

ACETONE TOP 7

KEY BOARD : 49 KEYS F to F

TONE TABLETS : FLUTESUS. STRINGSUS, 16'FLUTE, 16'BASS,
8'FLUTE, 8'CLARINET, 8'SAXOPHONE, 8'STRING,
4'FLUTE, 4'STRING,
VIBRATO, ON, OFF TABLETS SWITCH

VIBRATO : VARIABLE CONTROL KNOB (Speed)
VARIABLE CONTROL KNOB (depth)

VOLUME : MAIN VOLUME 1

TRANSISTORS : 165 TRANSISTORS

A C CONSENT : CAPACITY 300 W

ON/OFF SWITCH

PILOT LAMP

110/117 VOLT 50/60 or 220~240V 50/60

FUSE : 0.2 A (AC)

DIMENSIONS 78 × 40 × 21 cm

WEIGHT 21 KG

WOODEN CASE COVERED

How to open the lid of Model Top-7 Organ.

Pull down the hooks (Fig. A (A1)) toward you, then the lid of organ can be easily opened. With the lid completely opened, it can be removed by pulling up.

Place the organ upright so that its carrying handle is positioned at the top, and screw 4 metal legs into each corresponding female nuts (Fig. B (B))

Then, place the organ in playing position.

Important: Be sure to place the organ on the flat floor.

How to take out AC cord, Expression pedal and out-put cord.

Unlock the back-side lid (Fig. B (B2)) of organ and take out AC cord, expression pedal and out-put cord.

Connection to the amplifiers and expression pedal.

AC cord is connected to 110/117 V, 50/60 cycle electric source.

Plug the expression pedal cord (Fig C (C1)) into the out-put jack (Fig A (A3)) of Top-7 organ, and connect the I type plug of the out-put cord to the jack of expression pedal (Fig C (C2)), L type plug to the amplifier input jack.

How to play Top-7 organ.

Throw the power switch in. Then, pressing a certain tablet for example a flute tablet, turn the volume control

knob clockwise and press a key of organ. If a sound is satisfactory, the connection is supposed to be OK.

As the next step, press the "Vibrato" tablet and check "Vibrato" is effective.

If it is all right, turn the "Speed" and "Depth" knob to check whether a player can achieve various vibrato effects.

Connection to the Ace-Tone amplifiers.

Top-7 organs if connected to such Ace-Tone amplifiers as Ace-Tone A-5, 601 or 701 amplifiers etc, can produce satisfactory sound. It may be connected to any other amplifiers or stereo amplifiers so that a player can obtain any desired sound.

How to control sound volume, vibrato speed, and depth.

If the volume knob is turned clockwise, the volume of sound increases.

Also, as vibrato speed knob is turned clockwise, the speed of vibrato increases.

When vibrato depth knob is turned clockwise, the depth of vibrato increases.

Adjustment of generator and vibrato sheets.

Top corner of Top-7 organ can be removed by loosening 5 wood screws (Fig. A (A₁)) using (+) driver. The internal construction is as shown in Fig. D and Fig. D' shows the construction of generator coil.

Sound frequency of each key can be adjusted by turning dust cores by \ominus driver.

If turned anti-clockwise, the frequency increases and vice-versa.

Fig D (D₂) shows a magnified view of semi-fixed resistor for vibrato adjustment. A rectangular slit is provided at the center of above-mentioned resistor for adjusting vibrato depth.

For adjustment, the vibrato depth control knob should be set at the maximum position.

If it is turned clockwise, vibrato depth increases and vice-versa.

How to control the sustain effect.

Sustain effect can be adjusted by semi-fixed resistor (SR-748 (B)) shown in Fig. 6 and Fig 7, to achieve proper effect.

Back-side view of top-corner.

Fig E shows the location of under-mentioned parts when the top-cover is taken off and turned up-side down.

Those are Main switch (Fig E (E₁))

Pilot lamp (Fig F (E₂))

Vibrato speed control (Fig E (E₃))

Vibrato depth control (Fig E (E₄))

Tablet Switches (Fig E (E₅))

(Vibrato, 4'String, 4'Flute, 8'String, 8'Trumpet,
8'Sax, 8'Clarinet, 8'Flute, 16'Bass, 16'Flute
String, sustain, Flute Sustain)

Main volume control (Fig E (E₆))

Notes on schematic diagrams.

AG-7 Generator circuit (Fig I)

Fig. 1 shows the wiring circuit of generator & vibrato oscillator for Top-7 organ.

Capacity of condensers Ca, Cb, Cc varies in each generator sheet.

The 5th divider is included in the vibrato sheet only. Other sheets do not have the same circuit.

