

MASTER COPY
DO NOT DESTROY

TECHNICAL MANUAL

for

SIDEBAND CONVERTER

MODEL SBC-9



THE TECHNICAL MATERIEL CORPORATION
MAMARONECK, N. Y. OTTAWA, CANADA



★

TECHNICAL MANUAL

for

SIDEBAND CONVERTER

MODEL SBC-9



THE TECHNICAL MATERIEL CORPORATION
MAMARONECK, N. Y.

OTTAWA, CANADA

COPYRIGHT 1968
THE TECHNICAL MATERIEL CORPORATION

★

NOTICE

THE CONTENTS AND INFORMATION CONTAINED IN THIS INSTRUCTION MANUAL IS PROPRIETARY TO THE TECHNICAL MATERIEL CORPORATION TO BE USED AS A GUIDE TO THE OPERATION AND MAINTENANCE OF THE EQUIPMENT FOR WHICH THE MANUAL IS ISSUED AND MAY NOT BE DUPLICATED EITHER IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER WITHOUT THE WRITTEN CONSENT OF THE TECHNICAL MATERIEL CORPORATION.

FOREWORD

Sideband Converter, Model SBC-9 consists of the following two major components:

SBS-9 Sideband Selector

AFC-2A Automatic Frequency Control

The SBC-9 manual consists of system and modular unit manuals as listed below:

SBC-1A and 2A system manual (w/addendum describing SBC-9)

SBS-1 and 2 modular manual (w/addendum describing SBS-9)

AFC-2A and 3 modular manual

SIDEBAND CONVERTER

MODEL SBC-9

Sideband Converter, Model SBC-9 is similar to Sideband Converter SBC-1A except for the following differences:

SBC-1A

Consists of Sideband Selector SBS-1A and Automatic Frequency Control AFC-2A.

Each SBS channel (A & B) selects 4 sidebands: 7.5 LSB, 3.5 LSB, 3.5 USB, and 7.5 USB.

SBC-9

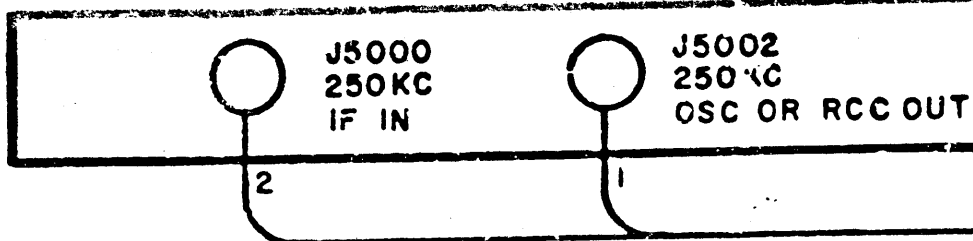
Consists of Sideband Selector SBS-9 and Automatic Frequency Control AFC-2A.

CH A switch of SBS-9 selects 7.5 LSB and 3.5 LSB; CH B switch selects 3.5 USB and 7.5 USB.

