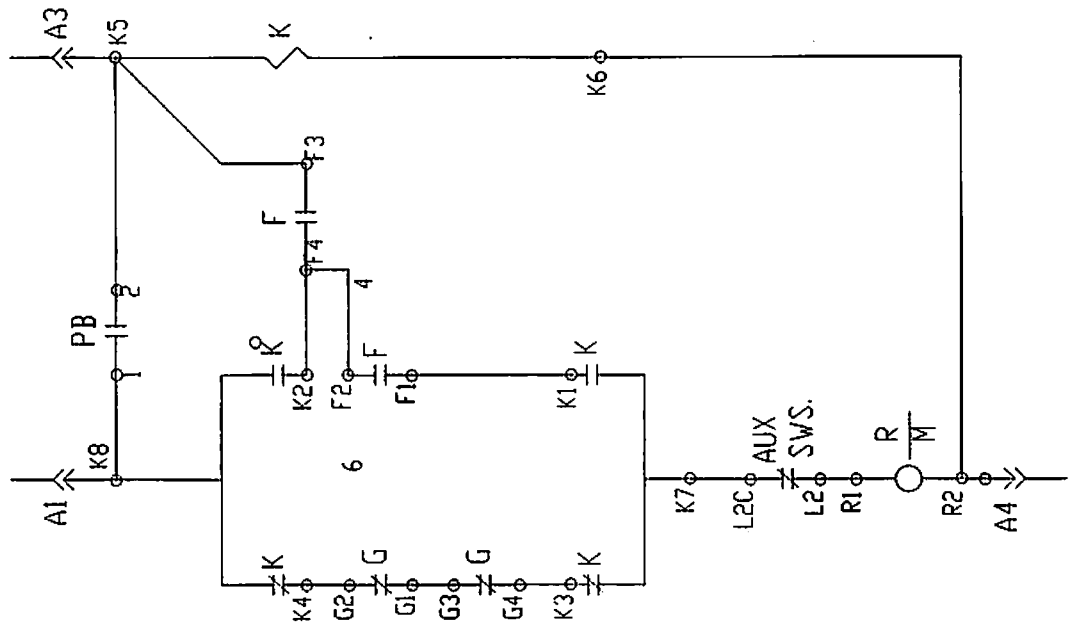
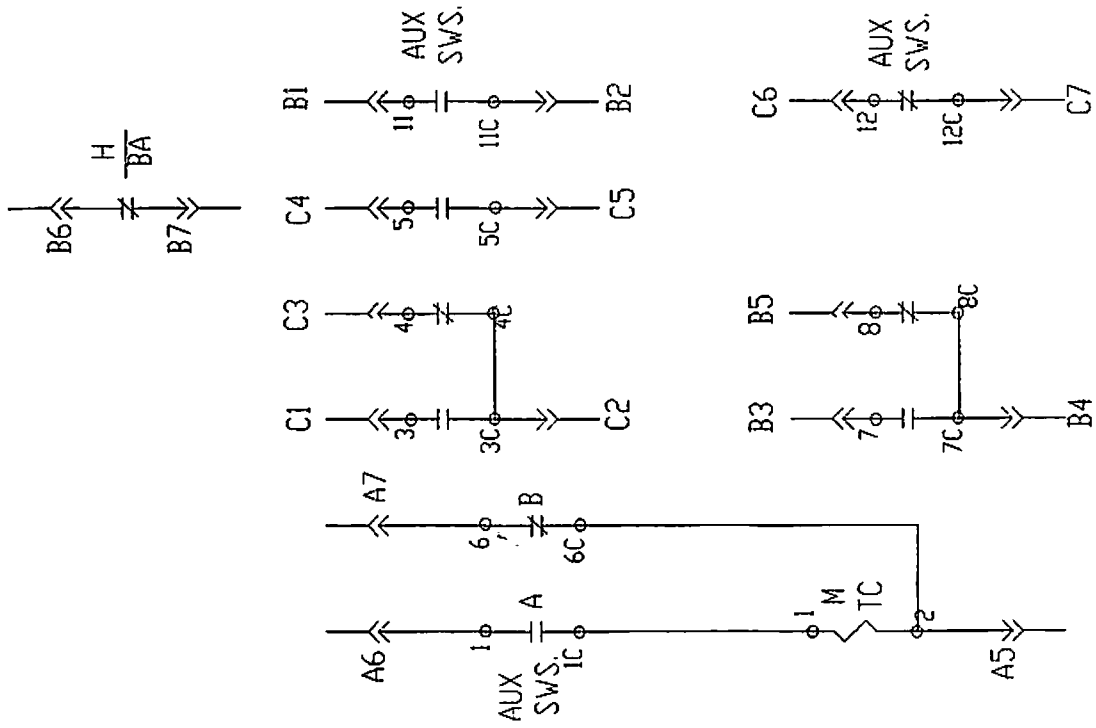
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To	Kim Williams	From	RON PEARSON		
Co./Dept.	WESTINGHOUSE	Co.	COM ED.		
Phone #		Phone #			
Fax #		Fax #			

POWER CIRCUIT - EV

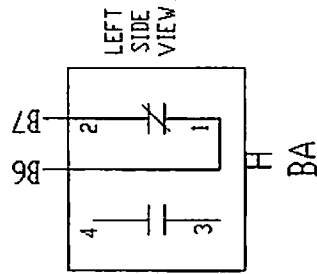
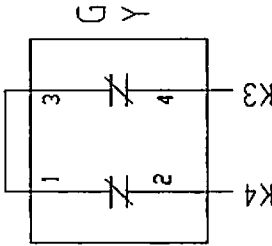
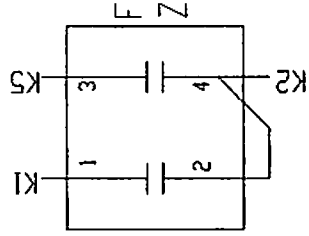
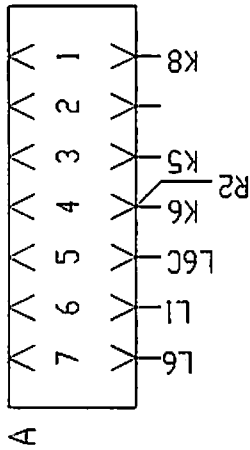
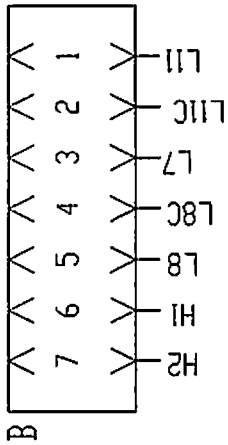
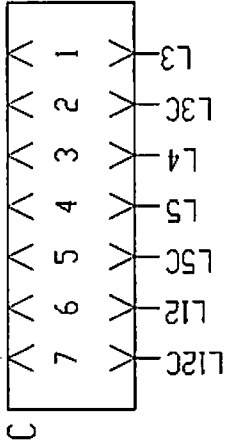
480V. C.H. P.S. CH. 7

7005/804

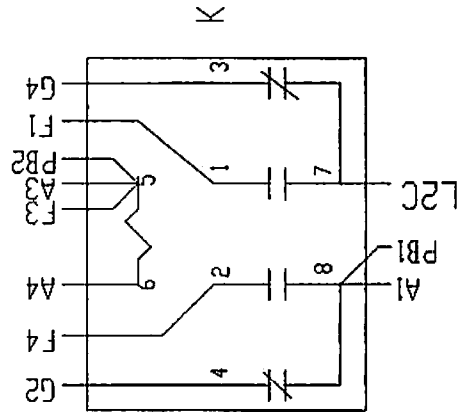
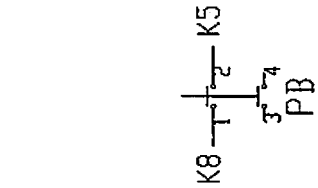
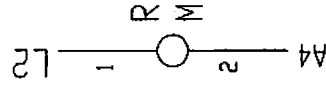
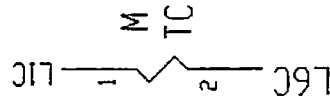
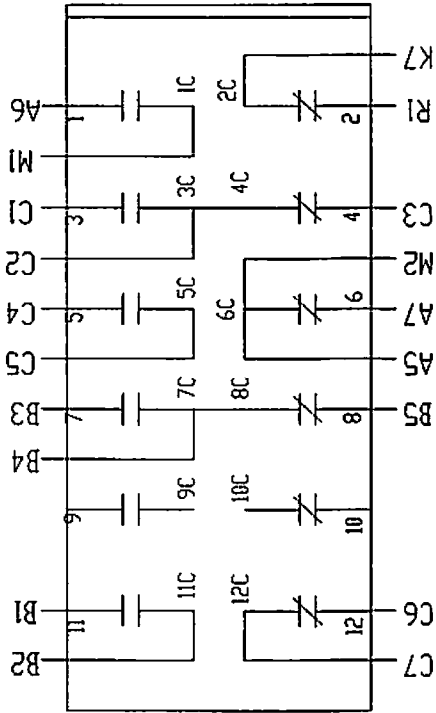
C



MKCR 842  
SWS - KC FSO



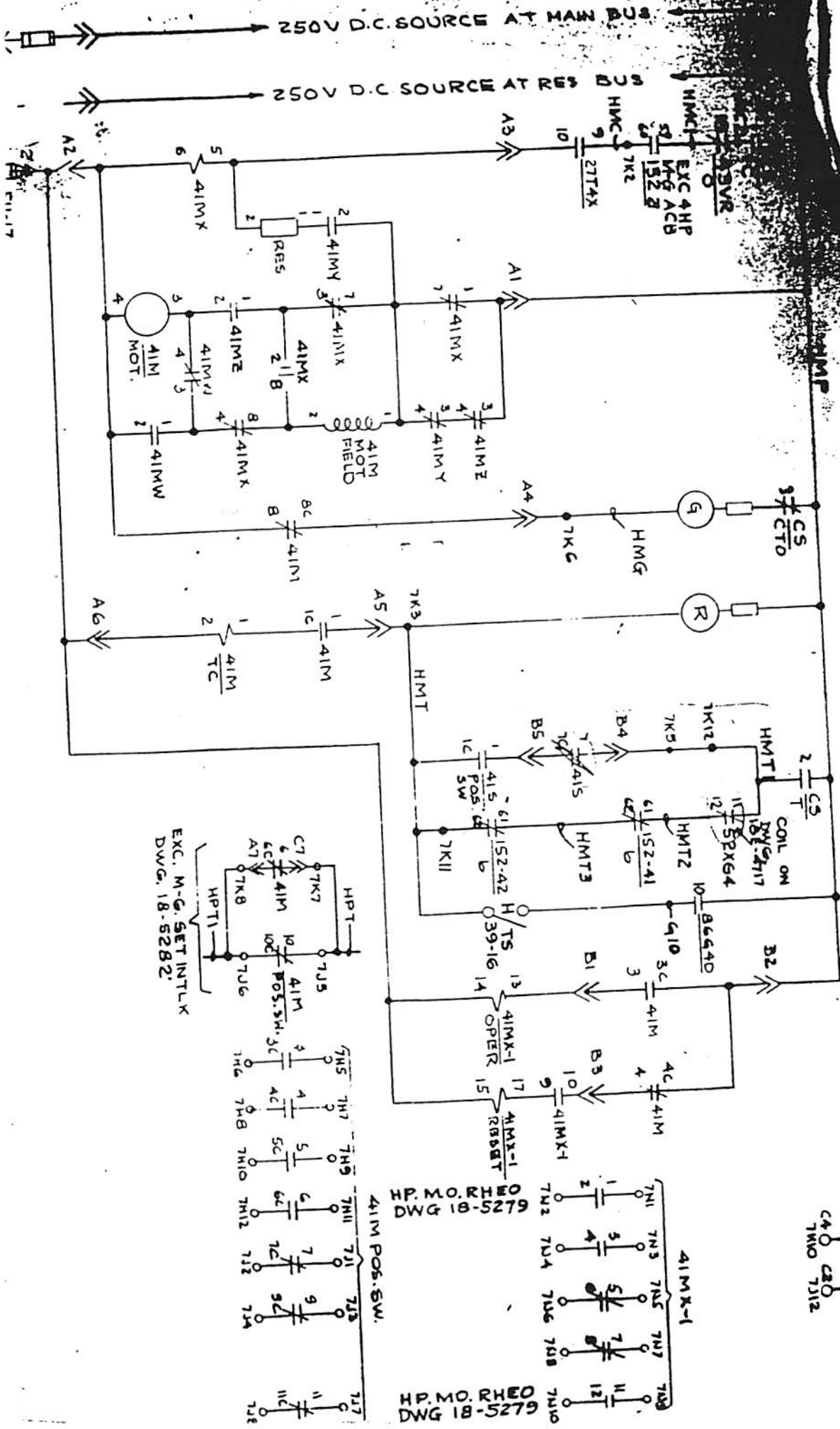
L  
AUX. SW.



MKCR842  
SWTS - KC F50

AKFD

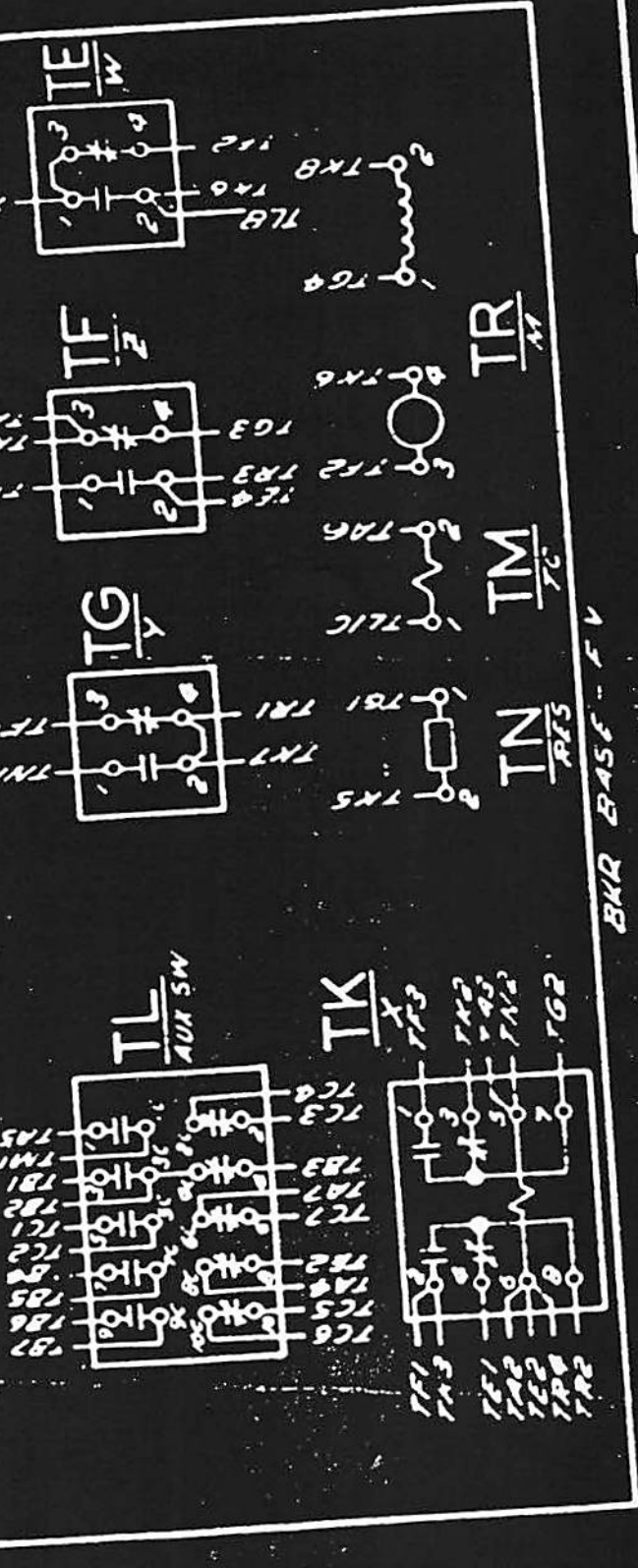
W. J. ...







MIN  
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 7K100



BKR BASE - F V

BKR COMPT - F V

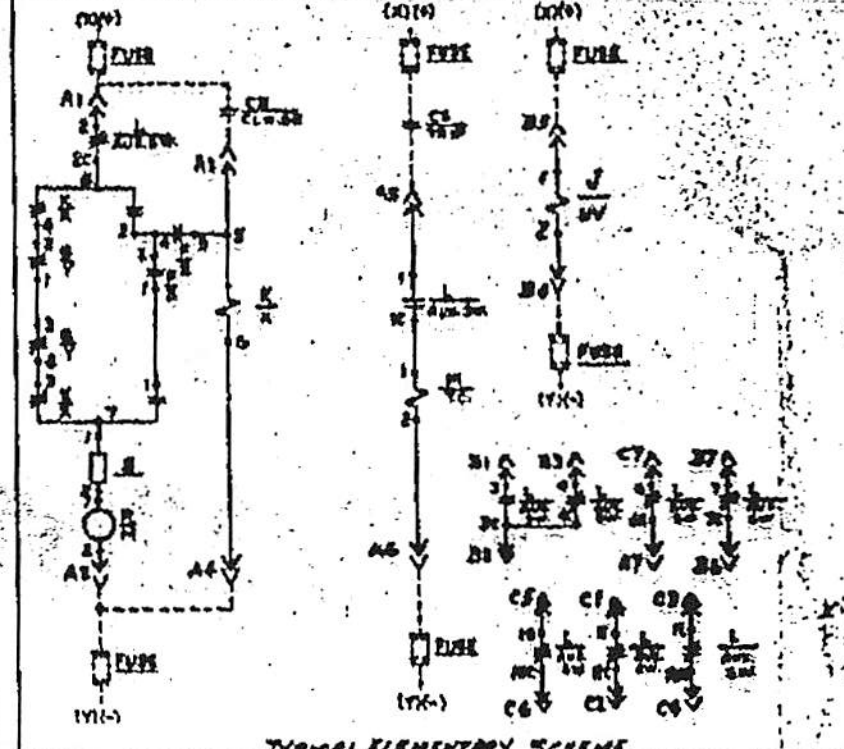
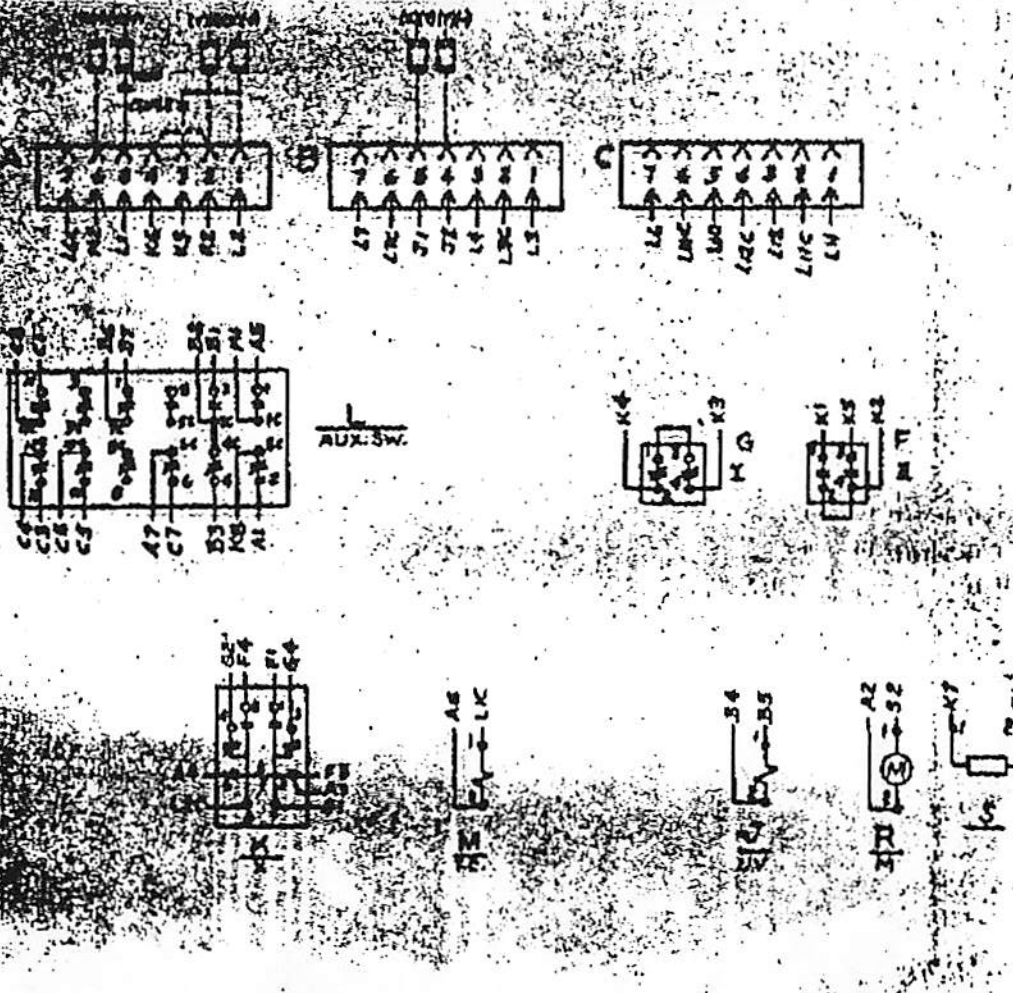
HP. M

AK-2-50.78.8100  
DRAWING SKR.