The vibrato-oscillator circuit is self-explanatory as shown in Fig.....1

AG-7 Generator Sheet (Fig 2)

Fig 2 shows the location of each parts used in the print circuit board of AG-7 generator sheet.

Each tone can be adjusted by tuning corresponding dust core of Coil L.

AV-4 (B) Vibrato Sheet (Fig 3)

Fig 3 shows the location of each parts used in the vibrato oscillator sheet.

The oscillation will be adjusted by semi-fixed resistor shown in the drawing.

AF-2 Filter circuit plan (Fig 4)

Fig 4 shows the wiring circuit of filters to be used to produce the sounds of String, Flute, Trumpet, Sax & Bass.

AF-2 Filter circuit sheet (Fig 5)

Fig 5 shows the location of various parts to be used in the print circuit board of the filter.

Terminals, Sustain Flute, Sustain Strings etc. shown in the upper part of drawing are connected to corresponding tablet switches on the top cover.

AS-4 Sustain circuit.

Sustain effects is available for 30 keys above C2.

AS-4 Sustain Sheet.

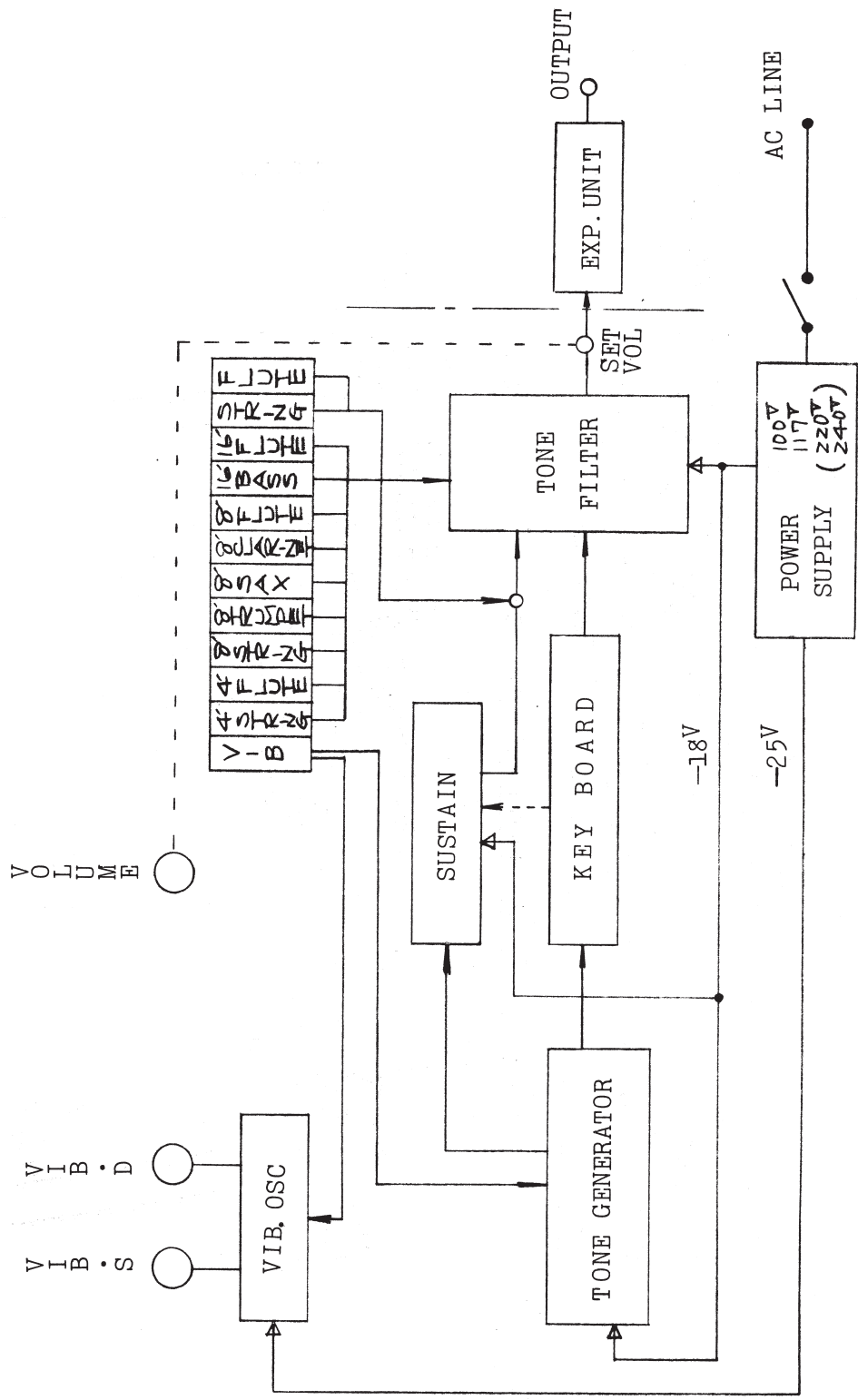
Fig 7 shows the location of parts used in the Sustain sheet. The connection of terminals is illustrated in Fig 8. Connection between key board and other print circuit boards

Fig 8 shows the connection between key board, generator, sustain sheet filter sheet and bass bar, observed from the back-side of key-board.

