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CIRCUIT NOTES:

DESIG	FUSE AMF	POTENTIAL	ONE PER
BATTERY SYMBOL		VOLTAGE RANGE	

FEATURE OR OPTION		PROVIDE		
		APP FIG.	APP OR WRG	QUANTITY
VOICE CONNECTING ARRANGEMENT LVH	USED WITH 1A2 KTS	1		1 PER LINE
	USED WITH 1A1 KTS	2	X, Y	1 PER LINE
	USED WITH 1A KTS		W, Y	1 PER LINE
VOICE CONNECTING ARRANGEMENT LOH USED WITH MANUAL PBX CORD SWBDS	FOR 551, 552, 555, 556, 557, 605A PBX'S	2	T, Z, Y	1 PER JACK
	FOR 606 & 607 PBX	2	U, Z, Y	1 PER JACK
	FOR 608 PBX	2	V, Z, Y	1 PER JACK

RECORD OF FIGURES, WIRING, AND APPARATUS CHANGES							
CHANGED OR ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT			
				STD	A&M	MD	
2B	S OR R	S		R		S	

CIRCUIT NOTES: (CONT)

104. THE Y OPTIONS ON TERMINALS 5 AND 6 SHALL BE FACTORY WIRED ON THE 110A IU.

EQUIPMENT NOTES:

201. PROVIDE ONE 8 OHM, 1 WATT RESISTOR PER CP SOURCE. THIS SHALL BE MOUNTED AT THE 66-TYPE CONNECTING BLOCK.

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE IN OHMS, CAPACITANCE VALUES ARE IN MICROFARADS, VALUES PRECEDED BY THE SYMBOL + (PLUS) OR - (MINUS) ARE IN VOLTS.

OPTION INDEX	
APP OR WRG	LOCATION
Z	4C1
Y	3A1, 4A2
X	3A3, 3B3
W	3A2, 3B3
V	4A4, APP FIG. 2
U	4A4, APP FIG. 2
T	4A4, APP FIG. 2
S	2C2, 3C2, 4B2, APP FIG. 1, 2
R	2C2, 3C2, 4C2, APP FIG. 1, 2