NOTE: SKR SHOWN IN  
OPEN POSITION  
WITH SPRING  
DISCHARGED

0116 B 4008

CONN. & ELEM. DIAG.



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A-SEC. DISC. AT TOP LEFT
- B-SEC. DISC. AT TOP CENTER
- C-SEC. DISC. AT TOP RIGHT
- F-A-CUT-OFF SWITCHES (Y, Z)
- J-UNDERVOLTAGE DEVICE, TIME OR INSTANTANEOUS (E.M.S.)
- K-CLOSING RELAY TYPE NSR(X)
- L-AUX SW "A" & "B" CONTACTS TYPE AB12 (AUX. SW)
- M-SHUNT TRIP (T. C.)
- R-CLOSING SPRING CHARGING MOTOR (M)
- S-DROPPING RESISTOR FOR MOTOR

CONNECTION DIAGRAM, SKR, BASE FRONT VIEW

DATE: APR 19, 1961  
APR 27, 1961

LOW VOLTAGE  
SWITCHGEAR DEPARTMENT  
PHILADELPHIA

0116 B 4008

LSP-A RD

JOLE

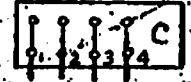
0127B7061

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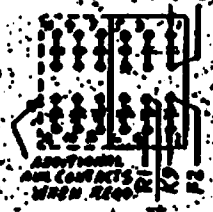
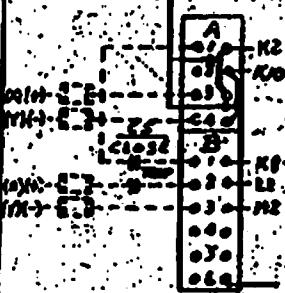
0127B7061 **CONN. ELEM. DIAGRAM**  
FIRST MADE FOR (QUICK-CLOSE) AKZ-305/759/1005

NOTE: REMOVE JUMPERS A1-A3 & A2-A6 WHEN ALTERNATE WIRING IS USED.

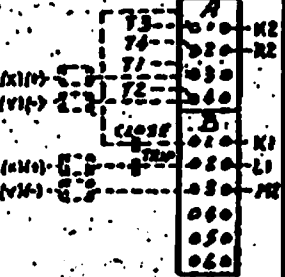
**FRONT VIEW**



H1 H2 H3 H4  
 OPEN NORMALLY OPEN  
 CLOSED CONTACT



**ALTERNATE WIRING**

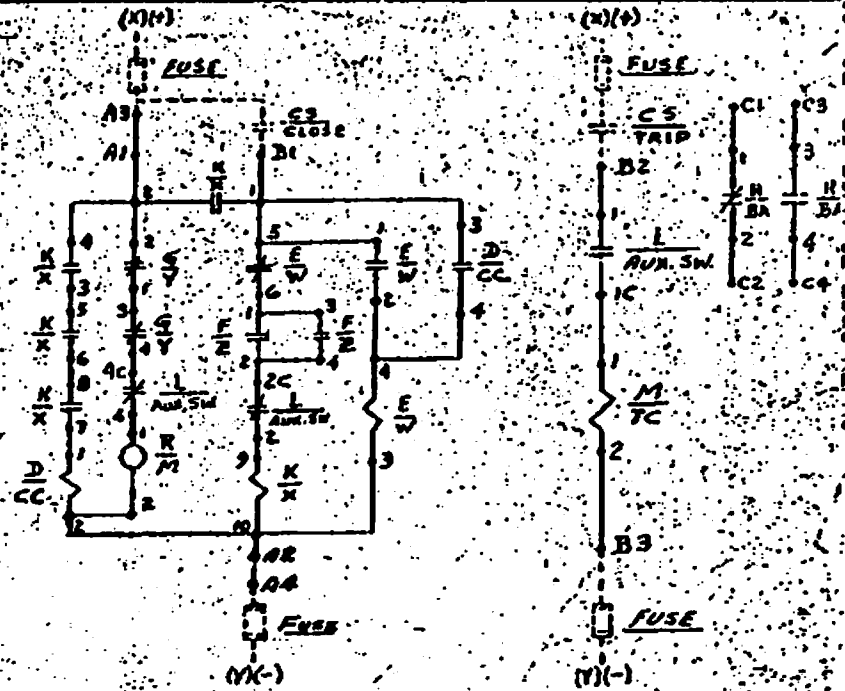


ALL WIRING USED WITH FULL RATING POWER VOLTAGE RATING

300/230 V.A.C.	50 W
460/230 V.A.C.	25 W
460/230 V.A.C.	50 W
460/230 V.A.C.	60 W
575/230 V.A.C.	25 W
575/230 V.A.C.	50 W
575/230 V.A.C.	60 W

ATT. IRLAND  
 MODIFICATIONS

**CONNECTION DIAGRAM - BRK BASE FRONT VIEW**



**TYPICAL ELEMENTARY SCHEME  
 LIST OF ABBREVIATIONS**

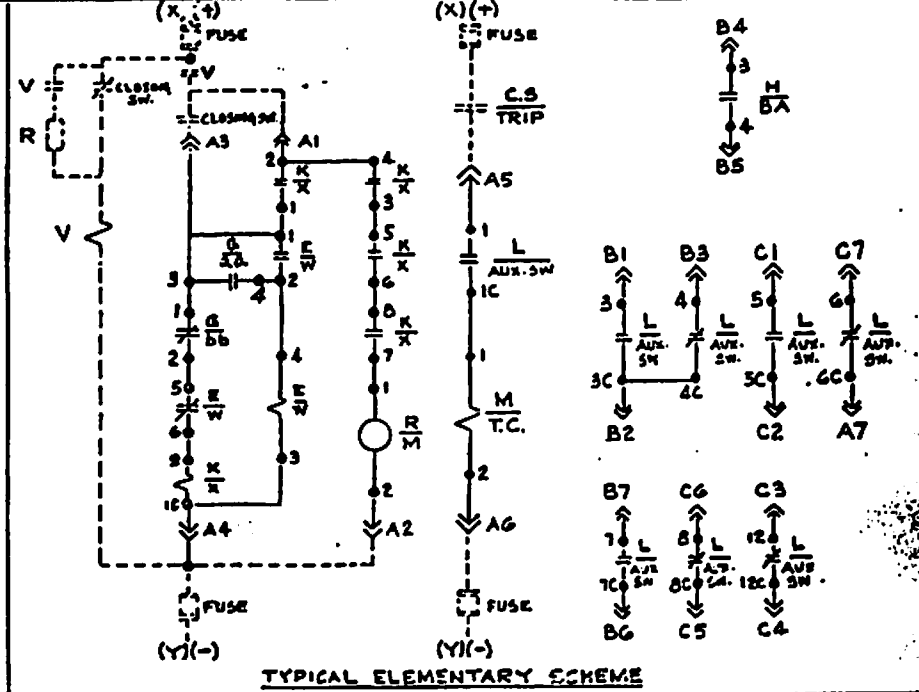
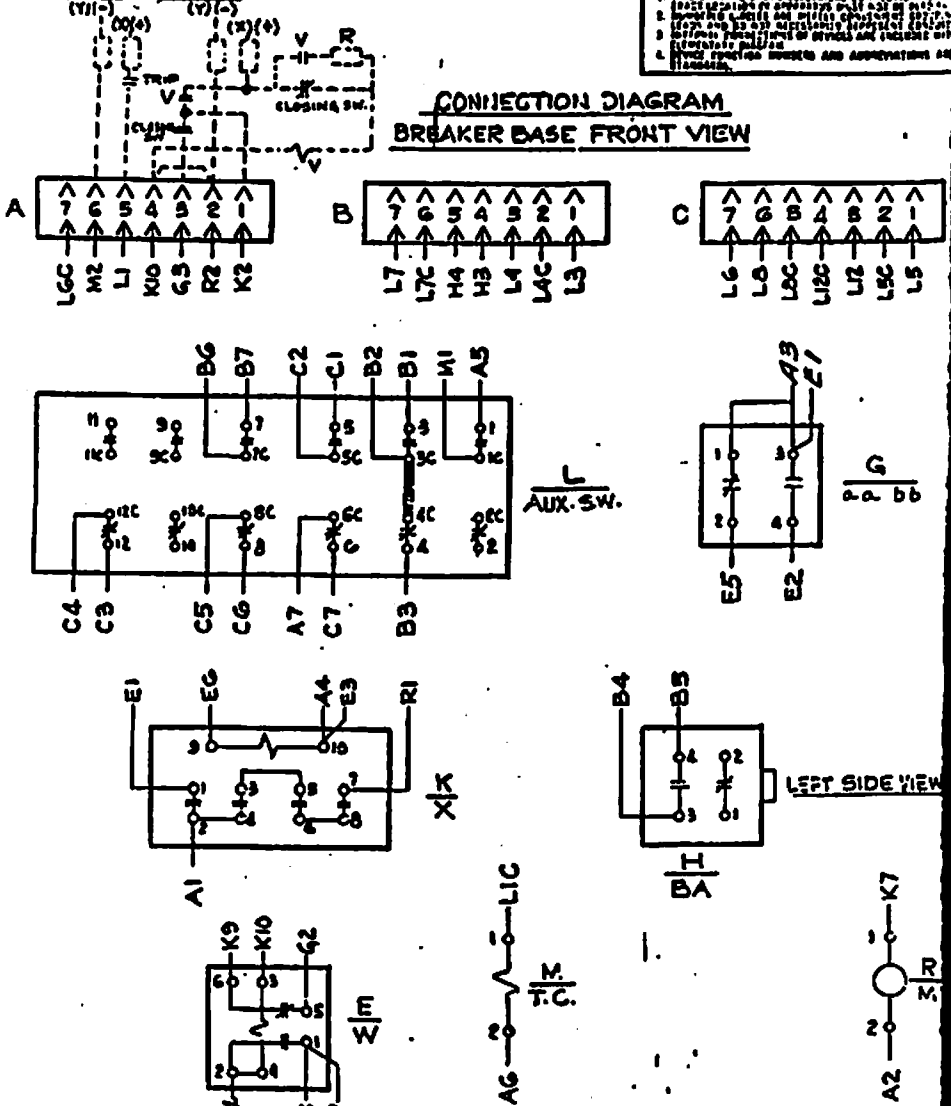
- A-TERMINAL BOARD LOCATED LEFT SIDE - F.X
- B-TERMINAL BOARD LOCATED LEFT SIDE - F.V
- C-TERM. BD. MID ON BELL ALARM
- D-CLOSING RELAY (CC)
- E-ANTI-PUMP RELAY (W)
- F&G-CUT-OFF SWITCHES (Y,Z)
- H-BELL ALARM OR LOCKOUT DEVICE OPERATES WHEN BRK IS TRIPPED BY ANY MEANS OTHER THAN SHUNT OR MANUAL TRIP
- I-AUXILIARY SW. 'a' & 'b' CONTACTS TYPE SB-12
- J-M SHUNT TRIP (T.C.)
- K-CONTROL RELAY (X)
- L-AUXILIARY SW. 'a' & 'b' CONTACTS TYPE SB-12
- M-SHUNT TRIP (T.C.)
- N-BELL ALARM OR LOCKOUT DEVICE OPERATES WHEN BRK IS TRIPPED BY ANY MEANS OTHER THAN SHUNT OR MANUAL TRIP
- O-AUXILIARY SW. 'a' & 'b' CONTACTS TYPE SB-12
- P-CLOSING RELAY (CC)
- Q-ANTI-PUMP RELAY (W)
- R-CLOSING RELAY (CC)
- S-ANTI-PUMP RELAY (W)
- T-AUXILIARY POWER TRANSFORMER (TRANS.)

0127B7061  
 1961

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS...
2. ...
3. ...
4. ...
5. ...

0128B2693  
 CONNECTION & ELEMENTARY DIAGRAM  
 AK-2-50-X & AK-2-75-X WITH OUT PRE-CHARGE.  
 FIRST MADE FOR REG. 221-76-2-47

**CONNECTION DIAGRAM  
 BREAKER BASE FRONT VIEW**



- LIST OF ABBREVIATIONS**
- A-SEC. DISC. AT TOP LEFT.
  - B-SEC. DISC. AT TOP CENTER.
  - C-SEC. DISC. AT TOP RIGHT.
  - E-ANTI-PUMP RELAY (W).
  - G-CUT-OFF SWITCH (J.L. bb).
  - H-BELL ALARM OR LOCKOUT DEVICE OPERATES WHEN BKR. IS TRIPPED BY ANY MEANS OTHER THAN SHUNT OR MANUAL TRIP & b CONTACTS SHOWN WITH BKR. IN RESET POSITION. (NORMAL OPERATION).
  - K-CONTROL RELAY (X).
  - L-AUX. SW. A & B CONTACTS TYPE SB-12.
  - M-SHUNT TRIP (T.C.).
  - R-CLOSING SPRING CHARGING MOTOR (M).
  - V-VOLTAJE RELAY SUPPLIED BY OTHERS.

0148A4528

AK-2A-50/75/100 D/O AC

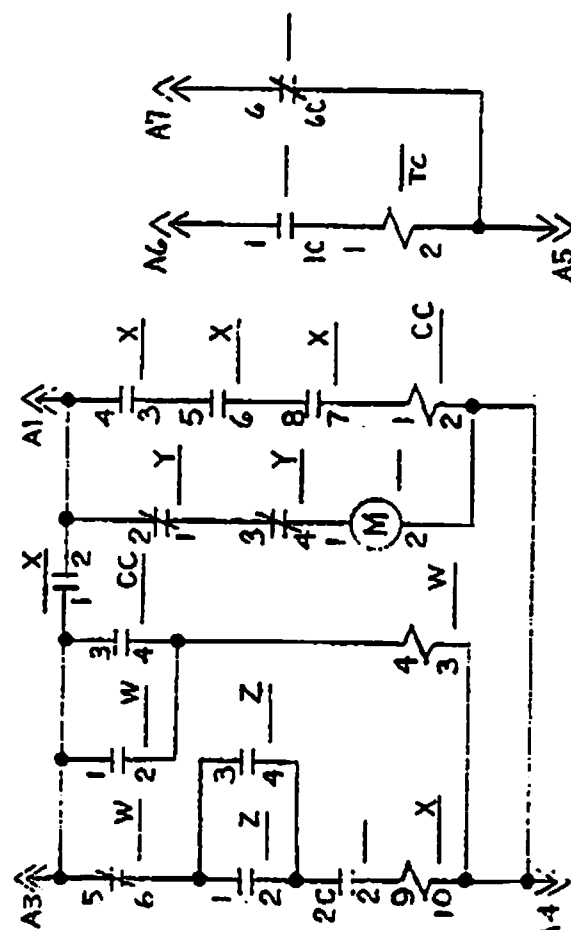
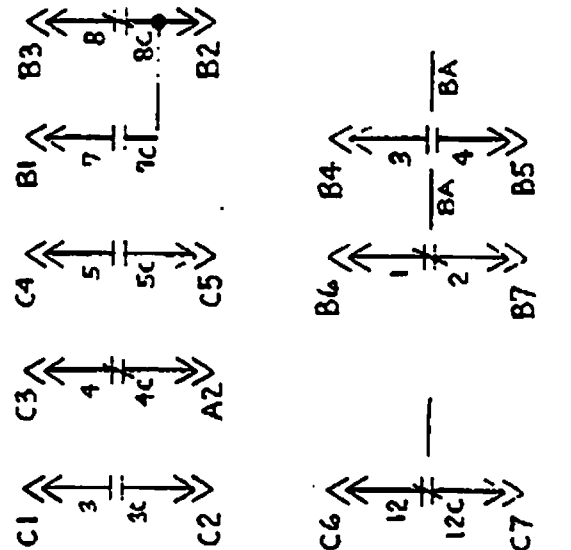
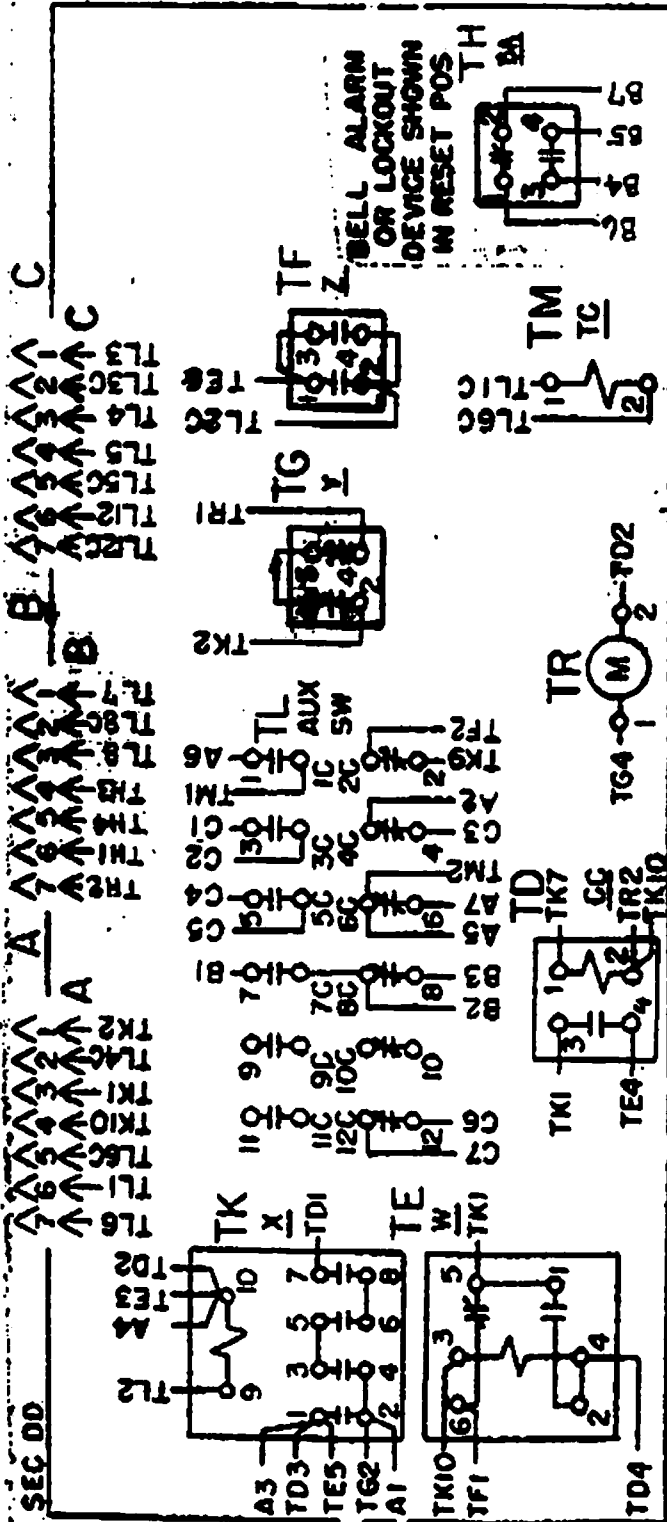
CONT ON SHEET

SH NO.

FIRST MADE FOR

ELEM & CONN. DIAG.