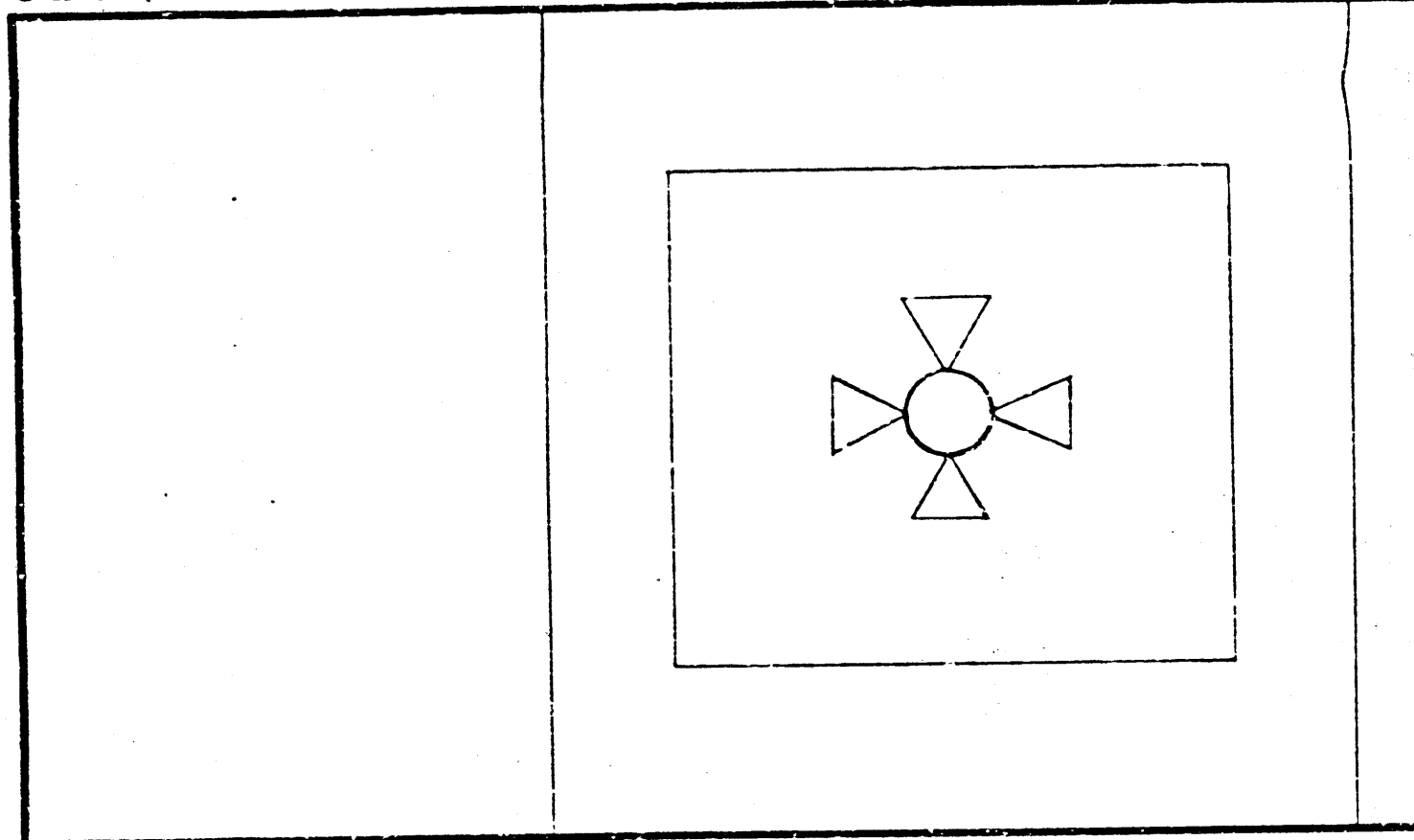
THE TECHNICAL MATEL CO. does not assume any liability for claims or damages arising from the use of this drawing. This drawing is intended for engineering and manufacturing purposes only and should not be reproduced or used for manufacturing purposes without permission from THE TECHNICAL MATEL CORPORATION. The user of this drawing is trained for technical assistance and is subject to recall at any time.