How to control filter circuit board .

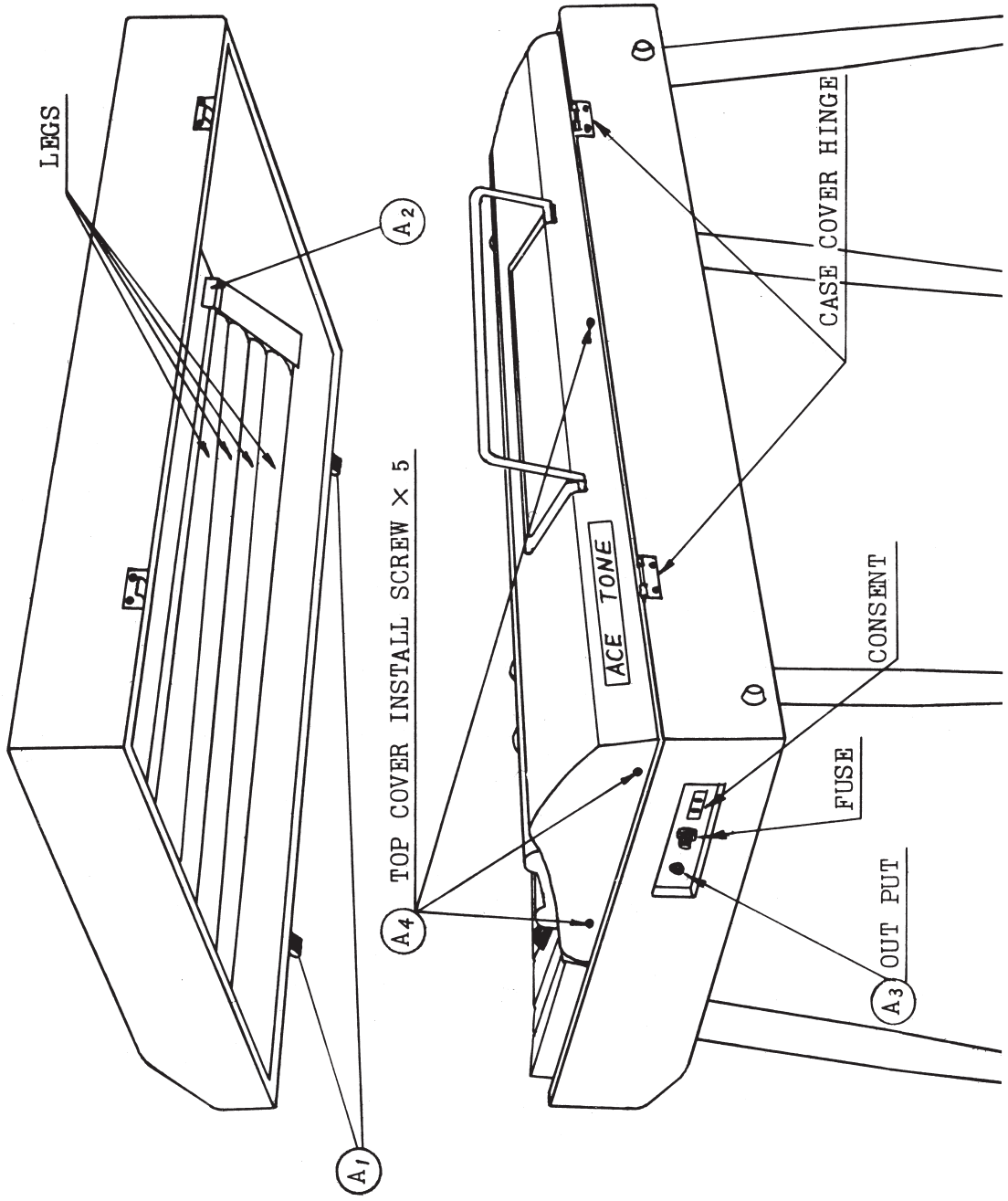
Balance of sound volume between Flute and String filters can be adjusted by semi-fixed resistor

(FR-7020 in Fig 4 & Fig 5).