JOE



MADE BY  
*W. Zimmerman* 21-28, 1962  
 ISSUED

APPROVALS  
 W.H.Z.  
 3/1/62

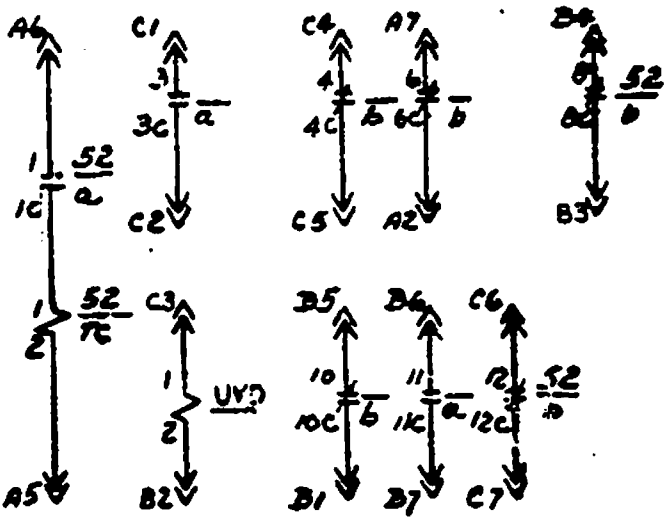
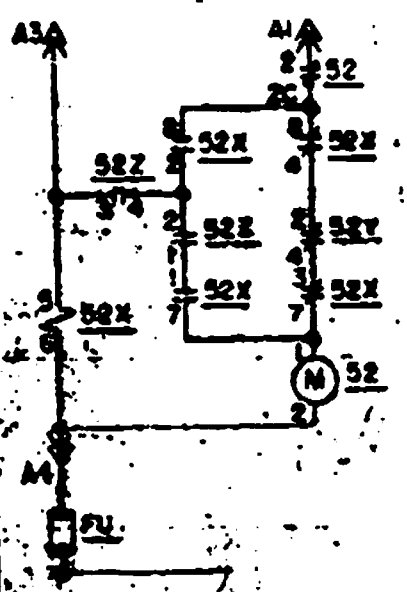
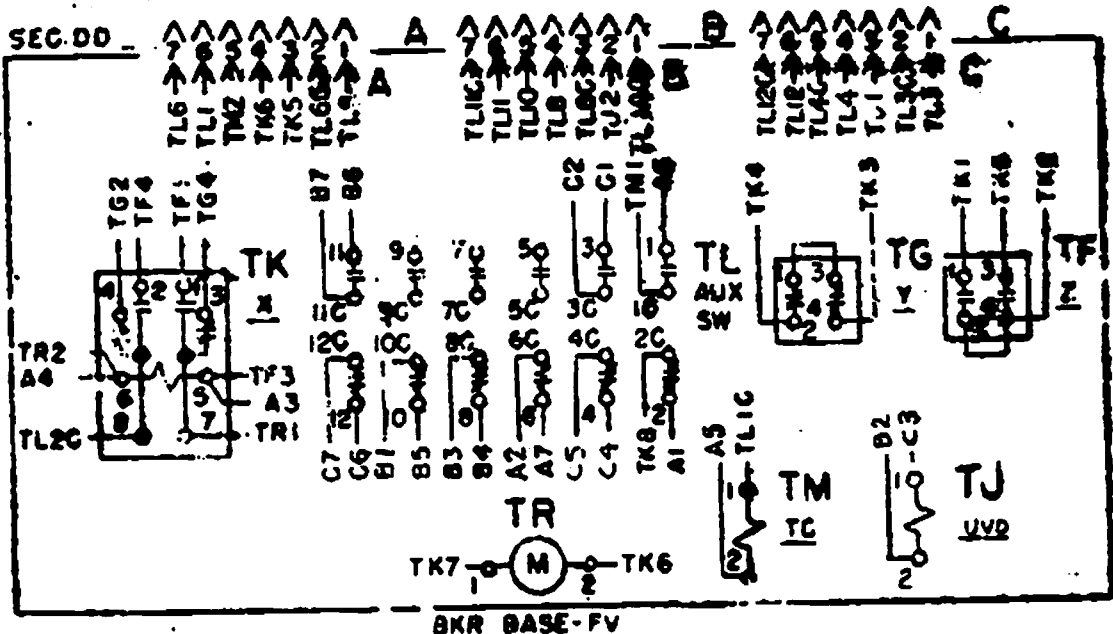
LOW VOLTAGE SWG.: DIV OR DEPT.  
 PHILADELPHIA. LOCATION

0148A4528  
 CONT ON SHEET SH AC

0165A8428  
CONT ON SHEET

TITLE  
**AK-2A-50/75/100 ACB**  
FIRST MADE FOR  
SO

REVISIONS



REVISED BY  
DATE  
1  
7-5-58

DATE  
May 4, 1964  
BY  
LSP

LOW VOLTAGE SWGR ON GA  
PHILADELPHIA LOCATION

0165A8428

DAVE

GENERAL ELECTRIC

REV. 0

0165A8454

TITLE

AK-2-50/75/100 D/O ACB

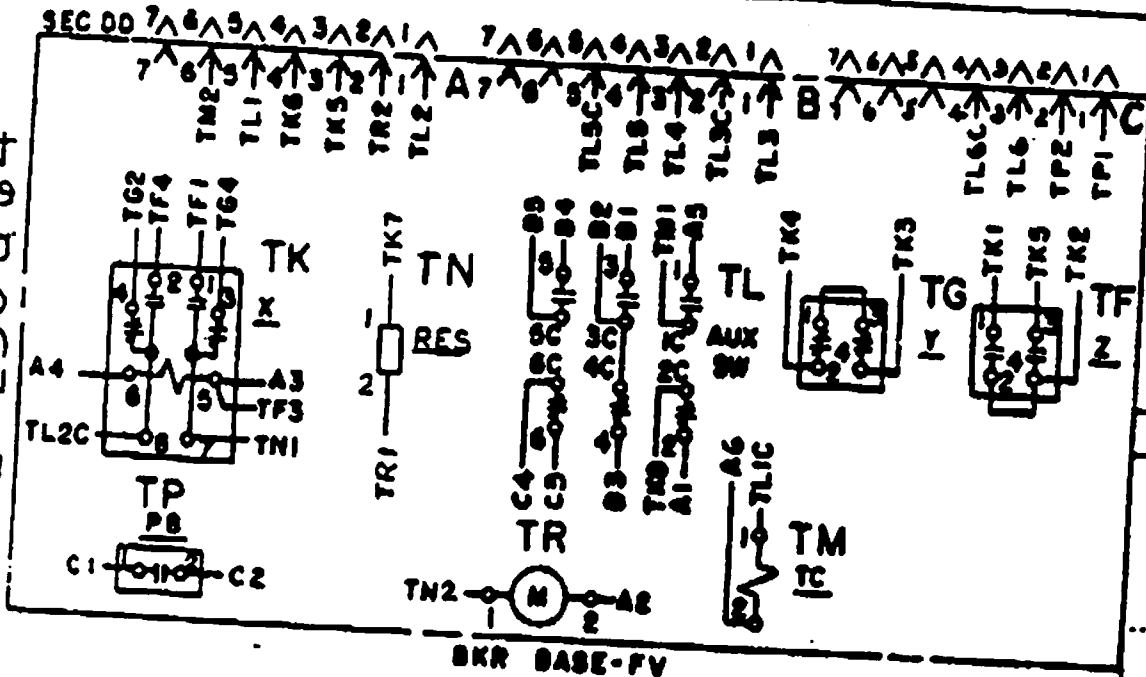
CURT CO.

10 00

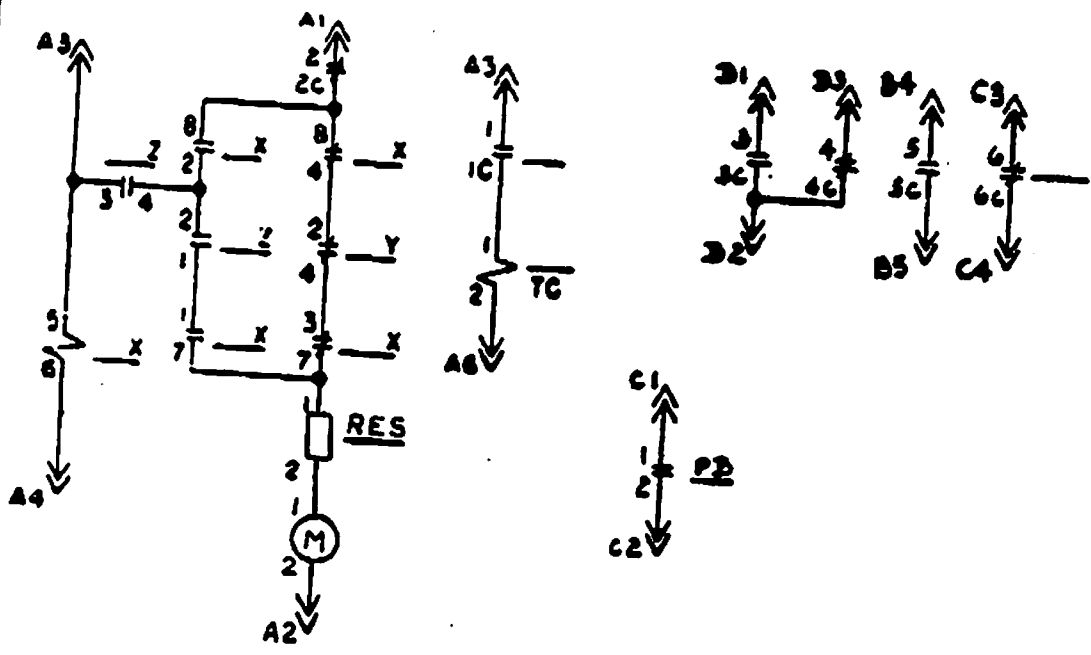
FIRST MADE FOR REG.

SU

USE 250G64



REVISIONS



APP. OF GMB

DATE

7/13

LOW VOLTAGE SWITCHGEAR

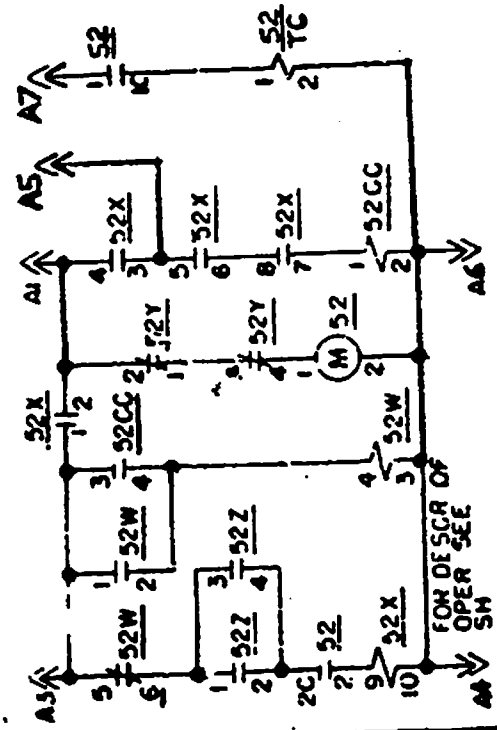
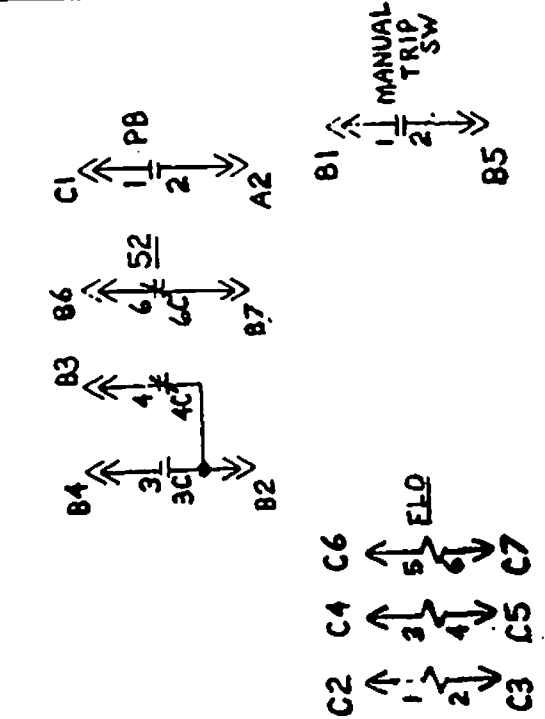
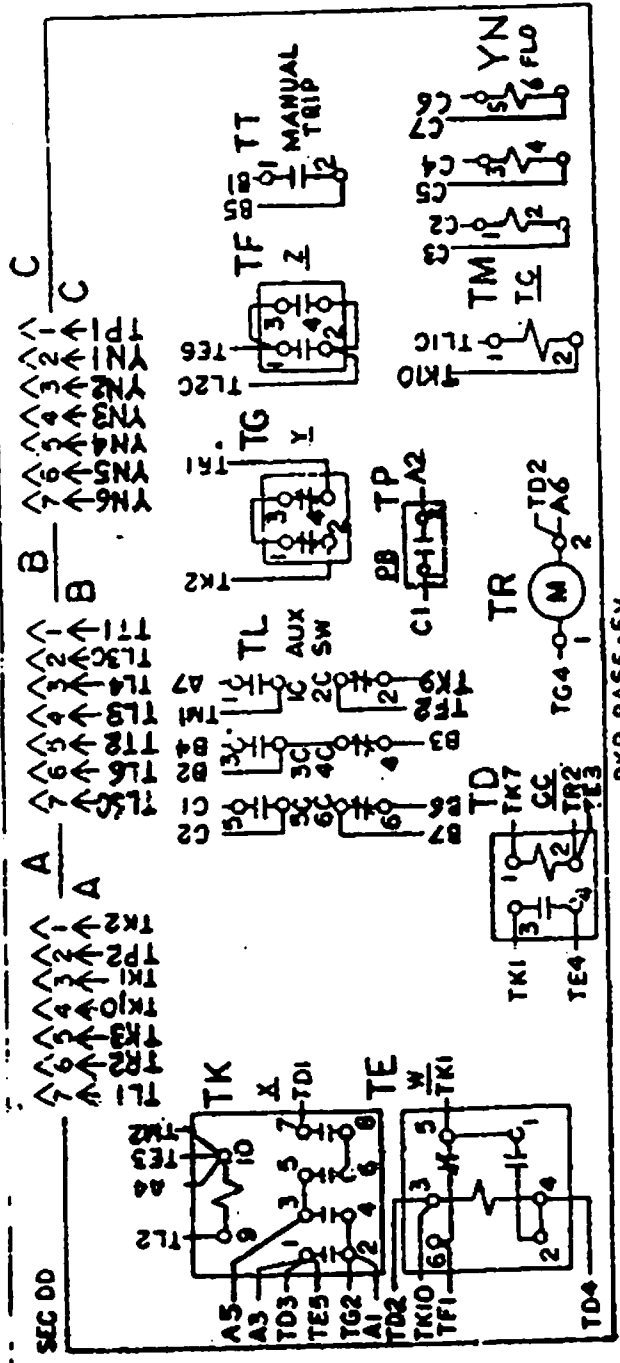
PRINTS TO



DAVE

GENERAL ELECTRIC

REV. NO. <b>0165A8495</b>	TITLE <b>AK-2- 75/100S D/O ACB</b>	CONT. OR SHEET 1 OF 2
CONT. OR SHEET 1 OF 2	FIRST MADE FOR REQ. <b>481-95433</b>	S. O. <b>911833</b>



<i>Handwritten notes:</i> 2.1.1966 112865	SWITCHGEAR DEPARTMENT PHILADELPHIA	<b>0165A8495</b>
-------------------------------------------------	---------------------------------------	------------------

GENERAL ELECTRIC

175L327-B

REV 7-10  
175 L327-B  
COPY ON SHEET 2 OF NO. 1

TITLE  
CONNECTION DIAGRAMS  
DETROIT ELECTRIC  
FIRST ISSUE FOR MODEL 1-12-28-100

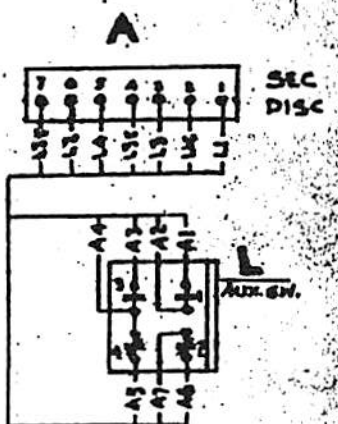


FIG 1  
FRONT VIEW  
29BC175  
4-CIRCUIT AUX SW (WIRING HARNESS)

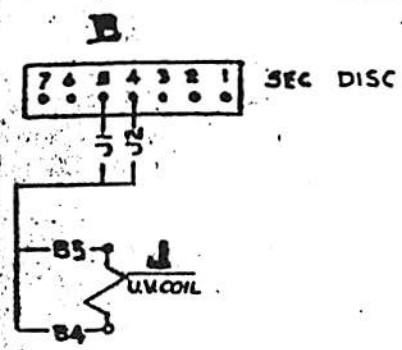


FIG 2  
FRONT VIEW  
UNDER VOLTAGE DEV

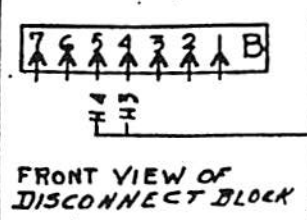
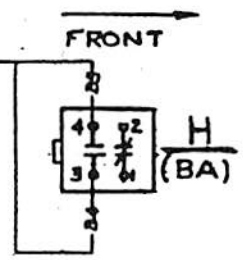


FIG 3  
BELL ALARM "A" SW

DEVICE IN RESET POSITION



LEFT SIDE VIEW OF SWITCH  
BELL ALARM OR LOCKOUT DE  
OPER. ONLY WHEN BKR TRIPS  
ON OVER CURRENT  
HAND RESET

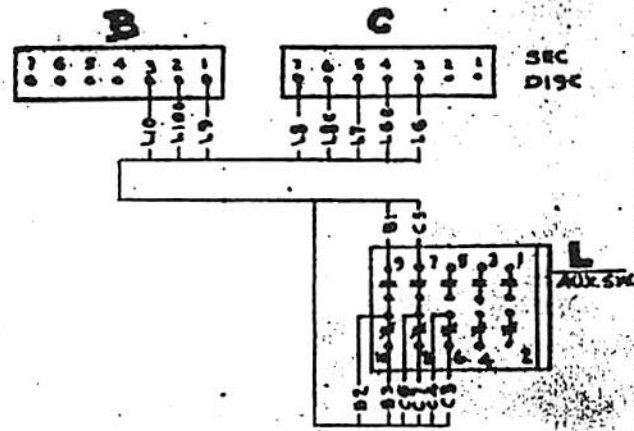


FIG 4  
FRONT VIEW  
SPARE AUX SW (#6, 7, 8, 9, 10 CIR)

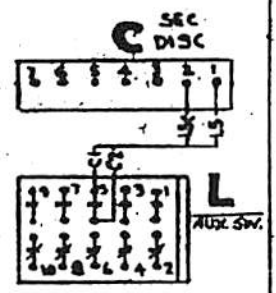


FIG 5  
FRONT VIEW  
& AUX SW (#5 CIR)

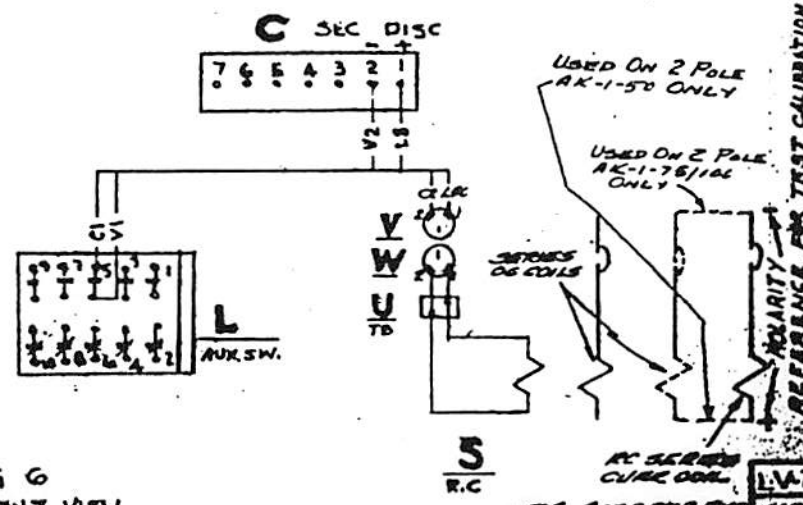


FIG 6  
FRONT VIEW  
RC DEV

175L327-B  
REV 7-10  
10  
7

MADE BY  
A.E. PITCHER FEB 27, 1951  
REV 7-10  
2/11/56

APPROVALS  
SWGR  
PHILA  
175L327-B  
LSP-A RE

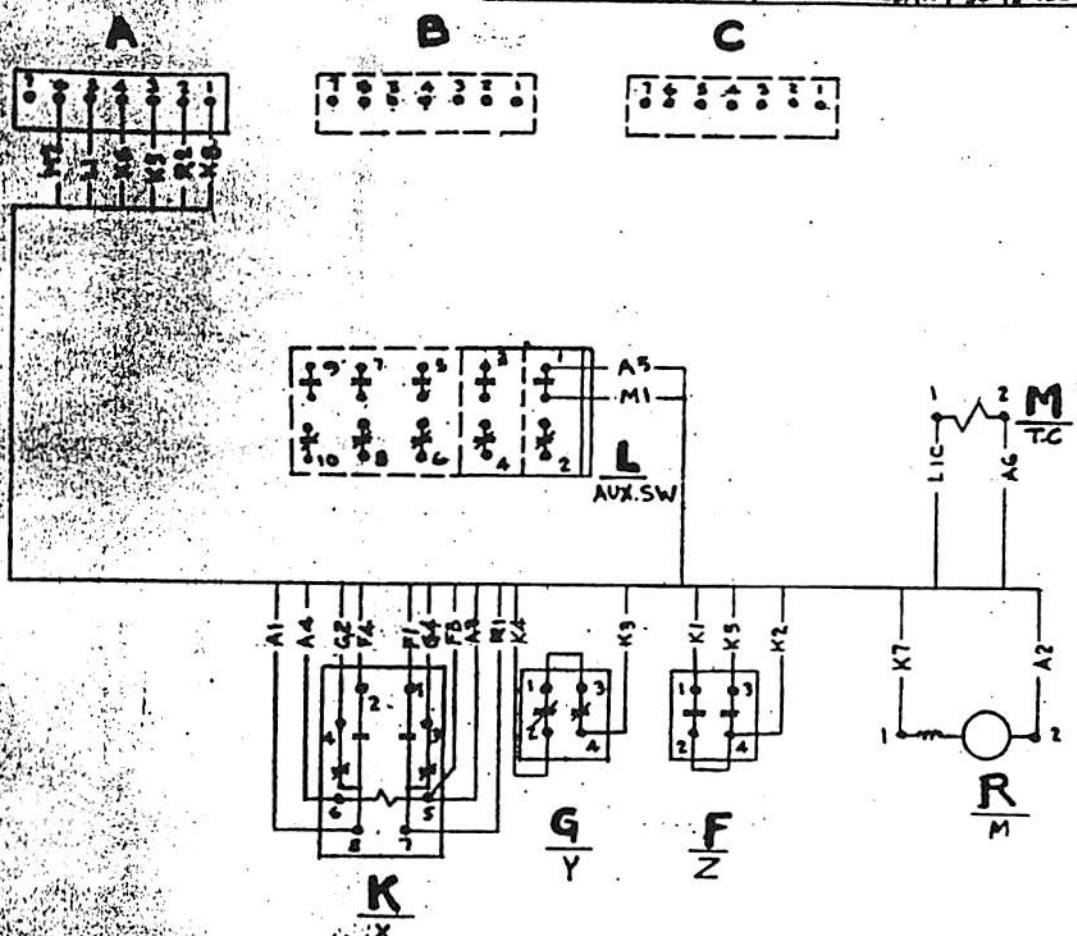
LVF-D-3

GENERAL ELECTRIC

175L327-B

175L327-B  
DRAWN BY: [blank] IN NO. 3  
CHECKED BY: [blank] IN NO. 3

TITLE  
CONNECTION DIAGRAMS  
DRAWN BY: [blank]  
CHECKED BY: [blank]  
FIRST ISSUE FOR: AK-1-50-75-100 S.S.