THE TECHNICAL MATEL CORPORATION
MANHATTAN, N.Y. 10044

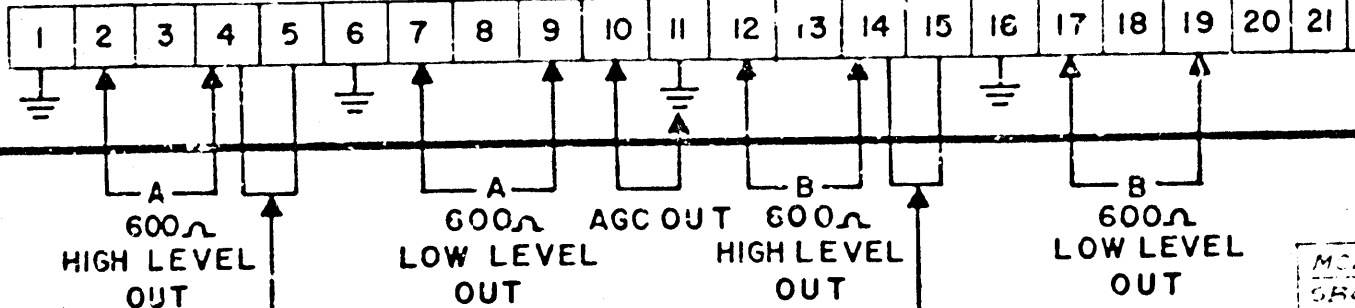
AFC*(SEE CHART)



SBS*(SEE CHART)



E6800



A
600Ω
HIGH LEVEL
OUT

A
600Ω
LOW LEVEL
OUT

B
AGC OUT
600Ω
HIGH LEVEL
OUT

B
600Ω
LOW LEVEL
OUT

REMOVE JUMPER
WHEN HIGH LEVEL
OUTPUT IS USED

REMOVE JUMPER
WHEN HIGH LEVEL
OUTPUT IS USED

REV	DATE	BY	CHKD	APP'D
A	1-10-65	65	7973	
SYN		ZONE		DESCRIPTION
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTION ± 1/64 DECIMALS ± 0.05 ANGLE ± 1/2°				
SCALE			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS & SHARP EDGES	