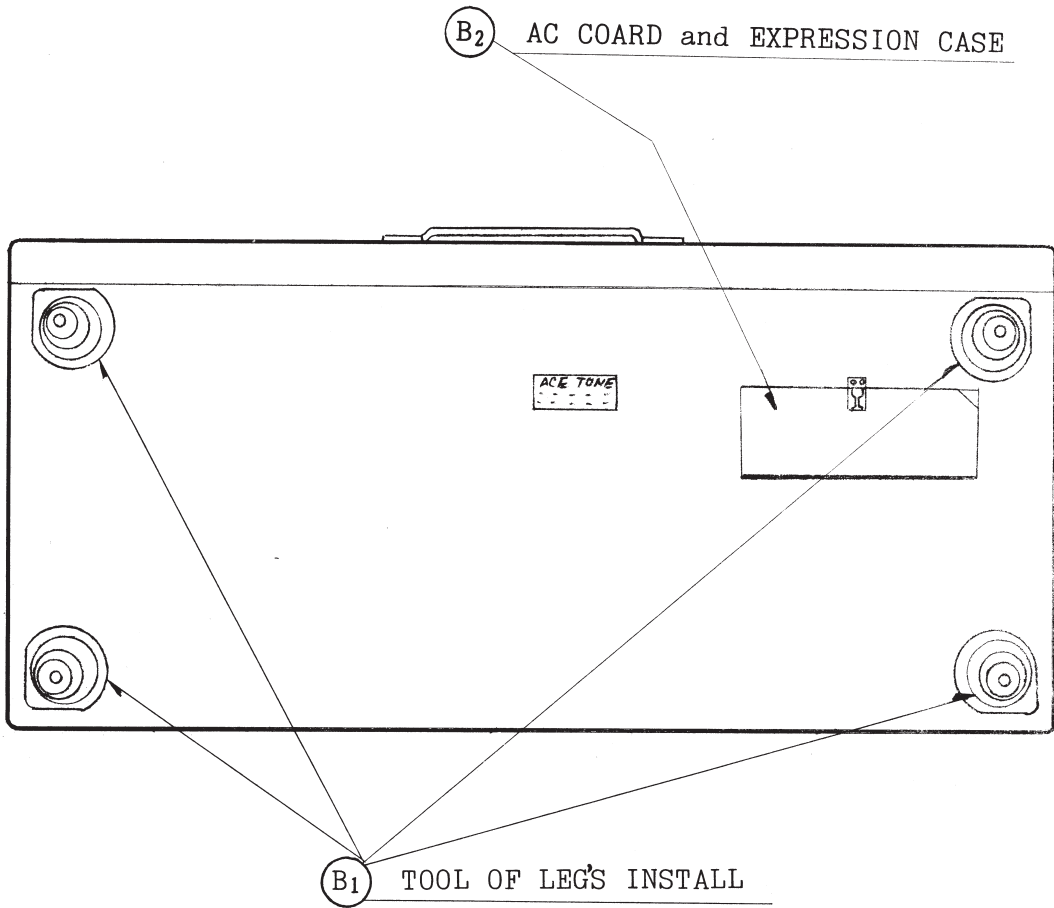
- TOP-7. BLOCK DIAGRAM -

FIG A



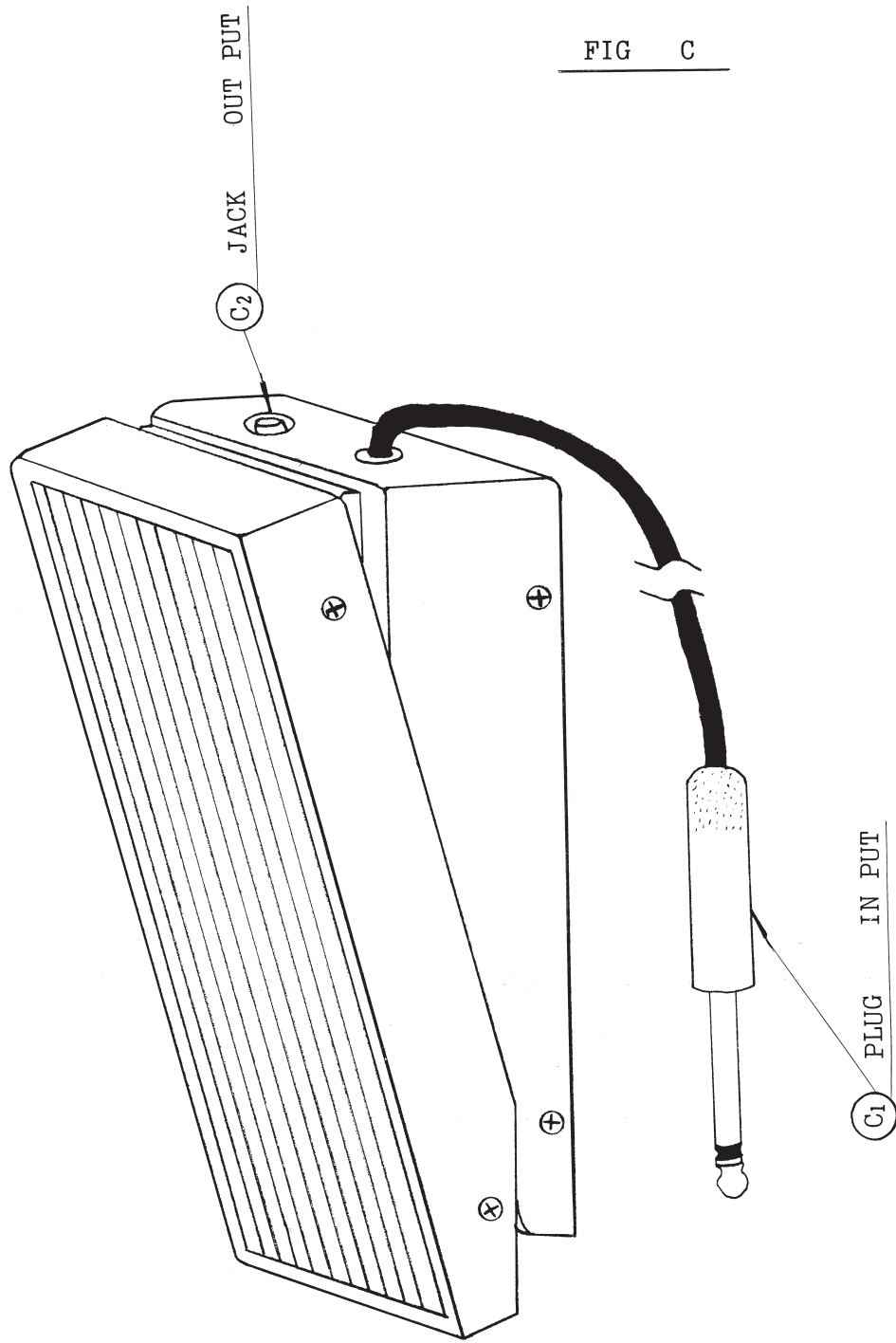