BKR RATING:	WIRING HARNESS
AK-1-50	293C183 G-1
AK-1-75	293C183 G-2
AK-1-100	293C183 G-3

FIG. 8  
FRONT VIEW  
WITHOUT PB SW  
BKR OPEN SPRINGS DISCHARGED

LVL  
41D  
PAGE 10

MADE BY A. S. MITCHELL FOR G.E.	APPROVALS [blank]	SWGR PHILA	175L327-B CHECKED BY: [blank] IN NO. 3 LSP-A RE
------------------------------------	----------------------	---------------	-------------------------------------------------------

LVE-D-53-23-P.8

REV. NO. 7-8-

175L327-B  
CONT ON SHEET 5 SH NO. 4

TITLE

CONNECTION DIAGRAM,  
DISCONNECT BREAKER.

FIRST MADE FOR REQ. AK-1-50-75-100 S.O.

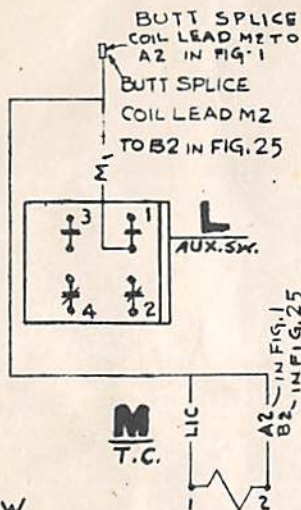


FIG. 9  
FRONT VIEW  
SHUNT TRIP (4-CIR AUX SW)

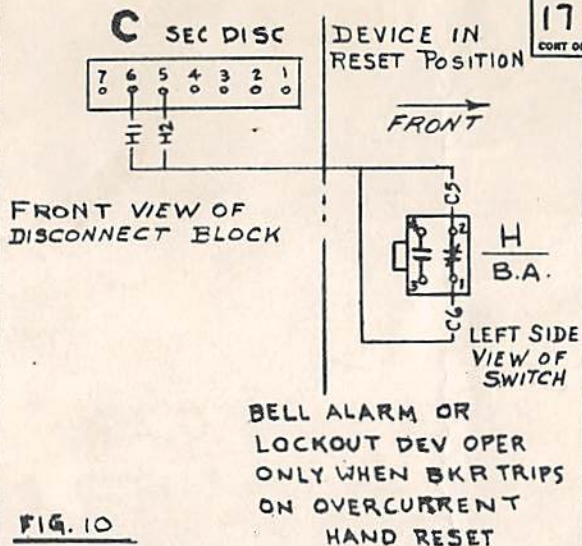


FIG. 10  
BELL ALARM "b"

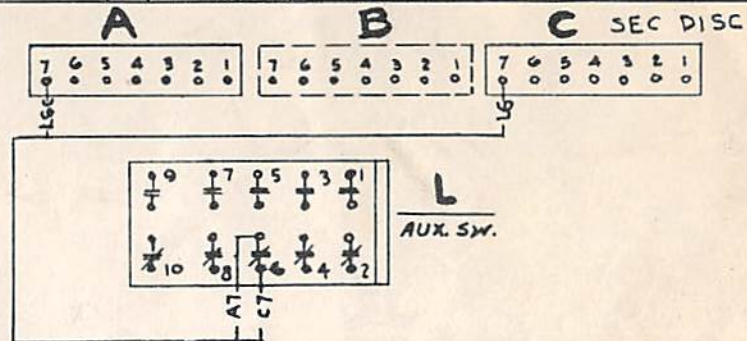


FIG. 11  
FRONT VIEW  
"b" AUX SW

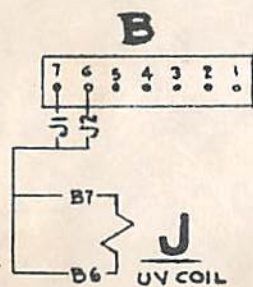


FIG. 12  
FRONT VIEW  
UV DEV

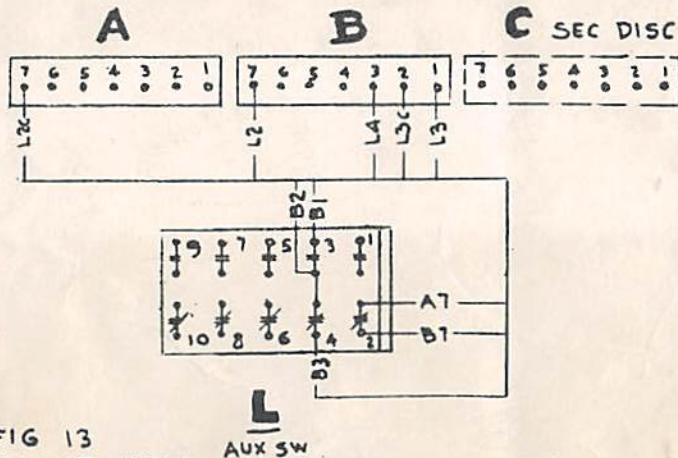


FIG. 13  
FRONT VIEW  
"b" AUX SW

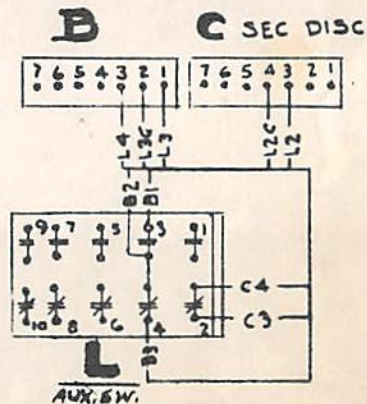


FIG. 14  
FRONT VIEW  
"b" AUX SW (#2 CIR)

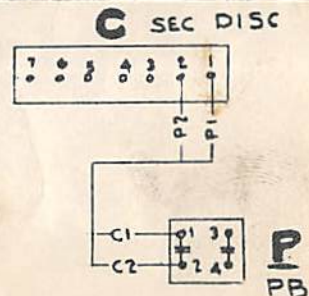


FIG. 15  
FRONT VIEW  
PB SW  
WIRED SEPARATELY

CHK FIG 9 B2 WAS 0-2-24-57  
RETRACED 1/21/56  
REVISED FIG. 10 2/2/56

MADE BY  
A.E. PITCHER FEB. 27 '51  
ISSUED  
No. 28, 1956

APPROVALS

SWGR  
PHILA

175L327-B  
CONT ON SHEET 5 SH NO. 4

LSP A RE

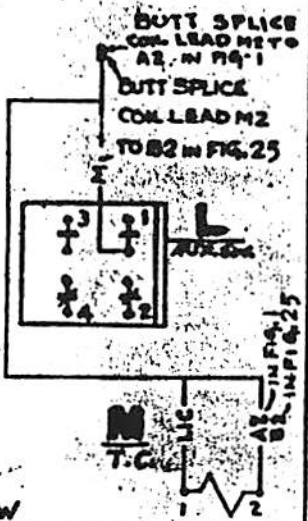


FIG. 9  
 FRONT VIEW  
 SHUNT TRIP (4-CIR AUX SW)

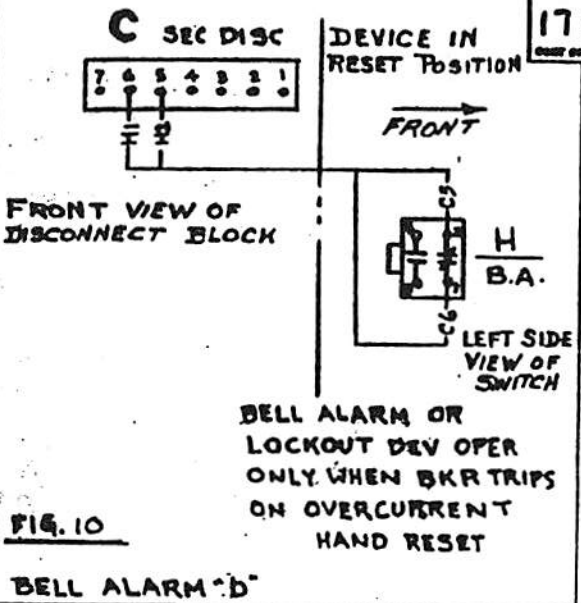


FIG. 10  
 FRONT VIEW OF  
 DISCONNECT BLOCK  
 BELL ALARM "D"

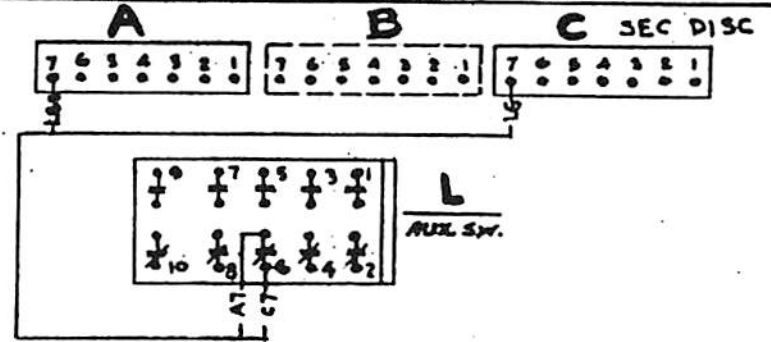


FIG. 11  
 FRONT VIEW  
 "b" AUX SW

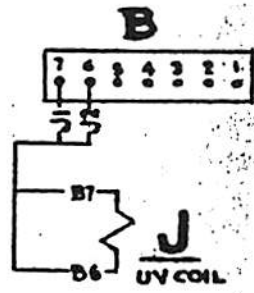


FIG. 12  
 FRONT VIEW  
 UV DEV

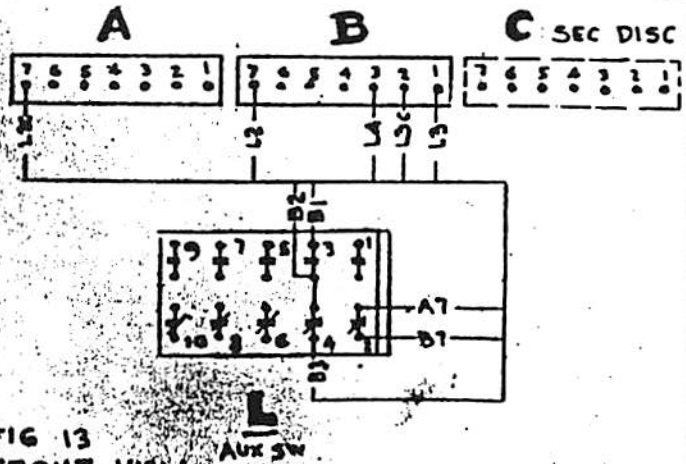


FIG. 13  
 FRONT VIEW  
 "b" AUX SW

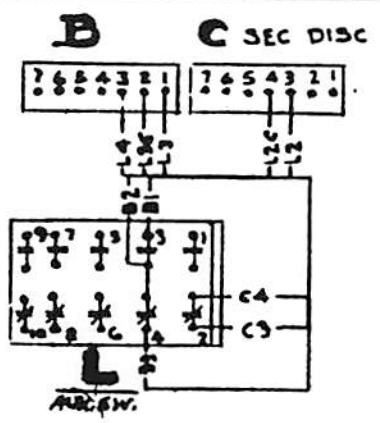


FIG. 14  
 FRONT VIEW  
 "b" AUX SW (#2 CIR)

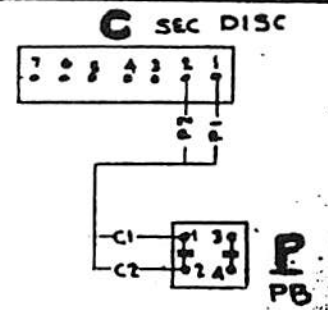


FIG. 15  
 FRONT VIEW  
 PB SW  
 WIRED SEPARATELY

Fig. 9 B2  
 Approved  
 7

MADE BY  
 A.E. PITCHER FEB. 27 '51  
 RE-APPROVED  
 28, 1956

SWGR  
 PHILA

175L327-B

LSP-A

RE

LVE-D-50-100

GENERAL ELECTRIC

175L327-B

175L327-B  
UNIT OR MOUNT    NO. 8  
 TITLE  
**CONNECTION DIAGRAMS**  
WITHOUT IDENTIFIER  
PRINT MADE FOR USE AK-1-50-15-100 D/G    12

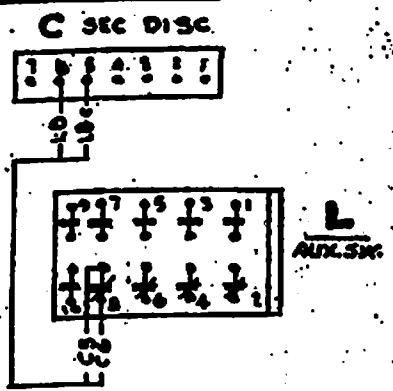


FIG 16  
 FRONT VIEW  
 AUX SW (\*b\* CIR\*8)

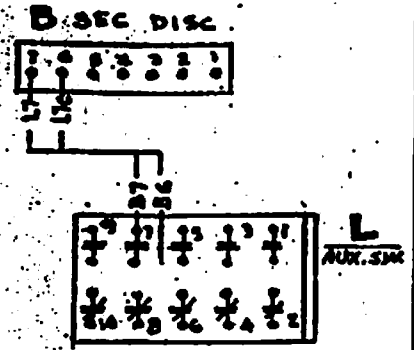


FIG 17  
 FRONT VIEW  
 AUX SW (\*a\* CIR\*7)

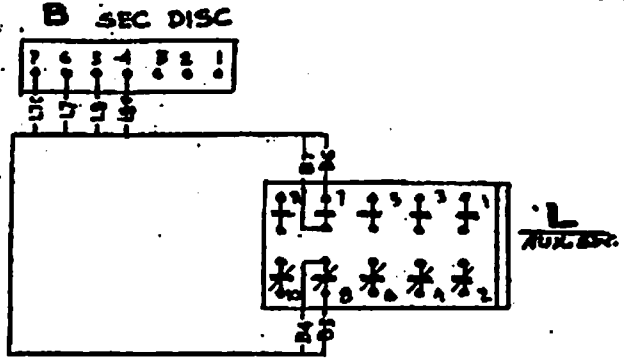


FIG 18  
 FRONT VIEW  
 AUX SW (\*a\*\*b\* CIR\*7&8)

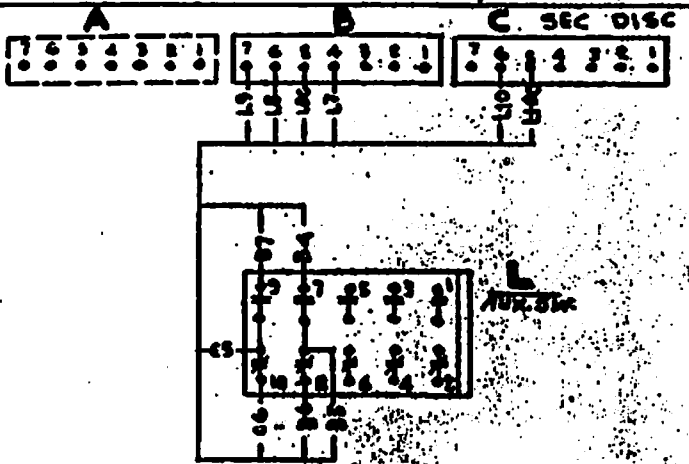


FIG 19  
 FRONT VIEW  
 AUX SW (2a-2b CIR=7,8,9&10)

- LIST OF ABBREVIATIONS**
- A SEC DISC AT TOP LEFT
  - B SEC DISC AT TOP CENTER
  - C SEC DISC AT TOP RIGHT
  - F CUT OFF SWITCHES (Y,Z)
  - G
  - H BELL ALARM OR LOCKOUT DEV OPER WHEN BKR TRIPS ON OVERCURRENT. HAND RESET \*a\* AND \*b\* CONTACT (BA)
  - J UNDER VOLTAGE DEV TIME OR INSTANTANEOUS (U.V)
  - K CLOSING RELAY TYPE HGA (X)
  - L AUX SW \*a\* AND \*b\* CONTACTS TYPE SB-12 (AUX SW)
  - M SHUNT TRIP (T.C)
  - P PUSH BUTTON CLOSING SW ON BKR (P.B)
  - R CLOSING SPRING CHARGING MOTOR (M)
  - S REV. CURR TRIP DEV FOR D-C (RC)
  - U-TERM.BD. MOUNTED ON LEFT HAND POLE UNIT BASE
  - V- MALE DISC. PLUG MOUNTED ON BKR.
  - W-FEMALE DISC. PLUG. MTD. ON. BKR.