DWG ISSUE	CD ISSUE	DATE ISSUED	DRAWN	APPD
1	1	4-14-70	RS	GAF
2B	1	10-10-72	HBW	REB
				RYL
				AFR

SD-69627-01-1

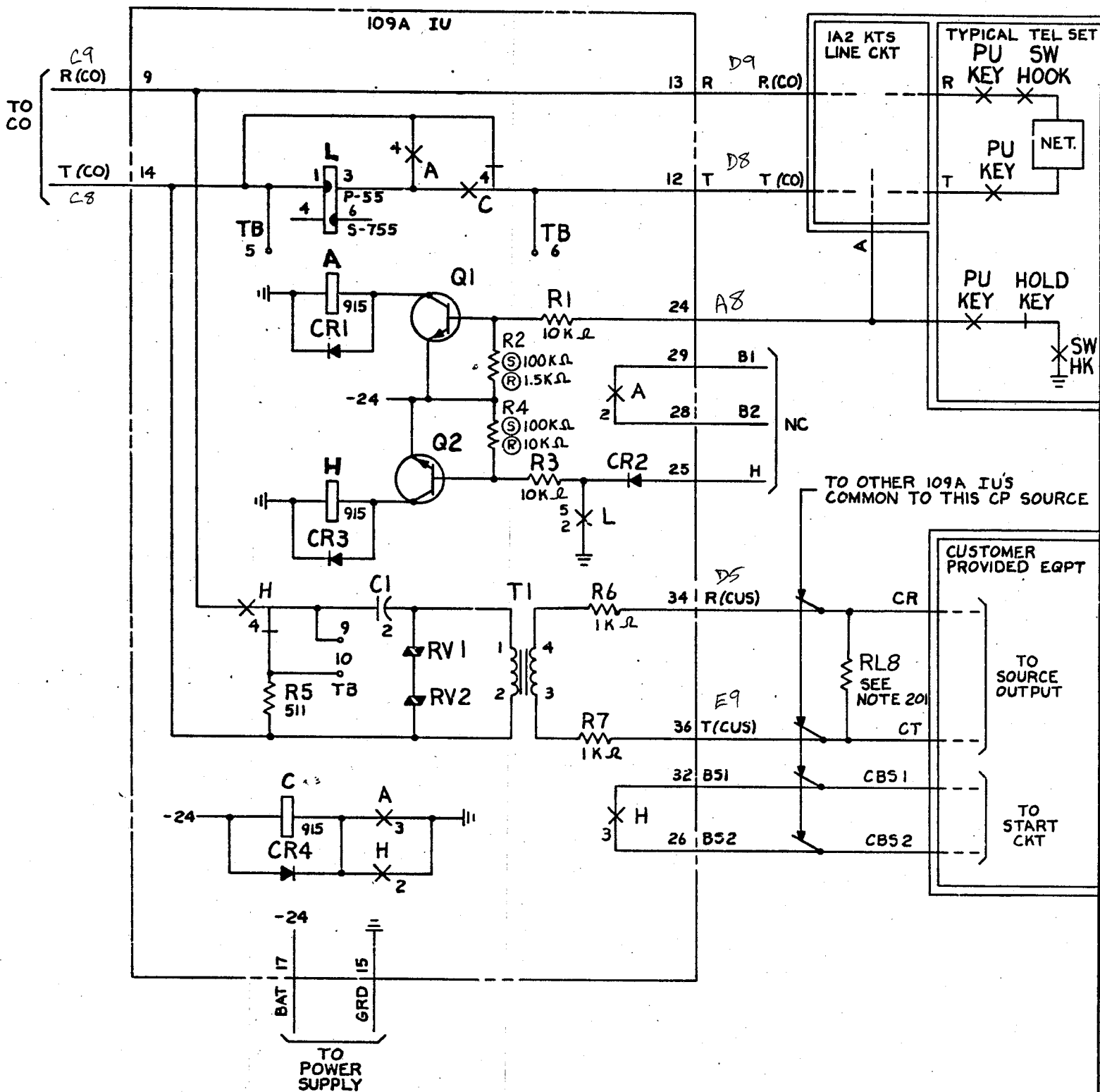
K&E HESLER INC. NEW YORK, N.Y.

SD-69627-01		1K99	
STATION SYSTEMS		AT&T CO STANDARD	
109A AND 110A INTERCONNECTING UNITS			
VOICE CONNECTING ARRANGEMENTS			
LVH AND LOH			
BELL TELEPHONE LABORATORIES INCORPORATED		SD-69627-01-1	
DWG SIZE 3S		5 SHEETS	

HANDBOOK DRAWING

FS I VOICE CONNECTING ARRANGEMENT LVH (109A INTERCONNECTING UNIT)