1	SBC-8
1	SBC-1A
REQ PER UNIT	MODEL

TMC FORM N. 11

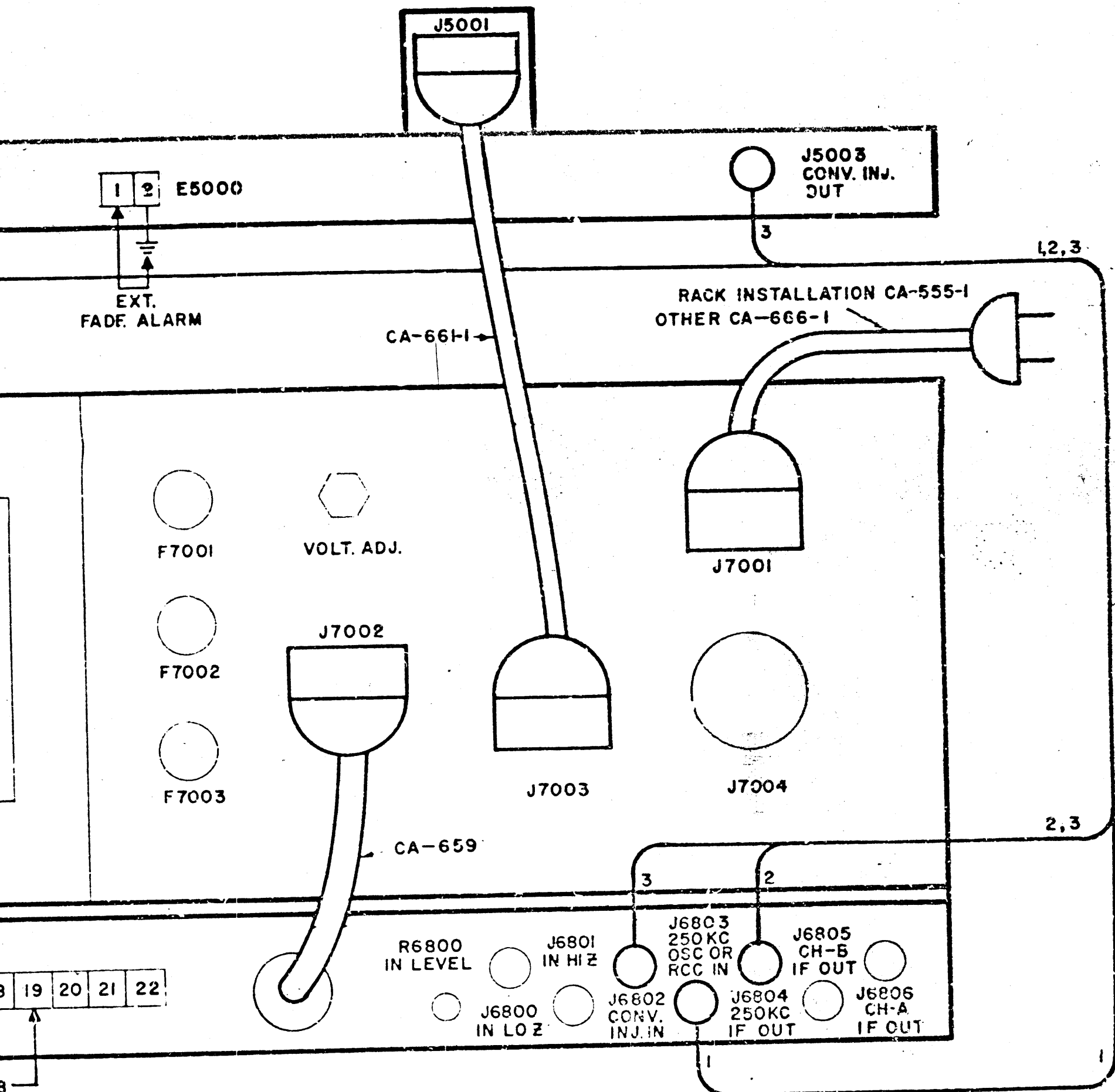
7

6

5

CK-555

B



19 20 21 22

30Ω LEVEL OUT

MODEL	SBC-1A	REV	1
DATE	12/21/61	BY	W.S.
BY	W.S.	CHKD	W.S.

MODEL	SECTION	ASSY NO.	DATE
C-8	C-1A		12/21/61

REV	ITEM	PART NO	DESCRIPTION	SYMBOL
			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
			WIRING DIAGRAM	
			SBC-1A	
DRAWN		W.S.	FINAL APPROVAL	
CHECKED		W.S.	CK-555	
ELEC. DES. APP			SHEET OF	
MECH. DES. APP			1	