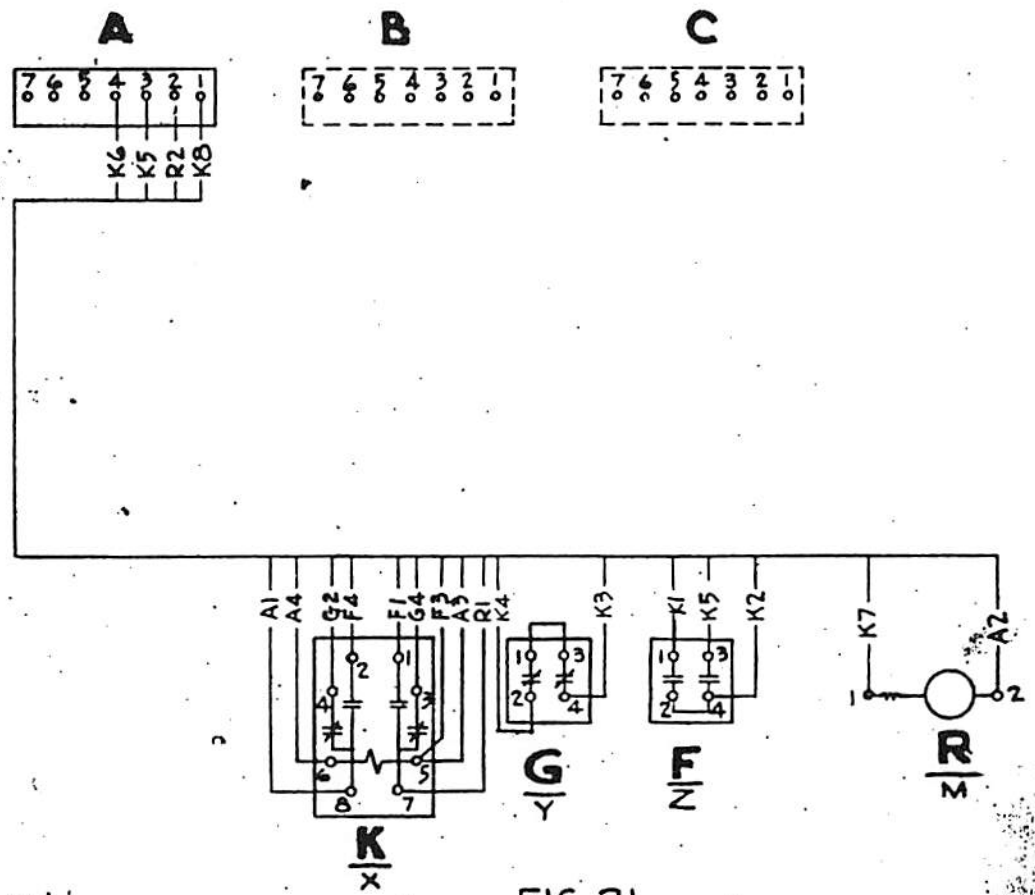
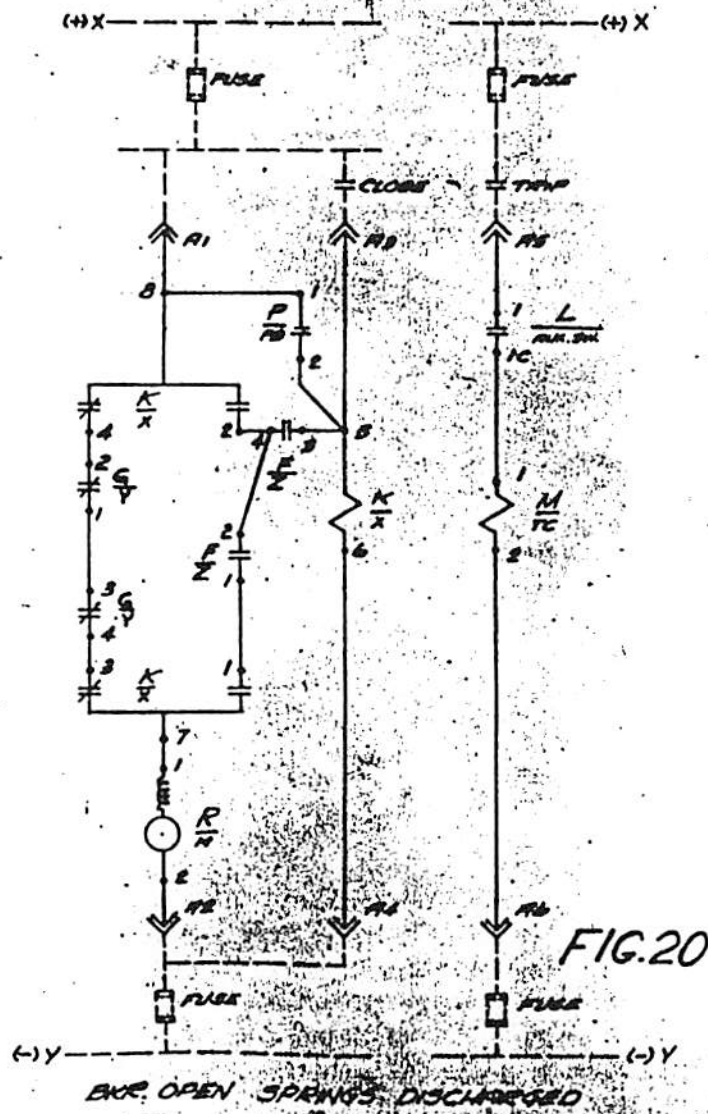
DESIGNED BY CHECKED BY DATE	DRAWN BY DATE	MADE BY DATE	APPROVED DATE	SWGR PHILA	175L327-B RE
-----------------------------------	------------------	-----------------	------------------	---------------	-----------------

GENERAL ELECTRIC

175L327-B  
CONT. ON SHEET 7

7-8-9  
175L327-B  
CONT. ON SHEET 7

TITLE  
ELEMENTARY DIAGRAM  
DRAWOUT BREAKER  
FIRST SIDE FOR REG. AC-1-50-75-100. S.D.



LVE-D-33-333-33-33

MADE BY REPTCHER MEXICO	APPROVAL	SWGR. PHILA.	175L327-B
TESTED APR. 28, 1956			
		LSP-A	RE

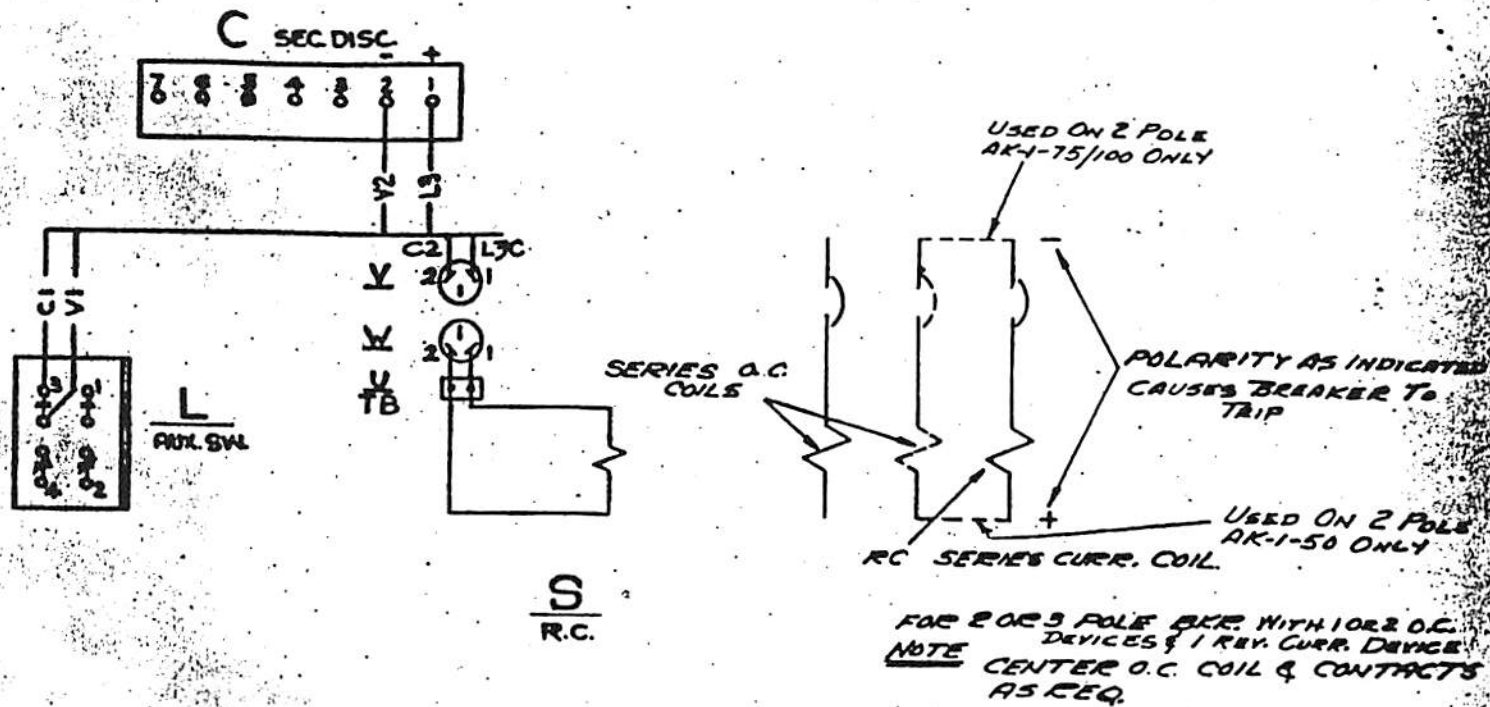
175L327-B

GENERAL ELECTRIC

175L327-B

175L327-B  
COPY OR PRINT 8 IN NO. 7

TITLE  
CONNECTION DIAGRAMS  
DRAWOUT BREAKER  
FIRST ISSUE FOR REG. AK-1-50-75-100 22



**FIG-22**  
**FRONT VIEW**  
**REVERSE CURRENT DEVICE**

DESIGNED BY L.V. SWAR	DATE JUN 10, 1953	APPROVED BY L.V. SWAR	175L327-B
ADD. NOTES FOR AK-1-50-75-100 RETRACTED	REVISED JUN 25, 1956	PHILA.	LSP-A R.F.

FIG 41D

175L-327-B

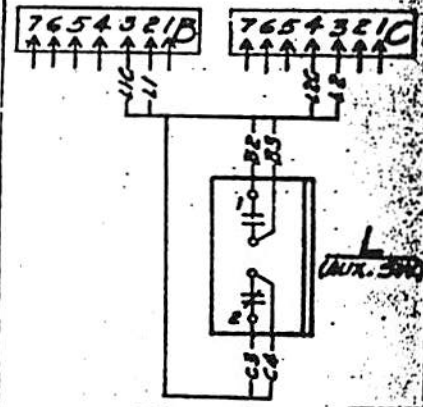
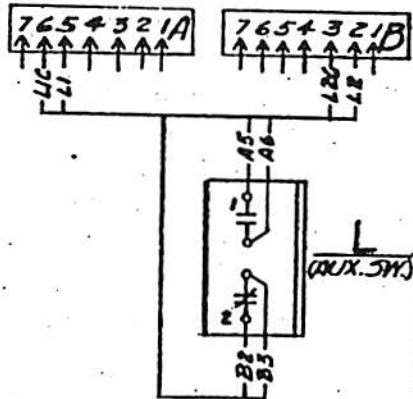
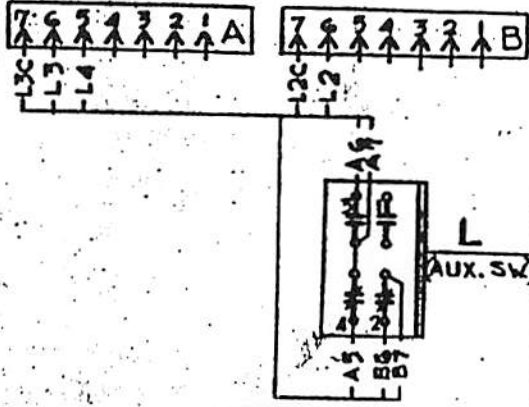
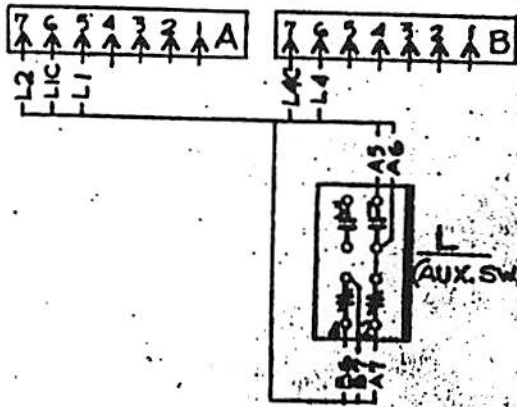
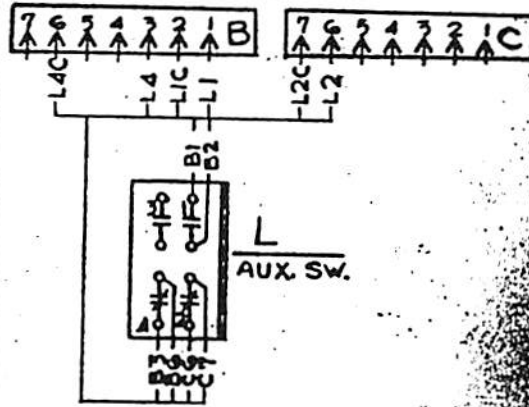
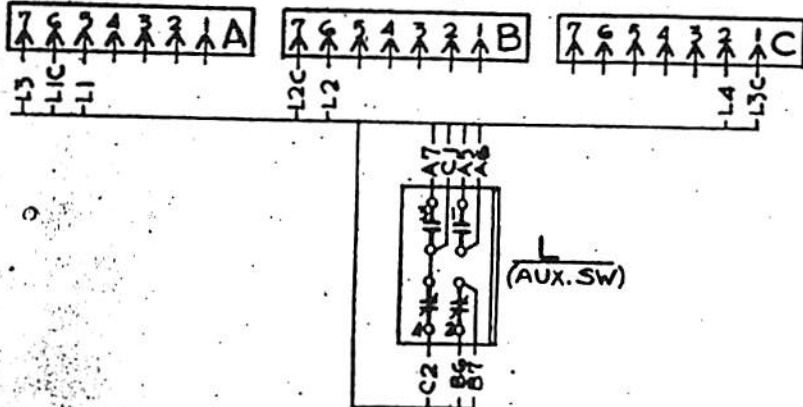
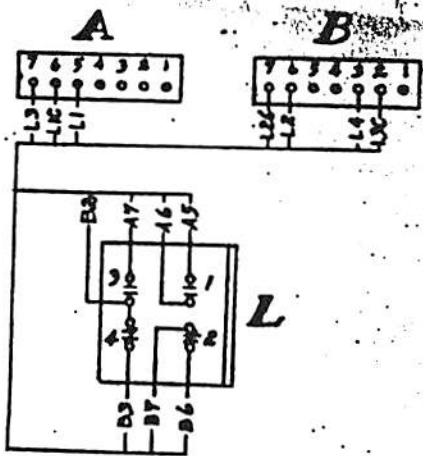


GENERAL ELECTRIC

175L327-B

REV. B-  
175L327-B  
DATE ON SHEET 9 ON NO. 8

TITLE  
CONNECTION DIAGRAM  
FIRST ISSUE FOR REG. AK-1-50-75-100 S.D.O. BKR.



MADE BY A.G. SMITH JAN. 14, 1958	APPROVALS	LV. SWGR PHILA.	175L327-B
DATE JAN. 28, 1956		LSP-A	RE

175-25-19

GENERAL ELECTRIC

175L327-D

CONNECTION DIAGRAM

175L327-B

FIRST MADE FOR REG. A5-1-38/18/00 D. O. BAR.

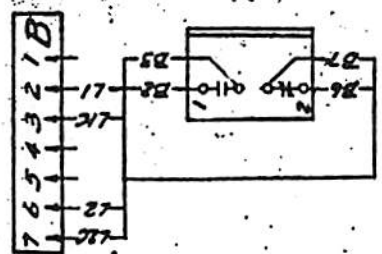


FIG. 30

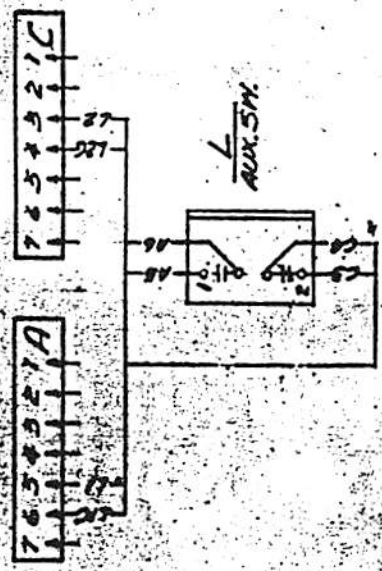


FIG. 31

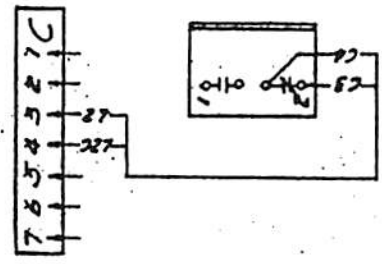


FIG. 34

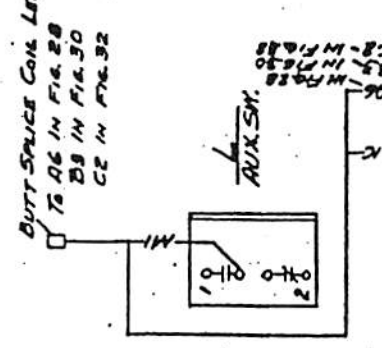


FIG. 35

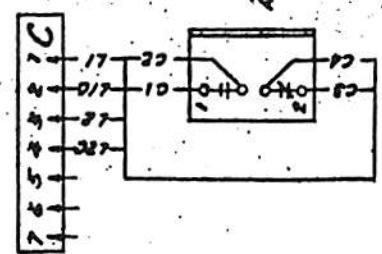


FIG. 32

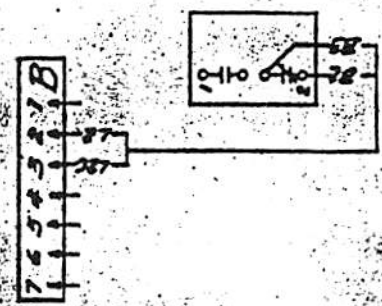


FIG. 33

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175L327-B

4. V. SWGR PHILA.

Nov. 2, 1965

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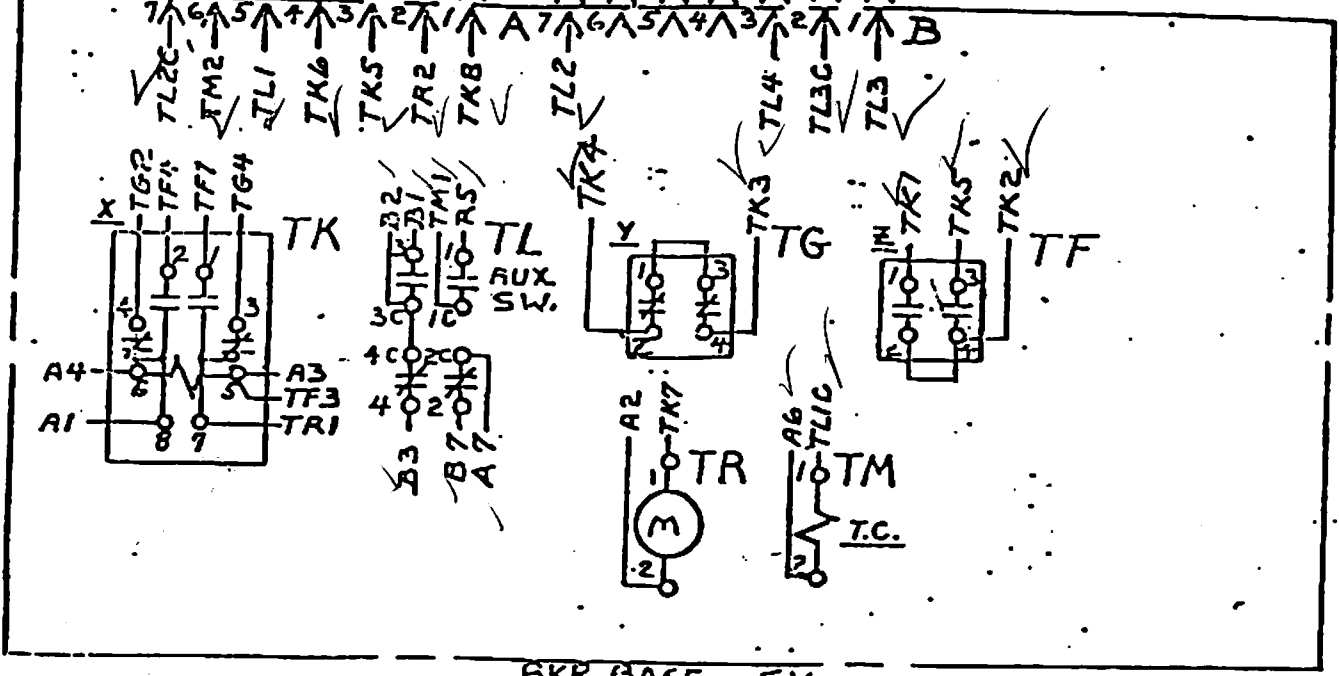
175L327 G49