A
B
C
D
E
F
G
H



DRAWING
ISSUE

I

DR

A

B

C

D

E

F

G

H

2B

DR

2B

DR

2B

DR

2B

DR

2B

DR

2B

DR

2B

DR

2B

DR

2B

DR

2B

DR

2B

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2B

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2B

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2B

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DR

2B

DR

2B

DR

2B

DR

2B

109A AND 110 A INTERCONNECTING UNITS

1

SD-69627-01-2

BELL TELEPHONE LABORATORIES
INCORPORATED

DWG SIZE
3S

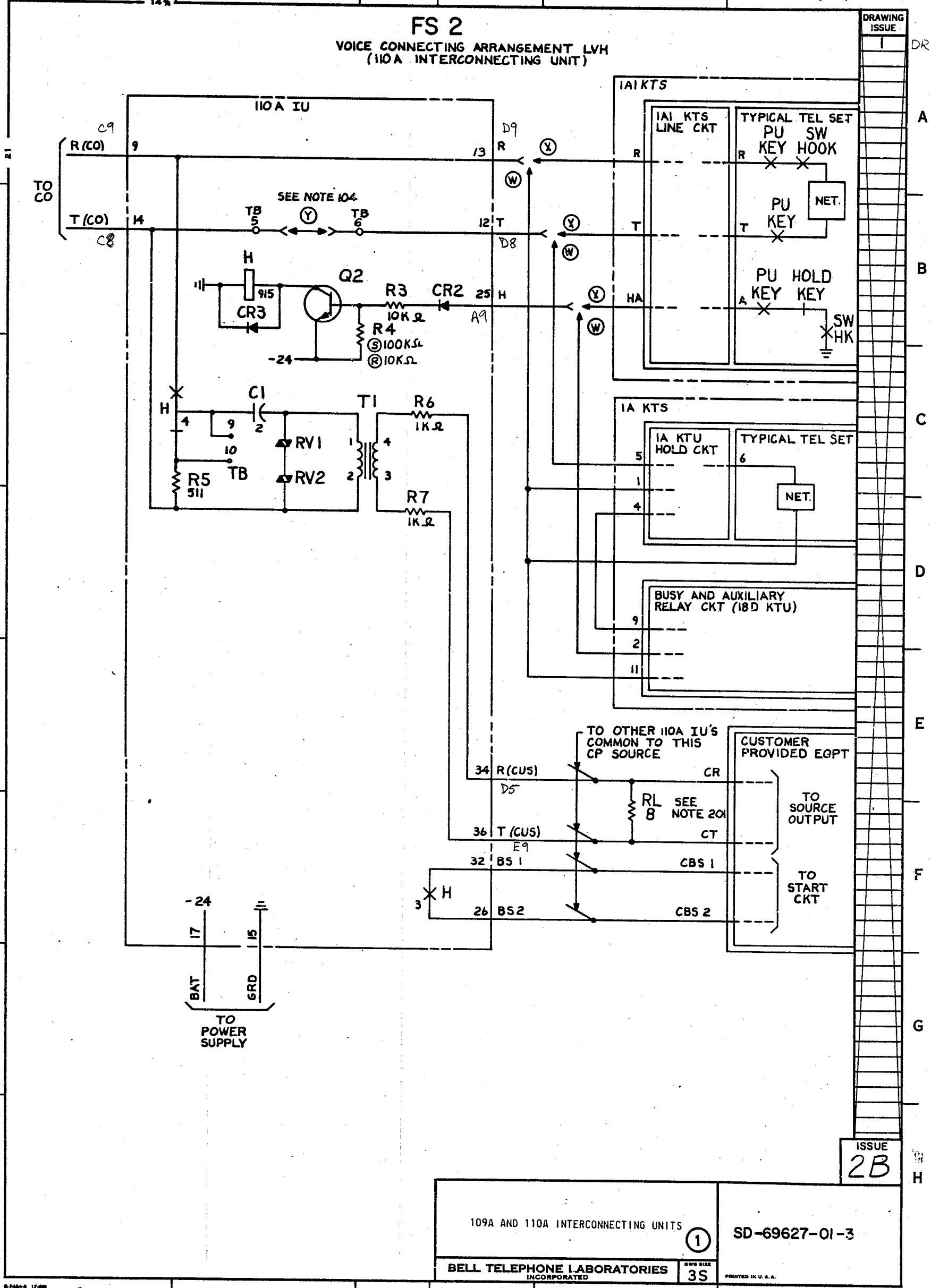
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SD-69627-01-2

K&E ENGINEERING

6-74864-8 (7-58)

FS 2 VOICE CONNECTING ARRANGEMENT LVH (110A INTERCONNECTING UNIT)