OUT SIDE CONSTRUCTION

FIG B



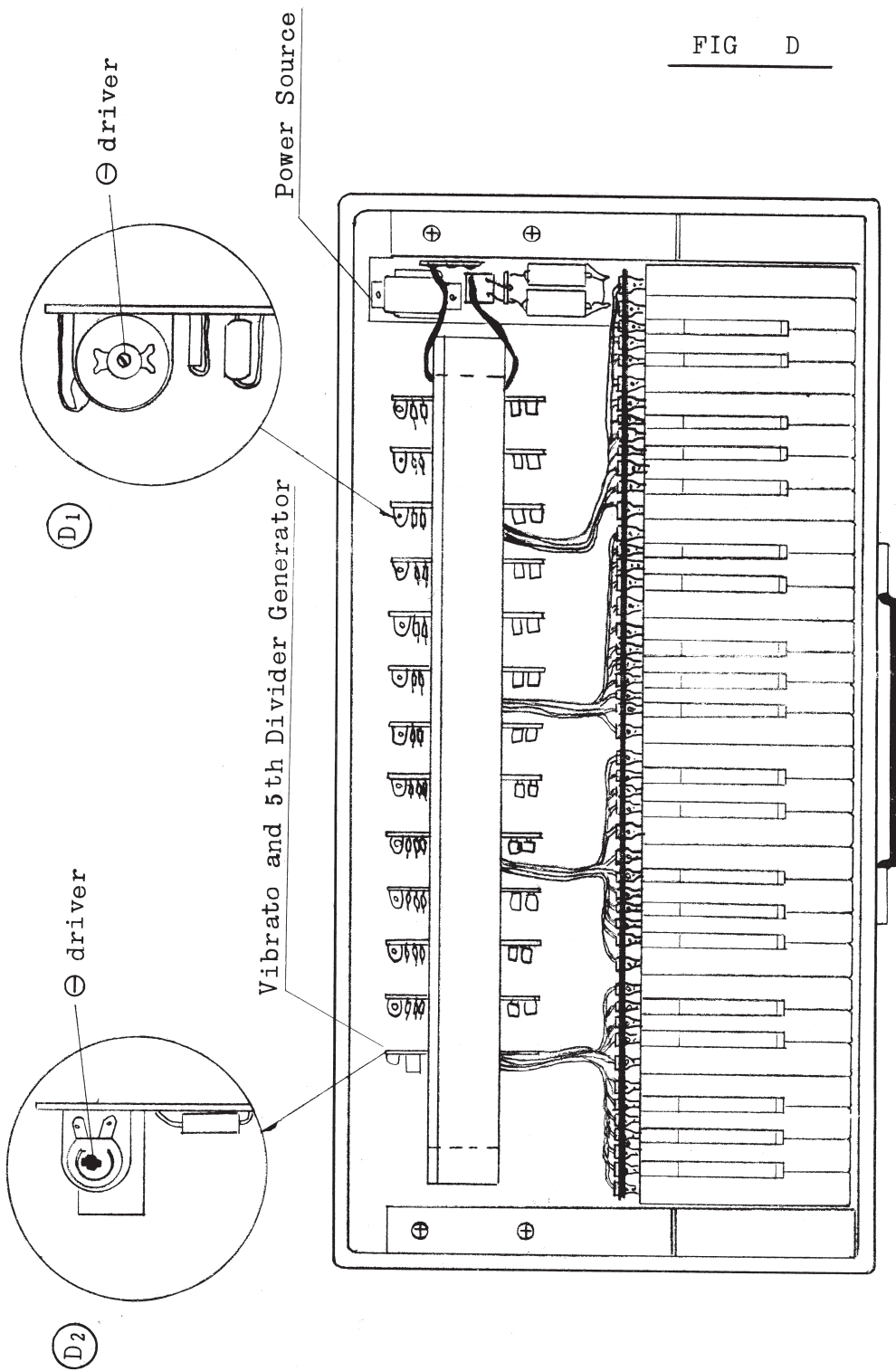
BASE OF CASE