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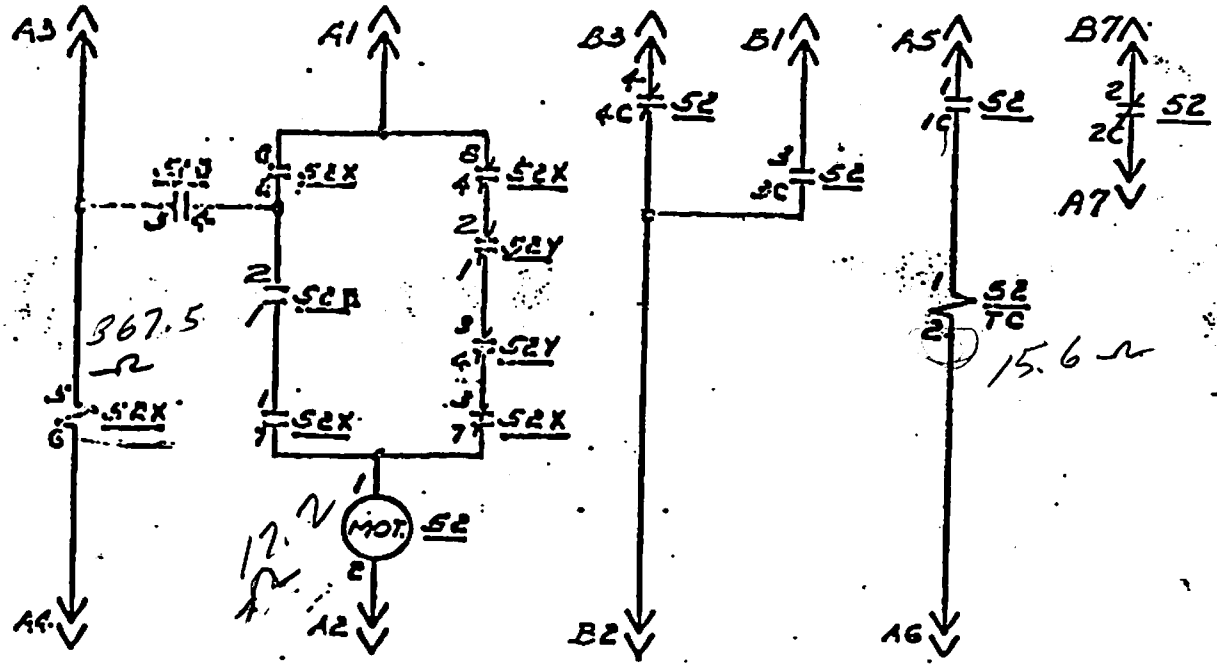
FIRST MADE FOR

SEC. DD 7 6 5 4 3 2 1 A 7 6 5 4 3 2 1 B



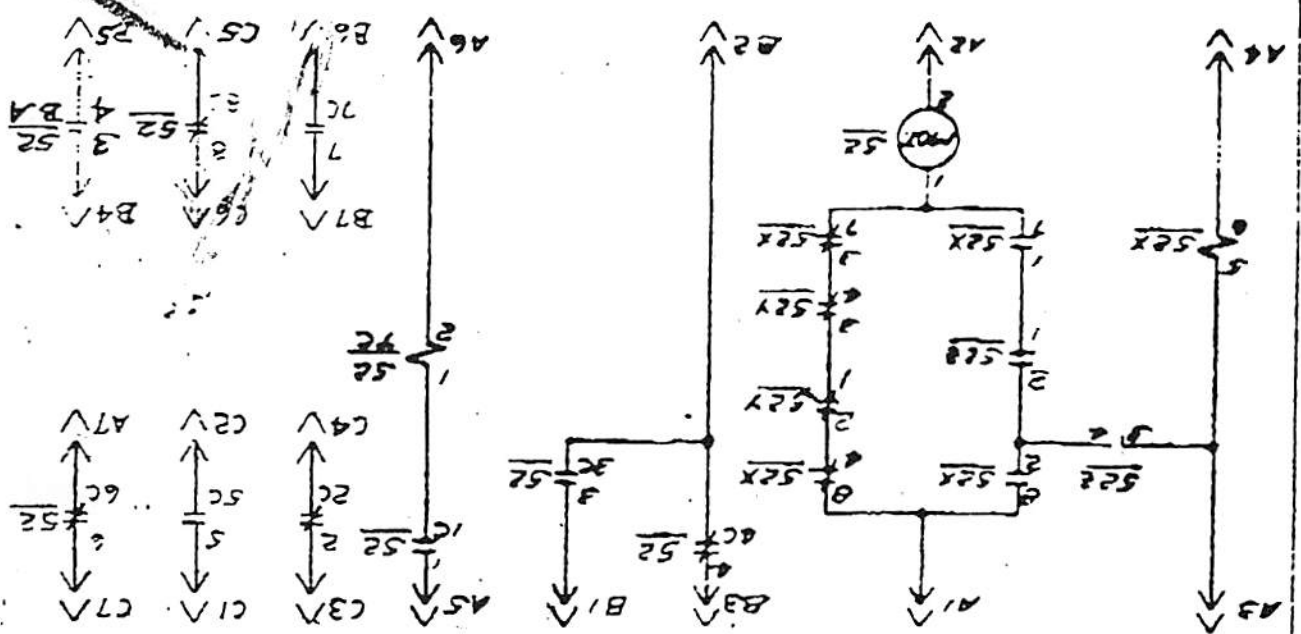
BKR BASE - F.V.

USE LRP-394 50649



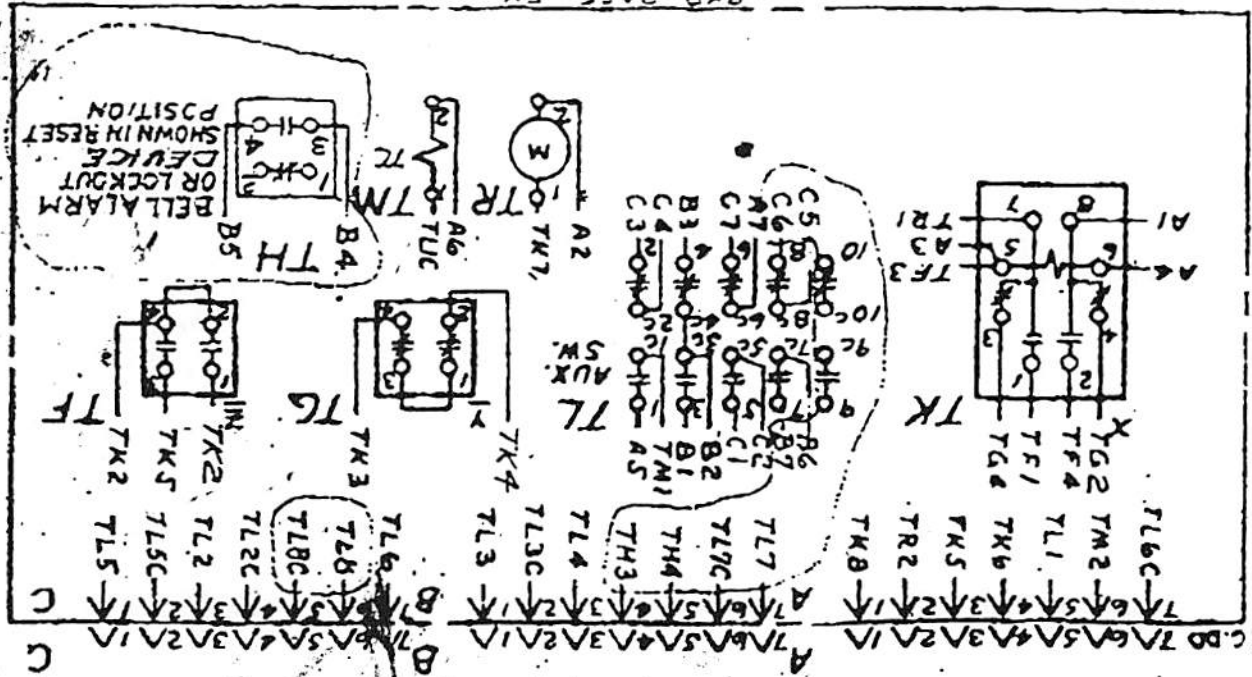
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A 7A6V5A4V3A2V1V  
 B 7A6V5A4V3A2V1V  
 C 7A6V5A4V3A2V1V

175LB27 660

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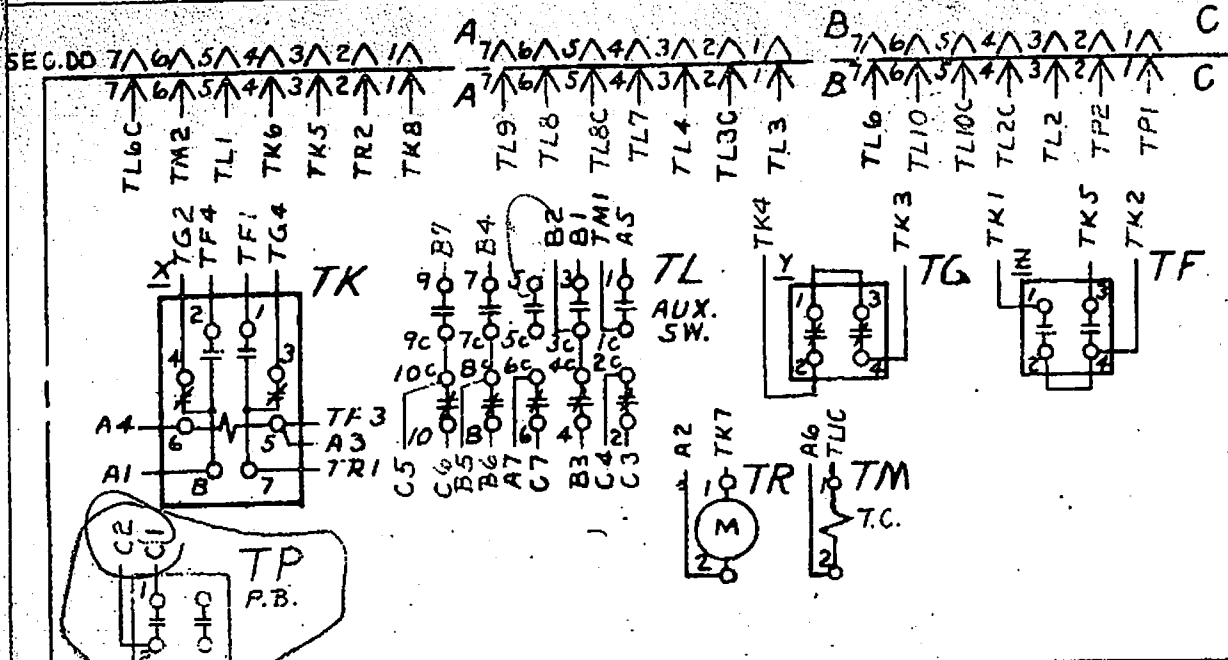
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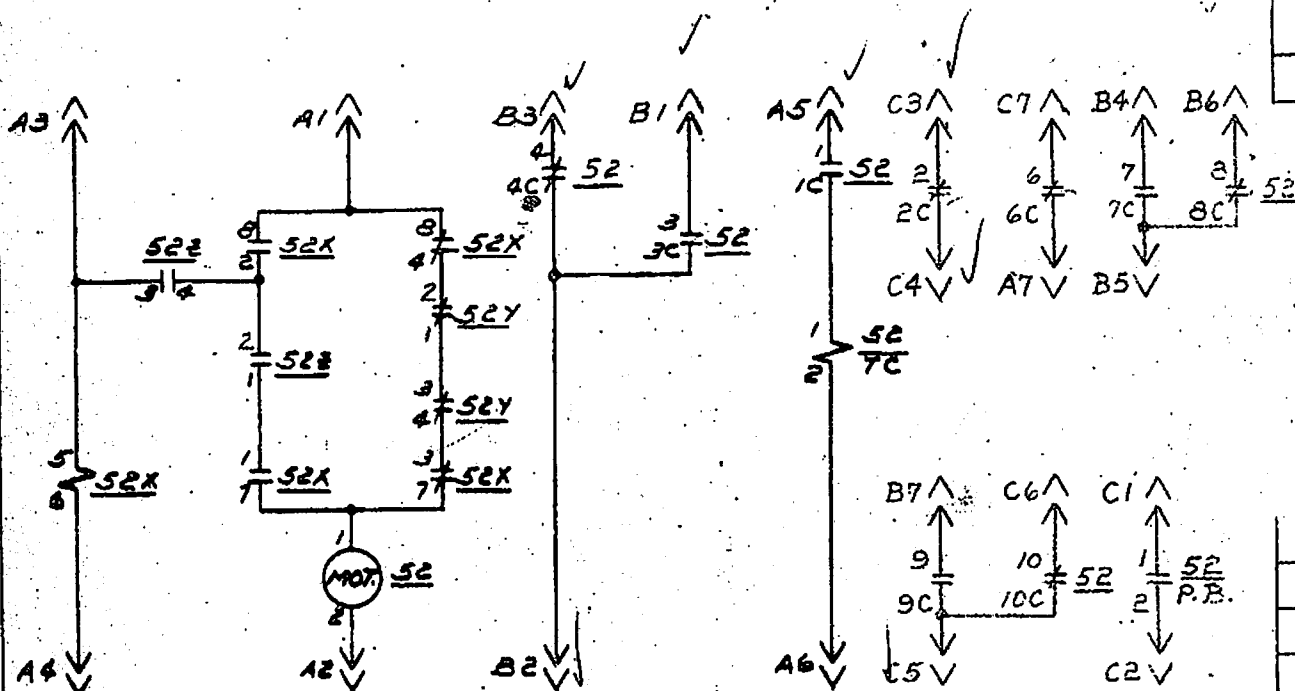
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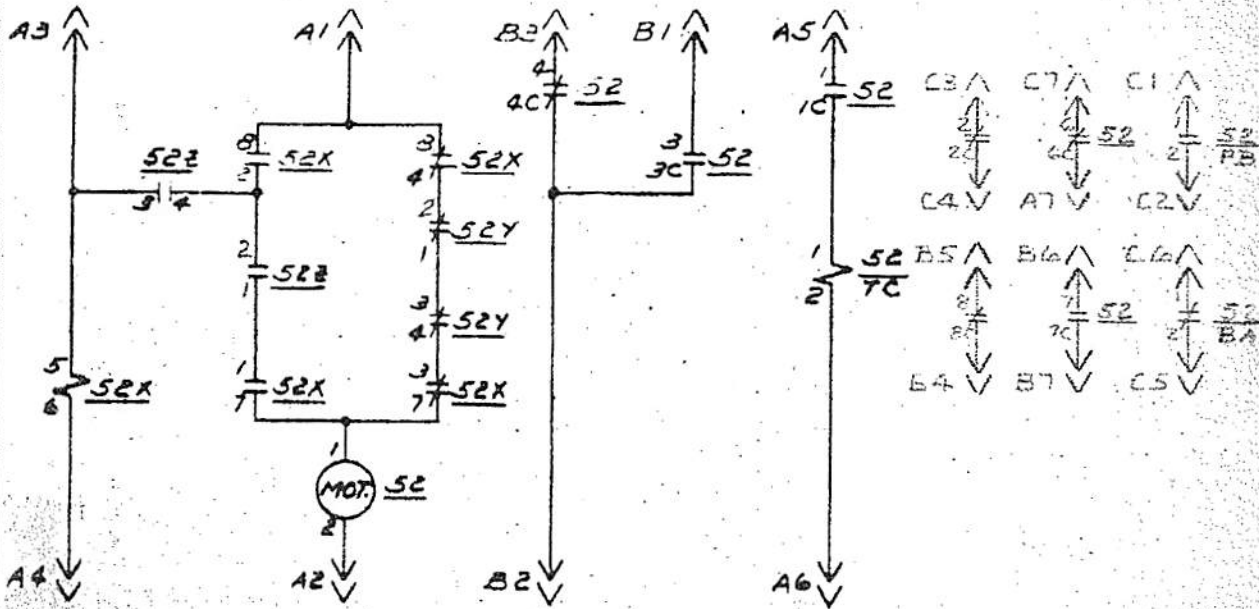
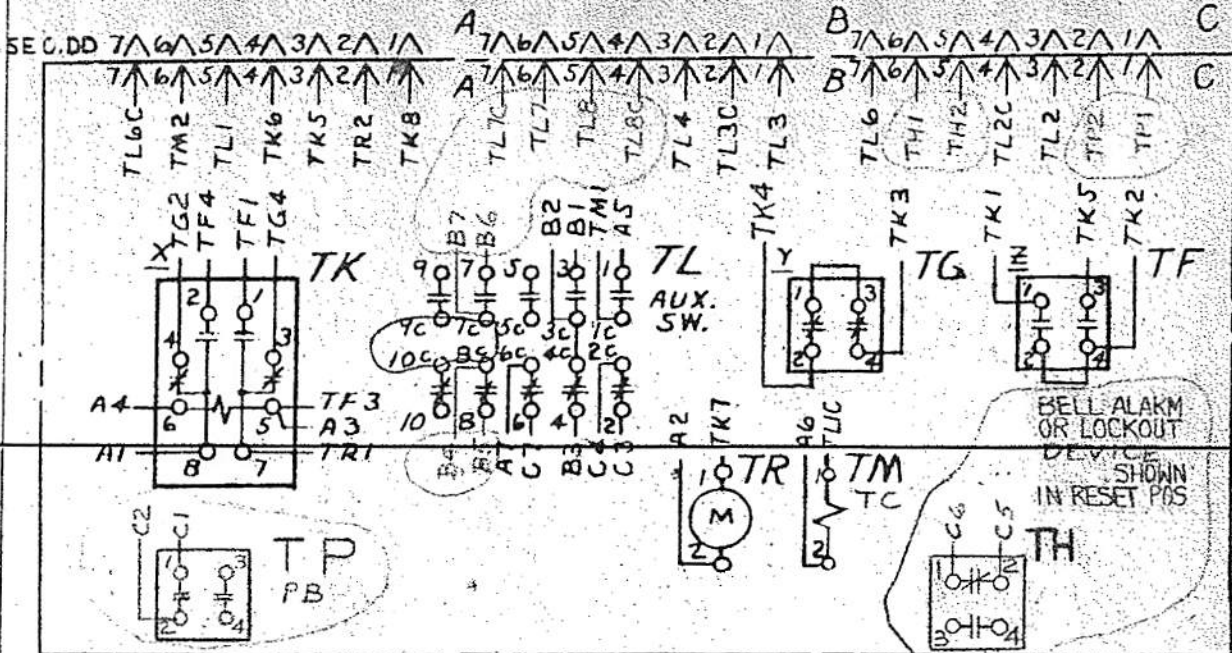
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Dept. *Switchgear* Phone #

Fax # *418-0289* Fax # *780-0341*

AK-2-50,75, & 100  
DRAWOUT BKR

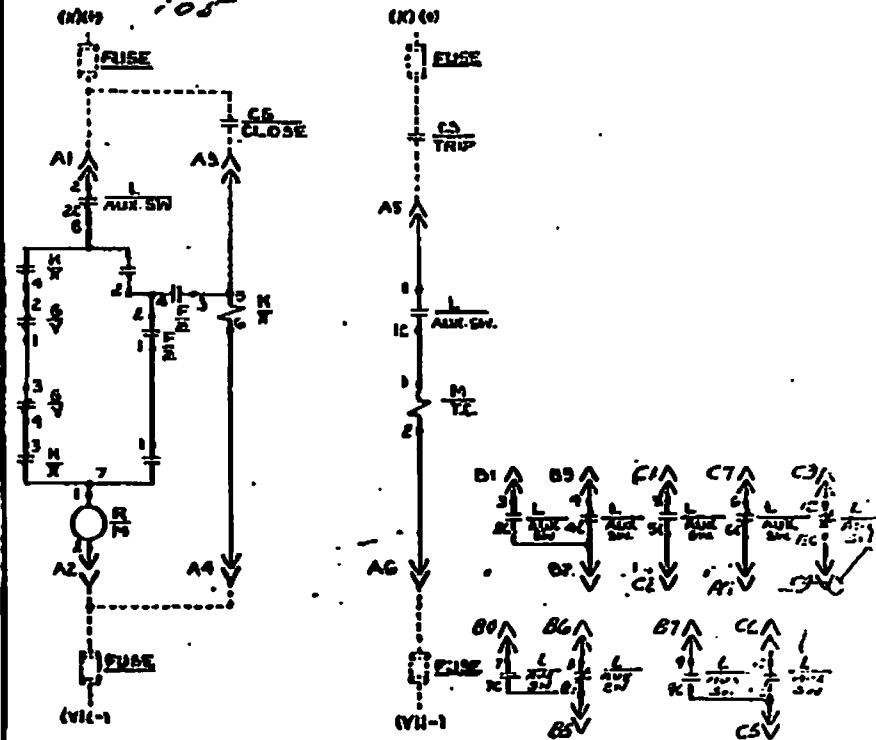
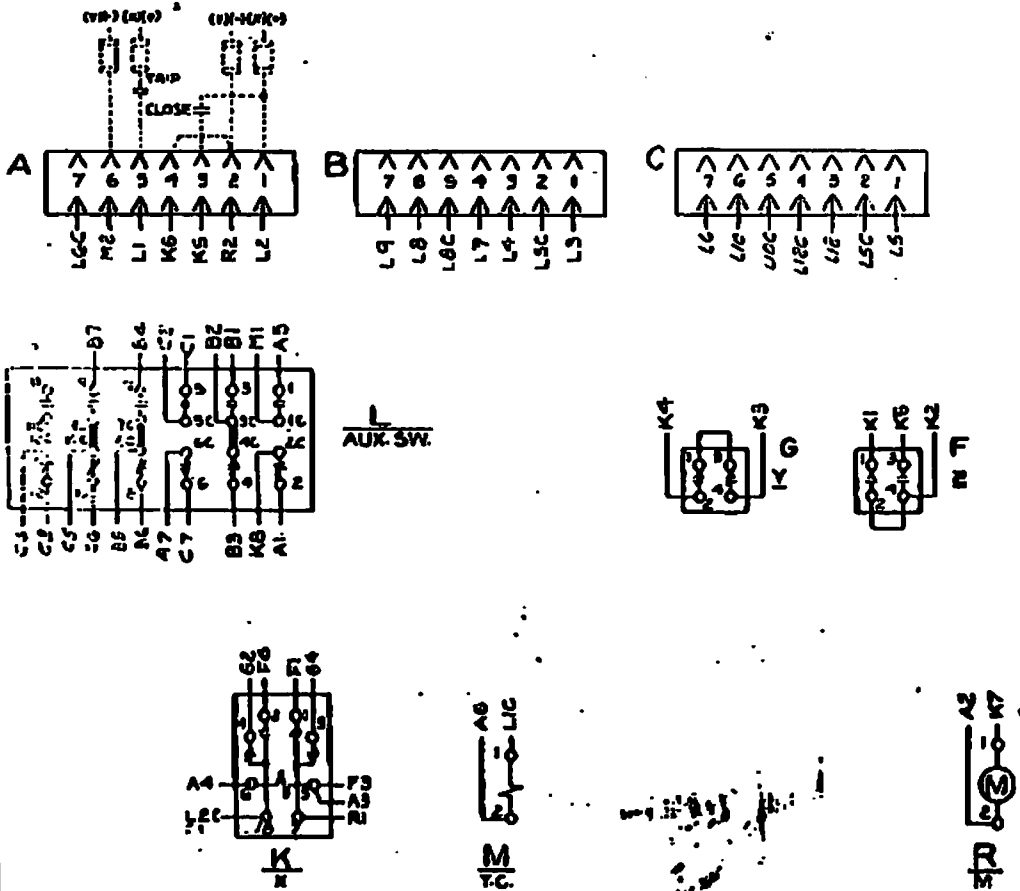
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WITH SPRING  
DISCHARGED

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY. THE EXACT LOCATION OF APPLICABLE HARDWARE IS SHOWN ON THE DRAWING OF THE DRAWING AND ON THE NECESSARY MECHANICAL DRAWINGS.
2. ELECTRICAL CONNECTIONS OF CIRCUITS ARE INDICATED WITH THE ELEMENTARY SYMBOLS.
3. THESE SYMBOLS, DIMENSIONS AND APPROPRIATIONS ARE AS SHOWN ON THE DRAWING.