SD-69627-01-3

K&E ENGINEERING

FS 3



B

C

D

E

F

G

H

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ISSUE

2B

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INCORPORATED

DWG SIZE
35

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APP. FIG. 1

CP 109A IU E/W

COMPONENT LIST

RELAY

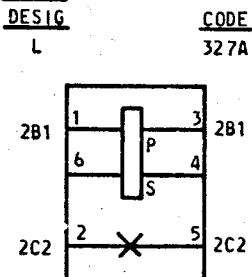
DESIG	A	C	H
CODE	MA1	MA19	MA1
OPTION			
	CONT	LOC	CONT
	ARR	LOC	ARR
6			
5			
4	EBM	2B1	EBM
3	EBM	2E1	M
2	EBM	2C2	M
1	EBM	EBM	EBM
COIL		2B1	2E1

RELAY NOT ADJUSTABLE. REPLACE WHEN THERE IS MALFUNCTION.

RESISTOR

DESIG	LOC	CODE
R1	2B2	KS-13490, L1, 10KΩ
R2	2C2	KS-13490, L1, 100KΩ (R) 1.5KΩ
R3	2C2	KS-13490, L1, 10KΩ
R4	2C2	KS-13490, L1, 100KΩ (R) 10KΩ
R5	2D1	KS-20289, L2D, 511
R6	2D2	KS-13490, L1, 1KΩ
R7	2D2	KS-13490, L1, 1KΩ

RELAY



CODE
327A

CAPACITOR

DESIG	LOC	CODE
C1	2D1	542F

DIODE

DESIG	LOC	CODE
CR1	2C1	458A
CR2	2C2	458A
CR3	2D1	458A
CR4	2E1	458A

TRANSFORMER

DESIG	LOC	CODE
T1	2D2	2579C

TRANSISTOR

DESIG	LOC	CODE
Q1	2B2	16G
Q2	2B2	16G

VARISTOR

DESIG	LOC	CODE
RV1	2D1	100A
RV2	2D1	100A

APP. FIG. 2

CP 110A IU E/W

COMPONENT LIST

RELAY

DESIG	H
CODE	MA1
OPTION	
	CONT
	ARR
6	
5	
4	EBM
3	EBM
2	EBM
1	EBM
COIL	

RELAY NOT ADJUSTABLE. REPLACE WHEN THERE IS MALFUNCTION.

CAPACITOR

DESIG	LOC	CODE
C1	3C1, 4C1	542F

DIODE

DESIG	LOC	CODE
CR2	3B2, 4B2	458A
CR3	3B1, 4B1	458A

RESISTOR

DESIG	LOC	CODE
R3	3B2, 4B2	KS-13490, L1, 10KΩ
R4	3B2, 4B2	KS-13490, L1, 100KΩ (R) 10KΩ
R5	3C1, 4C1	KS-20289, L2D, 511
R6	3C2, 4C2	KS-13490, L1, 1KΩ
R7	3D2, 4D2	KS-13490, L1, 1KΩ

TRANSFORMER

DESIG	LOC	CODE
T1	3C2, 4C2	2579C

TRANSISTOR

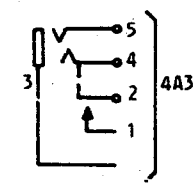
DESIG	LOC	CODE
Q2	3B1, 4B1	16G

VARISTOR

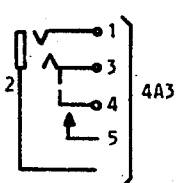
DESIG	LOC	CODE
RV1	3C1, 4C1	100A
RV2	3C1, 4C1	100A

JACK

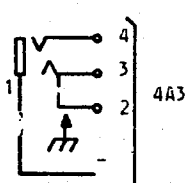
Ⓣ MH
295



Ⓤ MH
408



Ⓥ MH
510A



ISSUE

2B

109A AND 110A INTERCONNECTING UNITS

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SD-69627-01-5

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INCORPORATED

DWG SIZE
3S

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NOT REPRODUCIBLE