FIG C



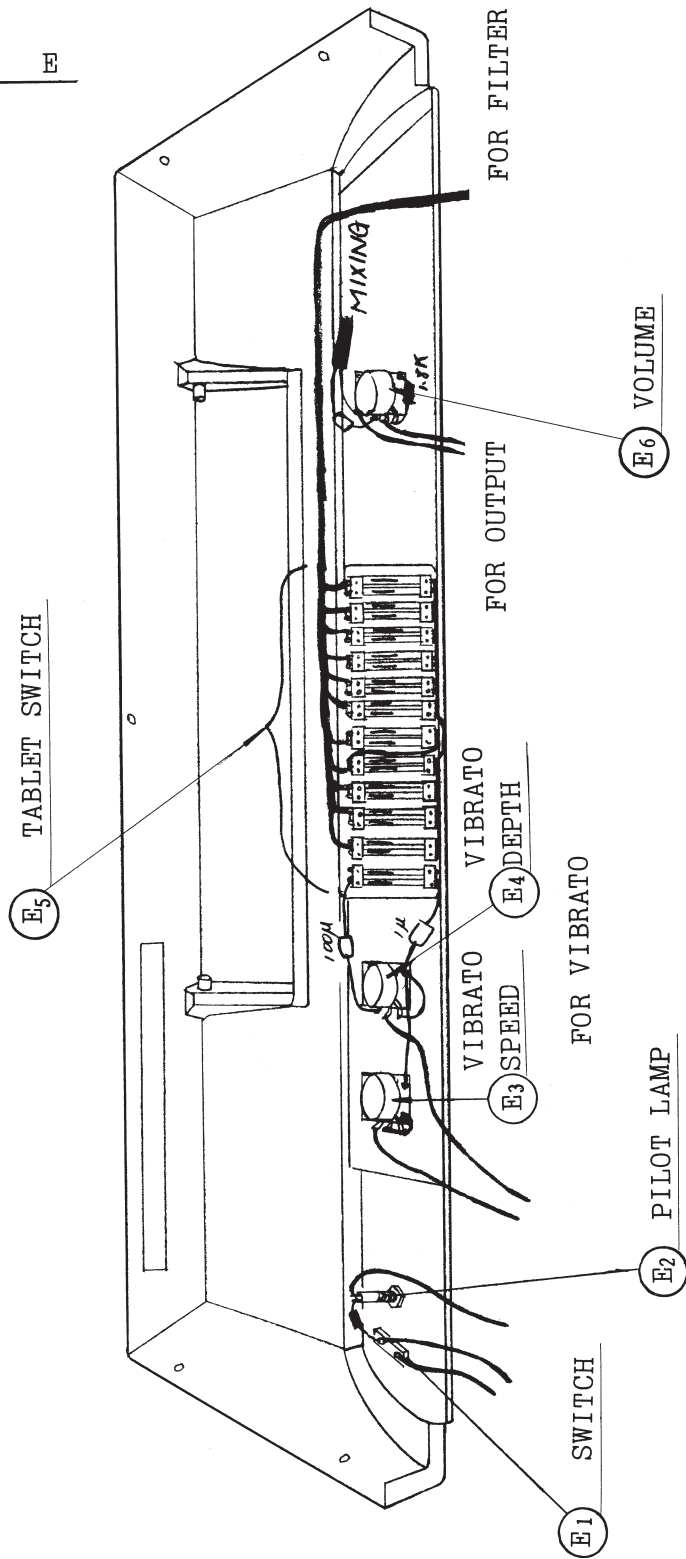
OUT PUT CONTROL PEDAL

FIG D



PARTS DISPOSITION PICTURE