177L240D

CONN. & ELEM. DIAG.

JUST MADE FOR BKR AK-2-50,75&100



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A-SEC DISC AT TOP LEFT
- B-SEC DISC AT TOP CENTER
- C-SEC DISC AT TOP RIGHT
- F } CUT OFF SWITCHES (V,Z)
- G } CUT OFF SWITCHES (V,Z)
- K-CLOSING RELAY TYPE HGA(X)
- L-AUX SW "A" & "B" CONTACTS TYPE SB12 (AUX SW)
- M-SMUNT TRIP (T.C)
- R-CLOSING SPRING CHARGING MOTOR (M)

CONNECTION DIAGRAM-BKR BASE-FRONT VIEW

JAN 19 '95 10:35AM GE HAMMOND SWITCHGEAR

Post-It<sup>™</sup> brand fax transmittal memo 7671 # of pages 1

To Collino Toranzo From J. Michniak

Co. Westing House Co.

Dept. Switchgear Phone #

Fax # 418-0289 Fax # 780-0341

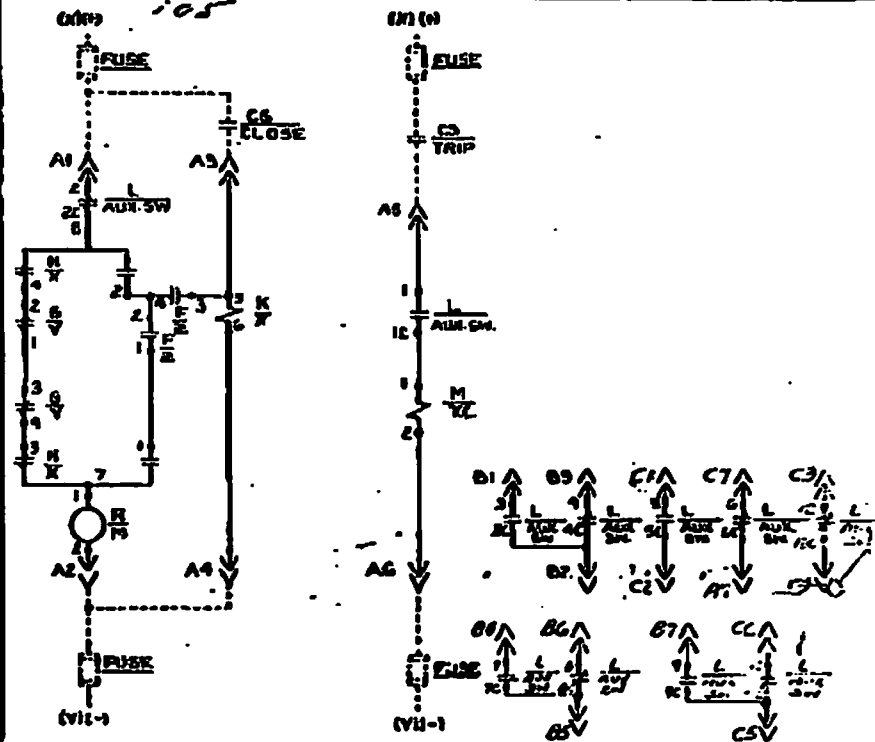
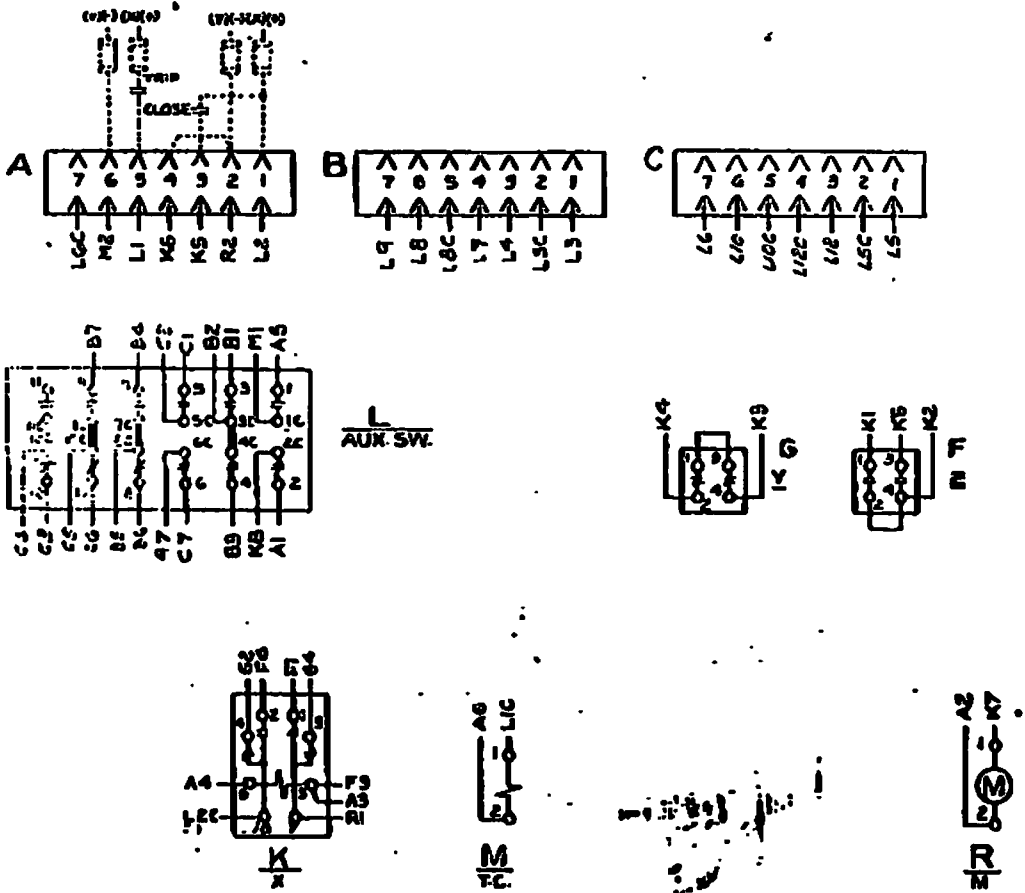
AK-2-50,75, & 100  
DRAWOUT BKR

NOTE: BKR SHOWN IN  
OPEN POSITION  
WITH SPRING  
DISCHARGED

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS AND THE  
2. EXACT LOCATION OF APPLICABLE COMPONENTS ON THE  
3. EXACTLY SHOWN AND ALL UNLABLED CONTACTS SHOWN IN  
4. UNLESS OTHERWISE SPECIFIED IN THE DRAWING, THE  
5. ALL ELECTRICAL CONNECTIONS OF BUCKLE ARE SHOWN WITH THE  
6. BUCKLE IN THE OPEN POSITION  
7. BUCKLE POSITION SHOULD BE INDICATED ON ALL  
8. DRAWINGS.

177L240D

CONN. & ELEM. DIAG.



- TYPICAL ELEMENTARY SCHEME
- LIST OF ABBREVIATIONS
- A-SEC DISC AT TOP LEFT
  - B-SEC DISC AT TOP CENTER
  - C-SEC DISC AT TOP RIGHT
  - F} CUT OFF SWITCHES (Y,Z)
  - G}
  - H-CLOSING RELAY TYPE HGA(X)
  - L-AUX SV "A" & "B" CONTACTS TYPE SB12 (AUX SV)
  - N-SHAFT TRIP (T.C)
  - R-CLOSING SPRING CHARGING MOTOR (M)

CONNECTION DIAGRAM-BKR BASE-FRONT VIEW

JAN 19 55 10:30 AM GE HAMMOND SWITCHGEAR

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DATE: 1/29/59  
BY: J. Michniak

LOW VOLTAGE  
SWITCHGEAR DEPARTMENT  
PHILADELPHIA

177L240D



DAVE

GENERAL ELECTRIC

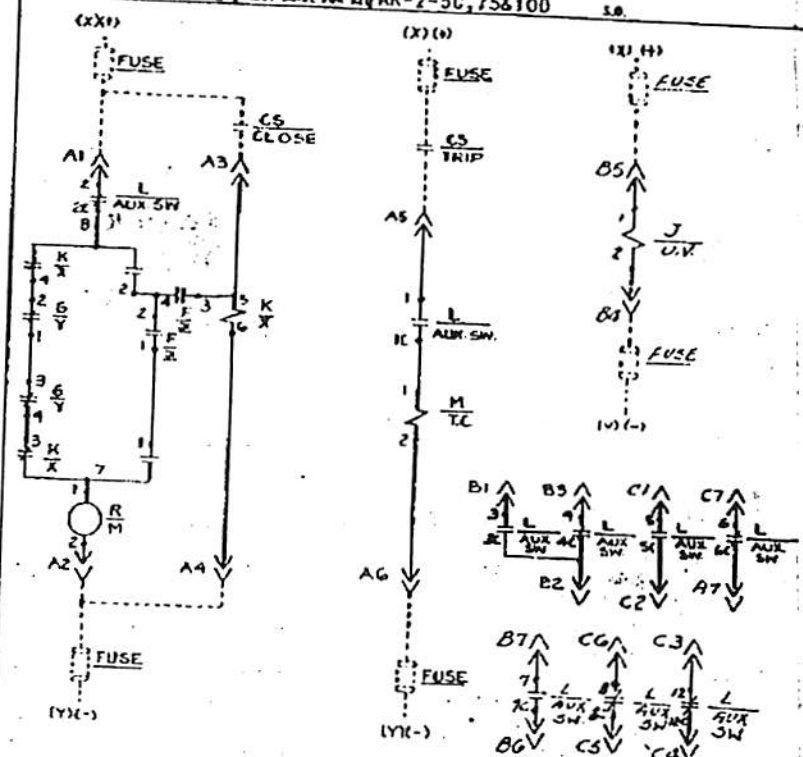
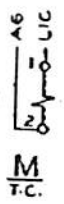
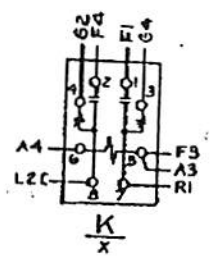
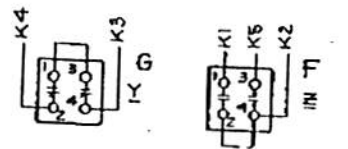
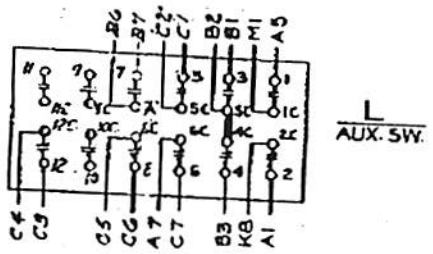
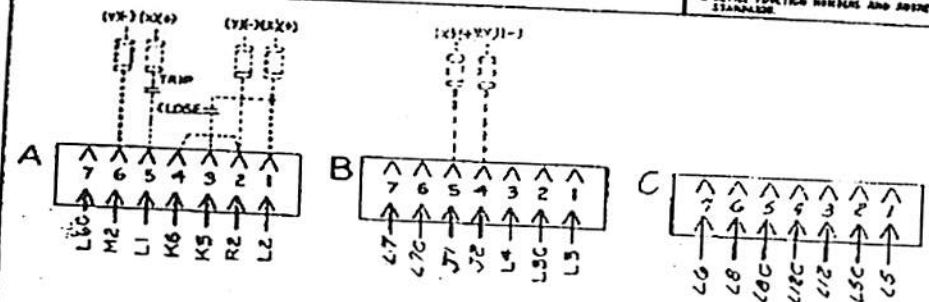
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AK-2-50, 75, & 100  
DRAWOUT BKR

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EXACT LOCATION OF APPLICABLE IDENTIFIERS MUST BE SHOWN IN THE  
2. NUMBERED CIRCLES AND IDENTIFY CONTACTS BY LOCATION IN  
LEADS AND DO NOT NECESSARILY REPRESENT CONTACTS.  
3. IDENTIFY CONNECTIONS OF CONTACTS ARE INCLUDED WITH THE  
4. IDENTIFY FUNCTION NUMBERS AND OBSERVATIONS ARE ALL  
STANDARD.



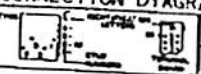
TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A-SEC DISC AT TOP LEFT
- B-SEC DISC AT TOP CENTER
- C-SEC DISC AT TOP CENTER
- F } CUT OFF SWITCHES (Y, Z)
- G }
- J-UNDERVOLTAGE DEVICE TIME OR INSTANTANEOUS(U.V)
- R-CLOSING SPRING CHARGING MOTOR (M)
- K-CLOSING RELAY TYPE HGA(X)
- L-AUX SW "A" & "B" CONTACTS
- C TYPE SB12 (AUX SW)
- M-SHUNT TRIP (T. C)

CONNECTION DIAGRAM-BKR BASE-FRONT VIEW

CONNECTIONS  
FOR KINDS OF WIRE ARE IDENTIFIED  
BY DESIGNATION. SWITCH INDICATES  
CONTACTS 1220 SERIES & 1210  
SERIES WHICH IS REVERSE.



MADE BY J.P.C.  
DATE: Aug 21 1957  
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APPROVALS

LOW VOLTAGE  
SWITCHGEAR DEPARTMENT  
PHILADELPHIA

177L240D  
COST NO. 107

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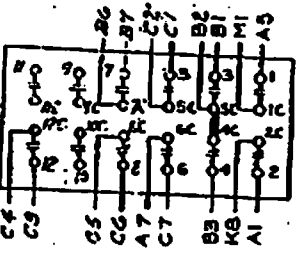
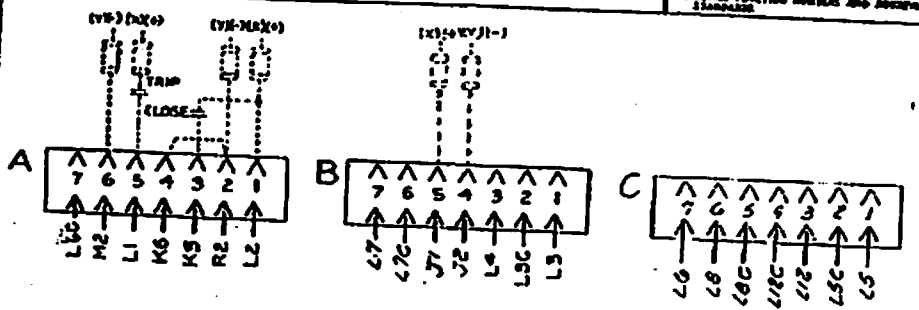
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WITH SPRING  
DISCHARGED

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EXACT WEARERS OF APPROVED WIRING SHALL BE MADE IN ACCORD  
WITH THE CONTRACT AND SHOULD COMPLY WITH THE APPROVAL OF  
THE LOCAL COMMISSIONER OF SERVICES AND THE LOCAL ELECTRICAL  
INSURANCE DEPARTMENT.  
2. OTHER PARTS, TERMINALS AND CONNECTIONS ARE AS  
SHOWN.

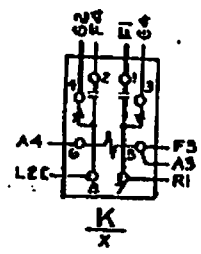
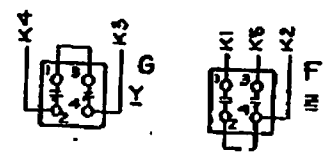
GENERAL ELECTRIC

CONN. & ELEM. DIAG.

177L240D



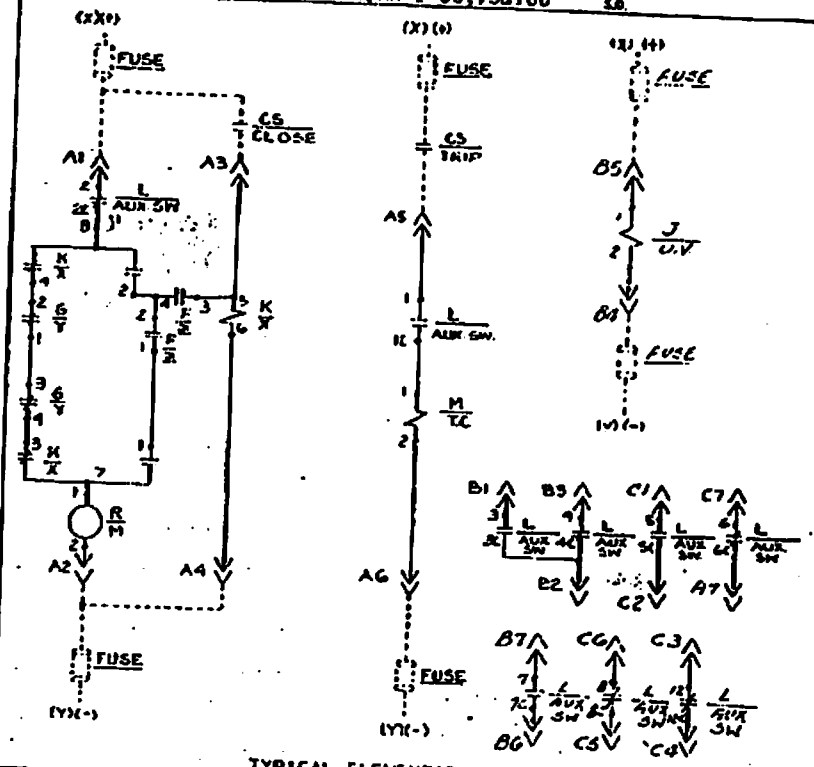
L  
AUX. SW.



A6 UC  
M  
T.C.