USED ON	4	3	2	1
---------	---	---	---	---

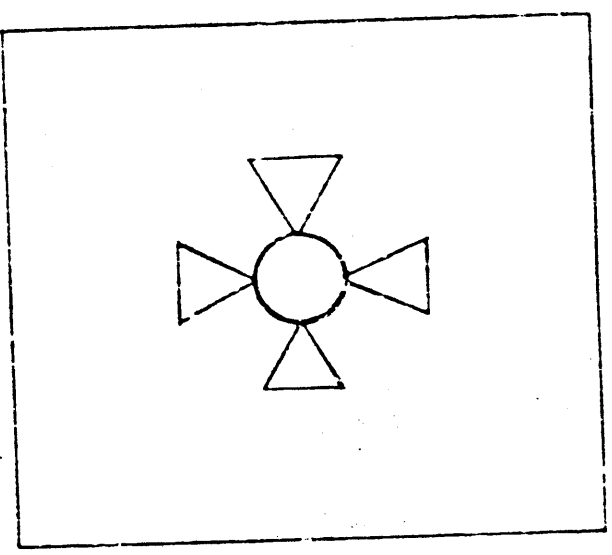
E

D

C

B

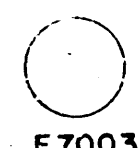
A



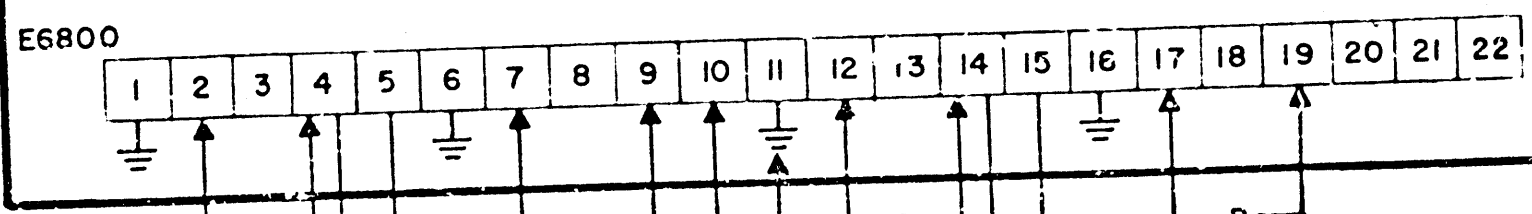
F7001



F7002



F7003



A
600Ω
HIGH LEVEL
OUT

A
600Ω
LOW LEVEL
OUT

AGC OUT
600Ω
HIGH LEVEL
OUT

B
600Ω
LOW LEVEL
OUT

REMOVE JUMPER
WHEN HIGH LEVEL
OUTPUT IS USED

REMOVE JUMPER
WHEN HIGH LEVEL
OUTPUT IS USED

MODEL W-	AFC
SBC-1A	AFC-2
SBC-8	AFC-5

R		MODEL NUMBER CHECK ADDED	2/2/65	5377	7/11	2/10	AP
A		AS MODEL WAS SPC-1	1-10-65	7973			
SYN	ZONE	DESCRIPTION	DATE	CH. NO	DRAFTS	CHECKED	ENG. APP.
UNLESS OTHERWISE SPECIFIED:			SCALE				
DIMENSIONS ARE IN INCHES			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS & SHARP EDGES				
TOLERANCES ON			A				
FRACTIONS ± 1/64			DECIMALS ± .005				
ANGLES ± 1/2°							

1	SBC-8		
1	SBC-1A		
REQ PER UNIT	MODEL	SECTION	USED ON

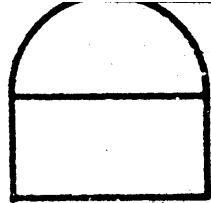
TNC FORM NO. 110 7 6 5 4



F7001



VOLT. ADJ.

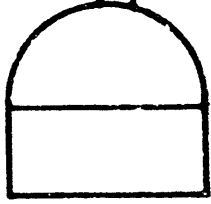
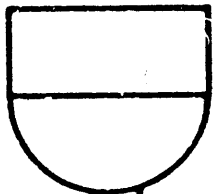


J7001

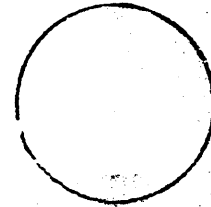


F7002

J7002



J7003



J7004



F7003

CA-659

2,3

19 20 21 22

LEVEL
OUT

MODEL	WFC	TYPE
SBC-1A	WFC-2A	SBC-1
REV	WFC-5	SBC-2

R6800
IN LEVEL



J6801
IN HI Z



J6803
250 KC
OSC OR
RCC IN



J6805
CH-B
IF OUT



J6800
IN LO Z



J6802
CONV.
INJ. IN



J6804
250 KC
IF OUT



J6806
CH-A
IF OUT



REV	ITEM	PART NO	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK				
STOCK SIZE				
WIRING DIAGRAM				
SBC-1A				
MATERIAL				
W.S.		J.S.		F.M.
DRAWN		CHECKED		FINAL APPROVAL
J.S.		J.S.		CK-555
TYPE & TEMPER		HEAT TREAT SPEC		SHEET OF
FINISH & SPEL NO		ELEC. DES APP		SHEET OF
USED ON		ELEC. DES APP		SHEET OF

-8

-1A

MODEL

SECTION

APPY NO.

DATE

12/21/61

USED ON

FINISH & SPEL NO

ELEC. DES APP

MGR. DES APP

SHEET OF

DEFINANCE NO. 1000

4

3

2

1

E

D

C

B

A

B