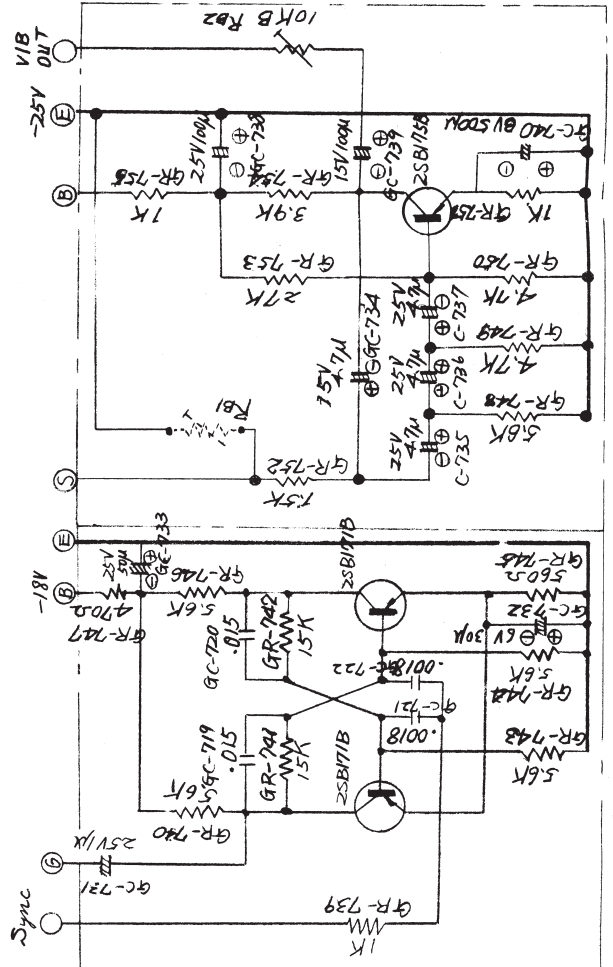
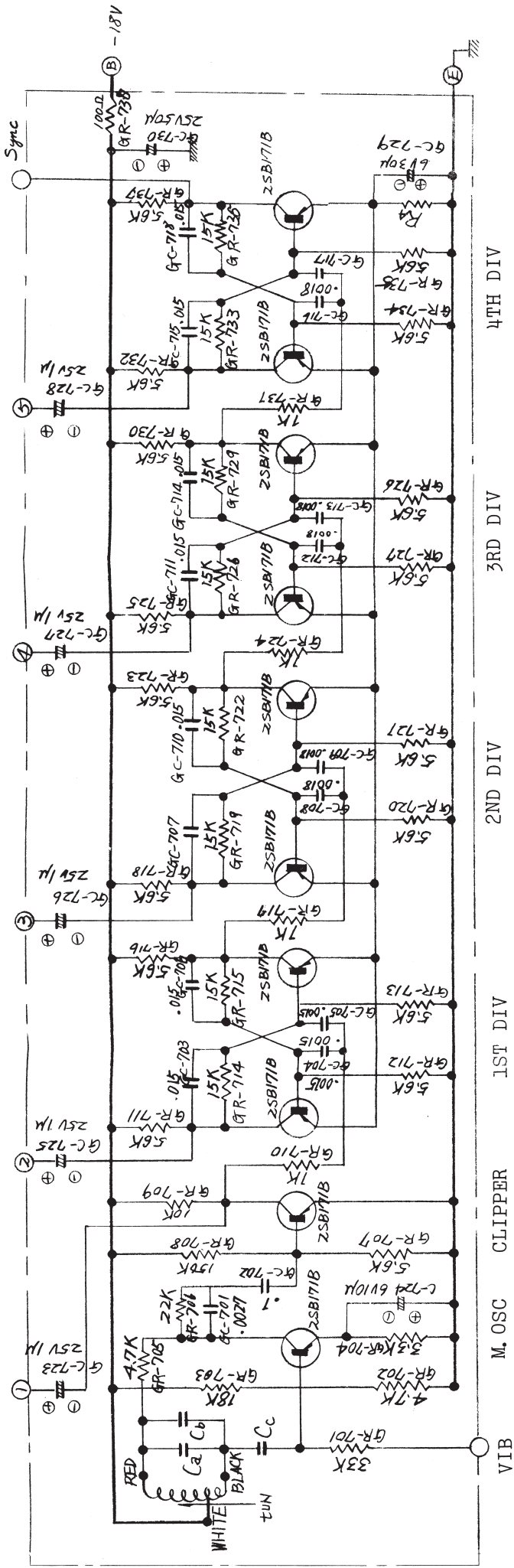
FIG E