B4  
S/T

A2 K7  
R



TYPICAL ELEMENTARY SCHEME

LIST OF ABBREVIATIONS

- A-SEC DISC AT TOP LEFT
- B-SEC DISC AT TOP CENTER
- C-SEC DISC AT TOP CENTER
- F } CUT OFF SWITCHES (Y,Z)
- G } CUT OFF SWITCHES (Y,Z)
- J-UNDERVOLTAGE DEVICE TIME OR INSTANTANEOUS(U,V)
- K-CLOSING RELAY TYPE HGA(X)
- L-AUX SW "A" & "B" CONTACTS TYPE SB12 (AUX SW)
- M-SHUNT TRIP (T.C)
- R-CLOSING SPRING CHARGING MOTOR (M)

CONNECTION DIAGRAM-BKR BASE-FRONT VIEW

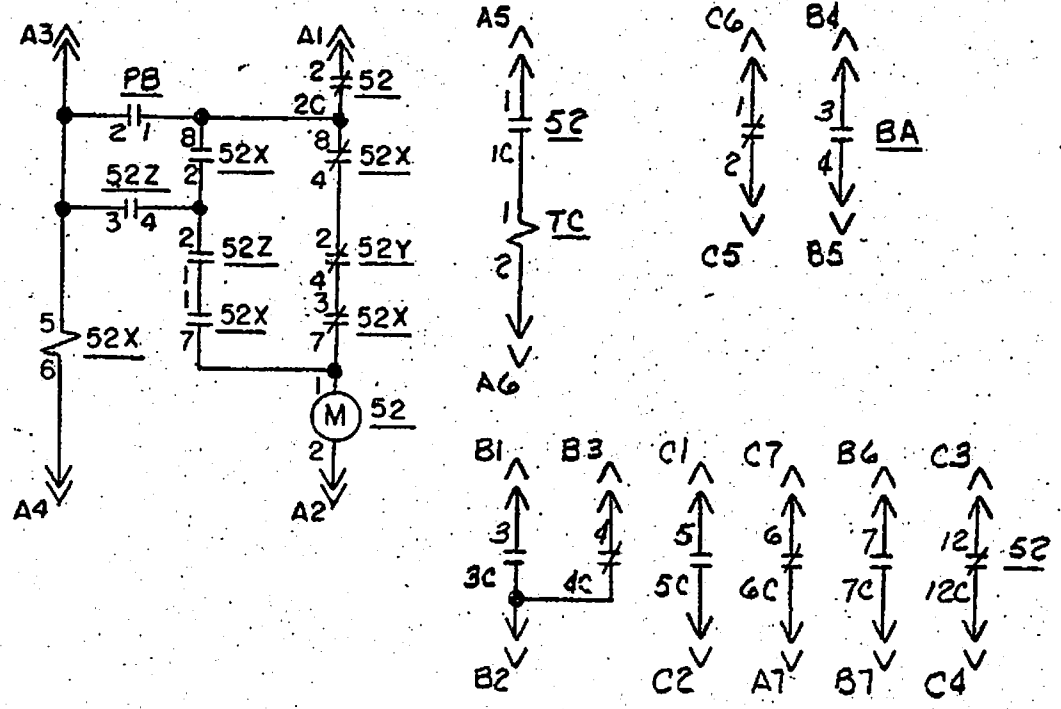
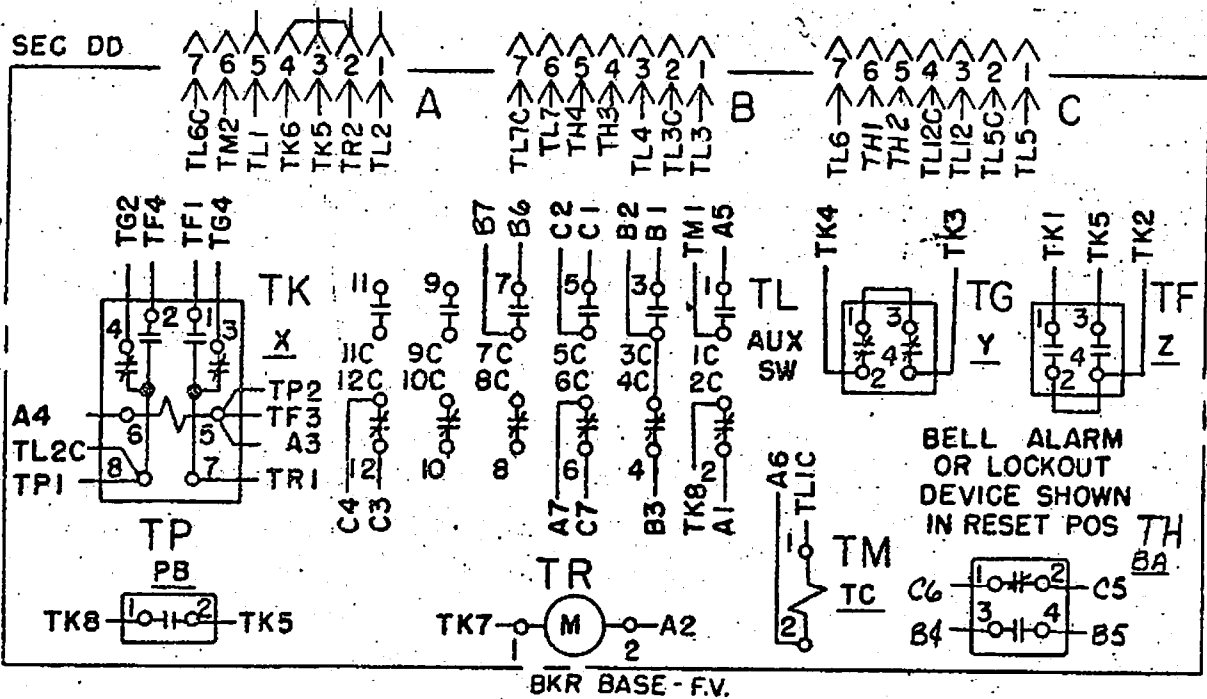
CONNECTIONS TO BE MADE BY THE USER TO THE BKR BASE-FRONT VIEW. THE USER SHOULD CONSULT THE LOCAL ELECTRICAL INSURANCE DEPARTMENT FOR APPROVAL OF THE CONNECTIONS.

APPROVALS  
DATE: 10/29/57  
BY: [Signature]

LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA

177L240D

REVISED BY: [Signature]  
DATE: [Date]  
PROVIDE TO: [Name]



GE AK-2-75

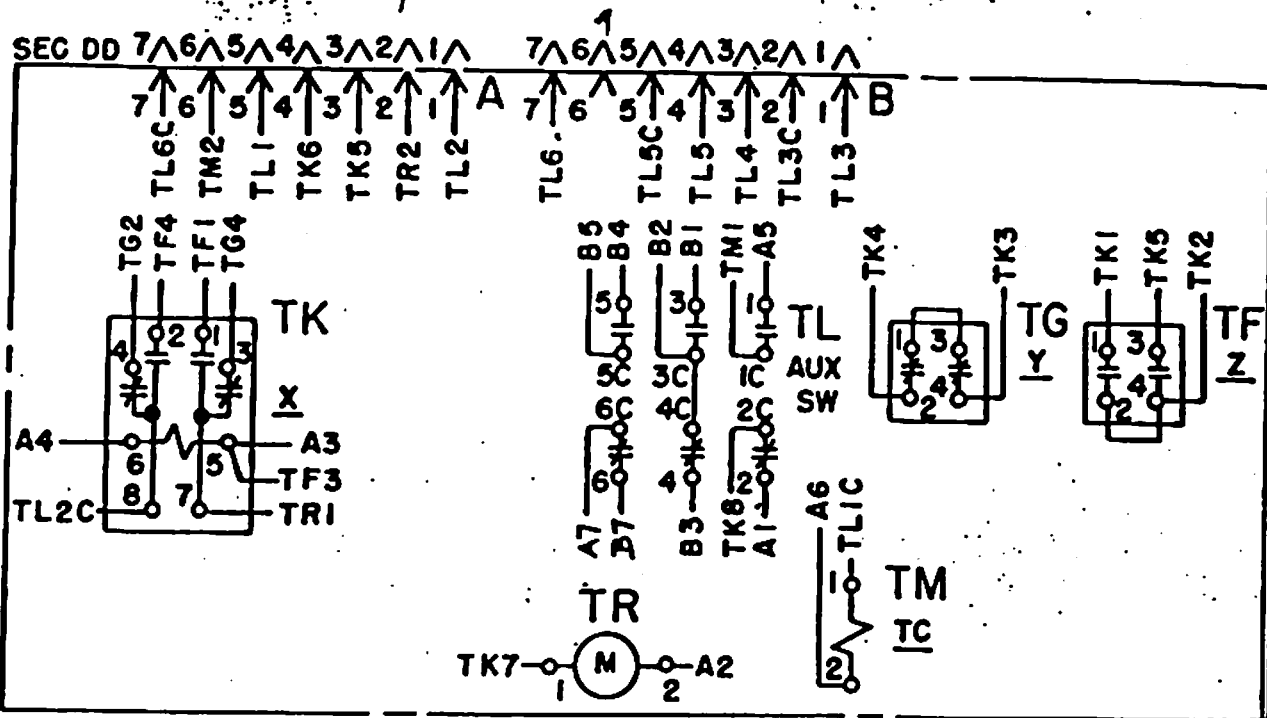
3-24-71 REV. 0	<b>GENERAL ELECTRIC</b> LOW VOLTAGE SWITCHGEAR DEPARTMENT PHILADELPHIA	TITLE: <b>DIO ACB</b> AK-2-50/75/100 177L240DW980
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C.C. x 2970

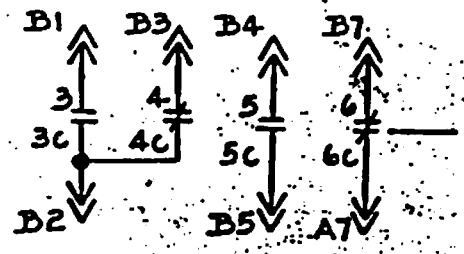
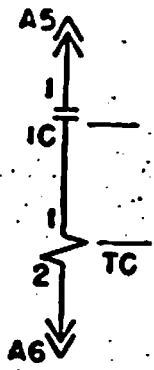
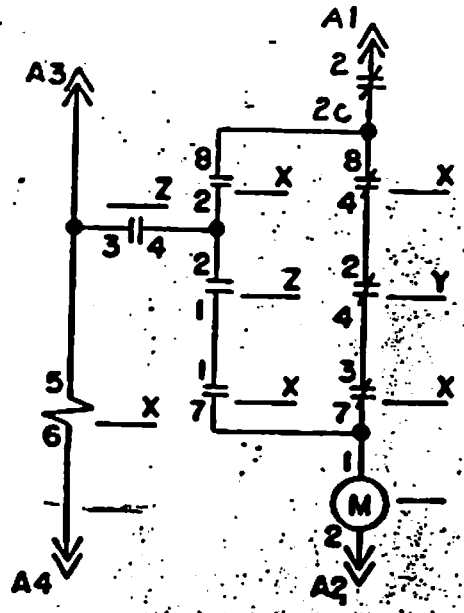
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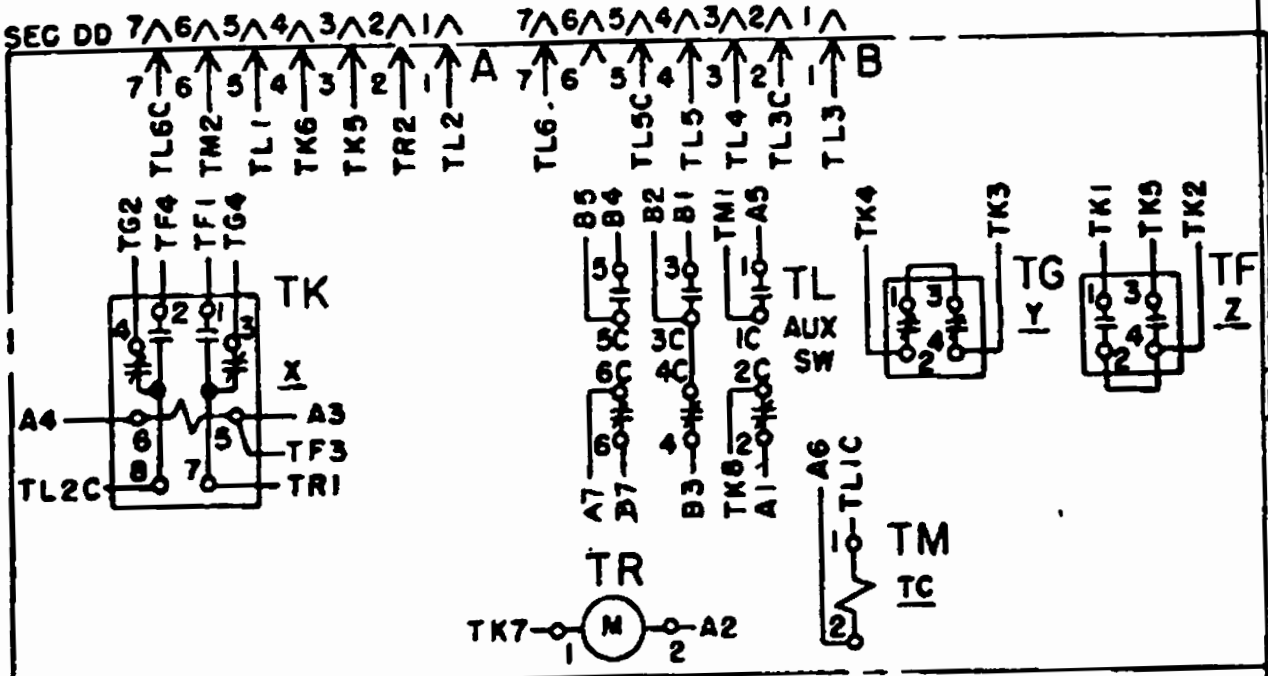
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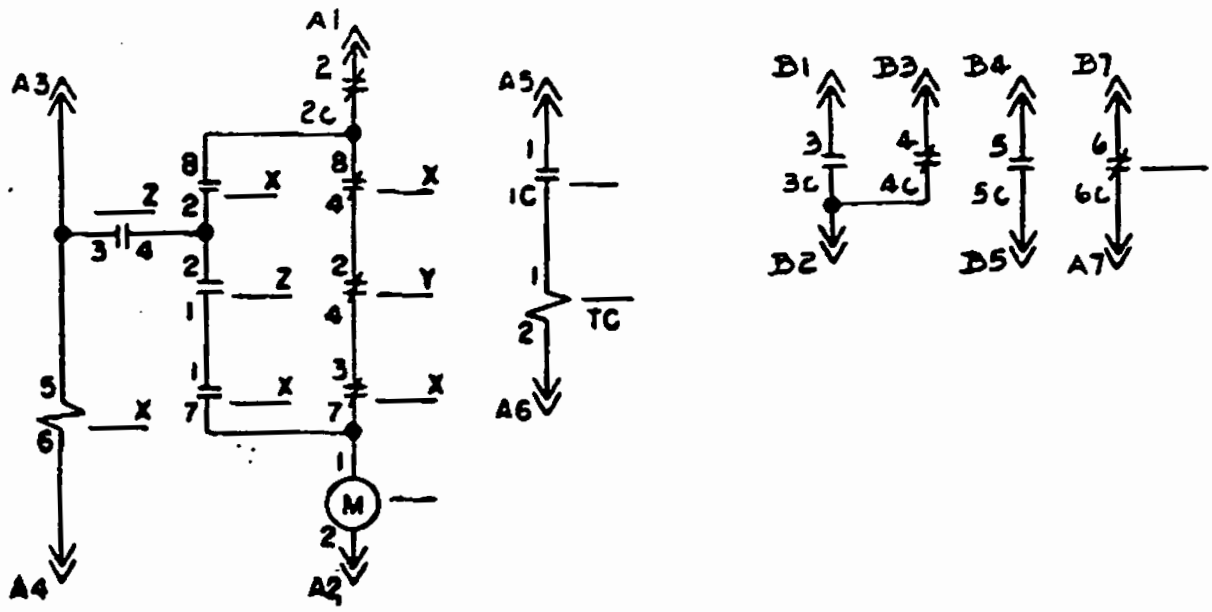
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Merrillville, IN 46410

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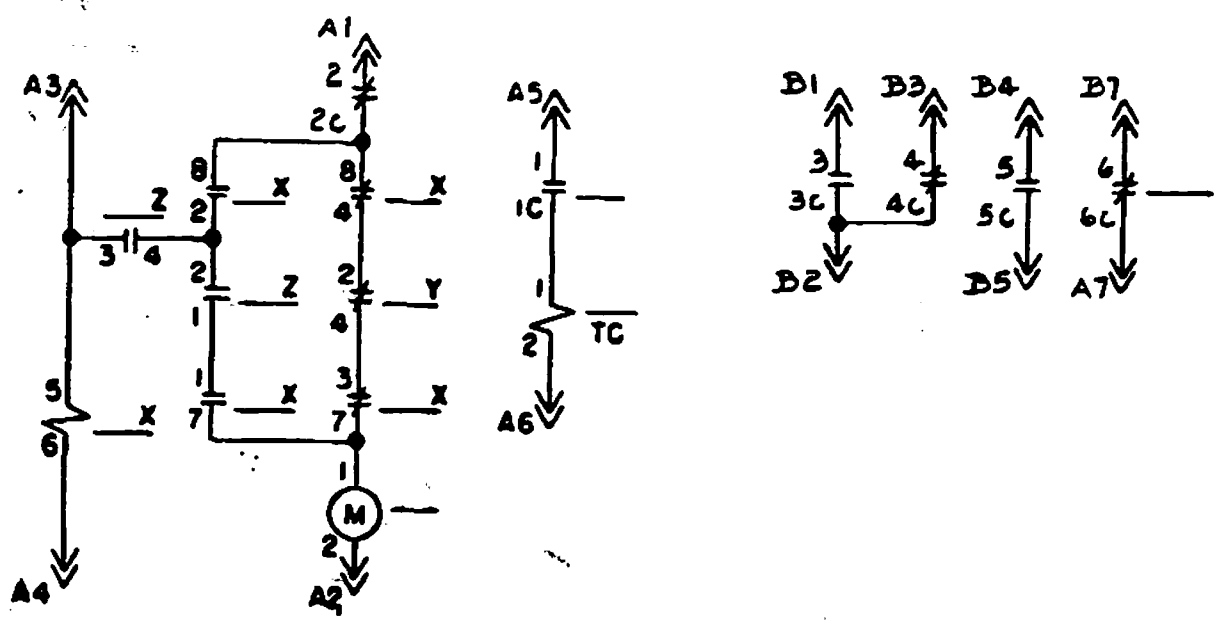
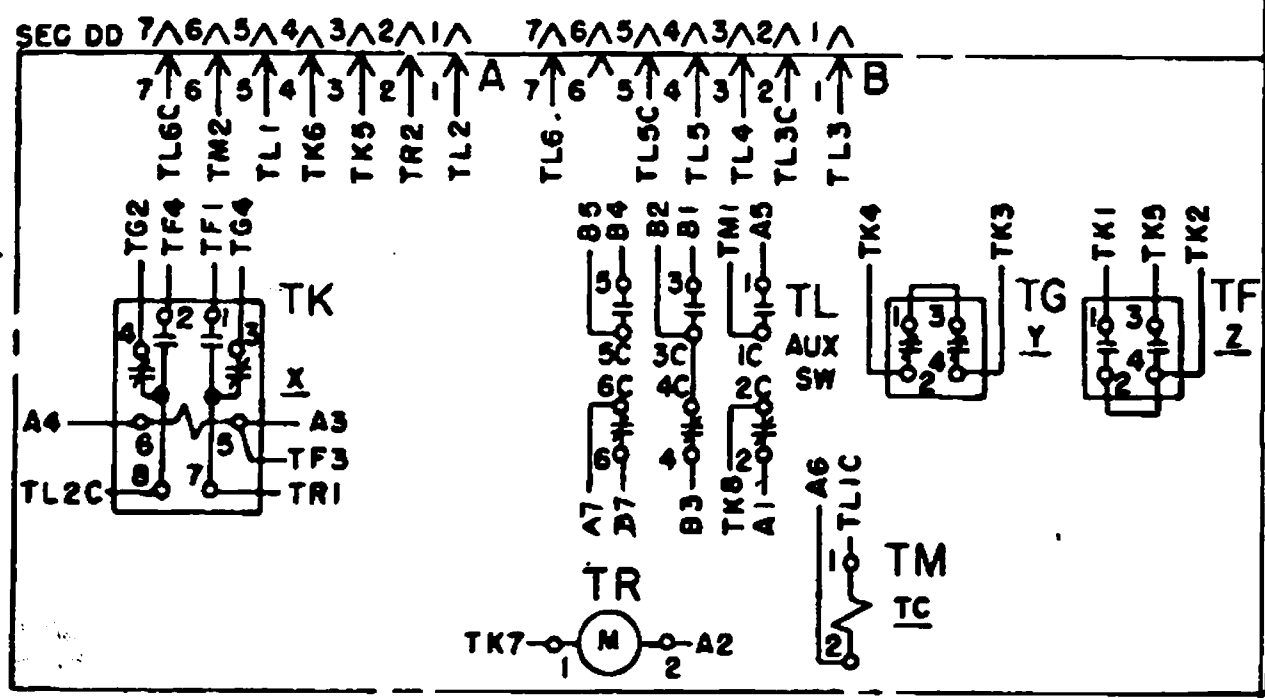
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