TOP COVER PARTS DISPOSITION PICTURE

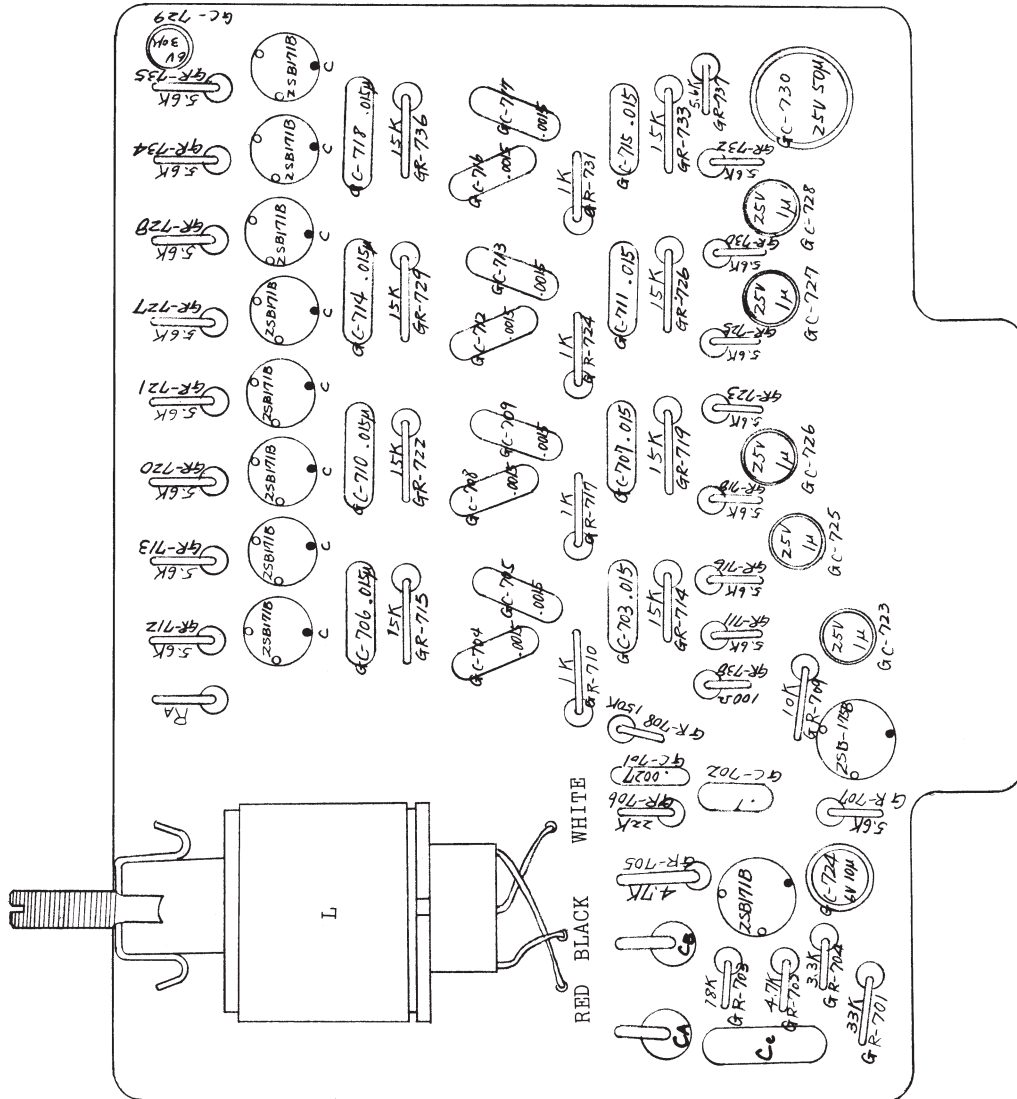
TABLET SWITCH, FROM LEFT

VIBRATO, 4STRING, 4FLUTE, 8TRUMPET, 8STRING, 8CLARINET, 8FLUTE, 16BASS, 16FLUTE, STRING, FLUTE



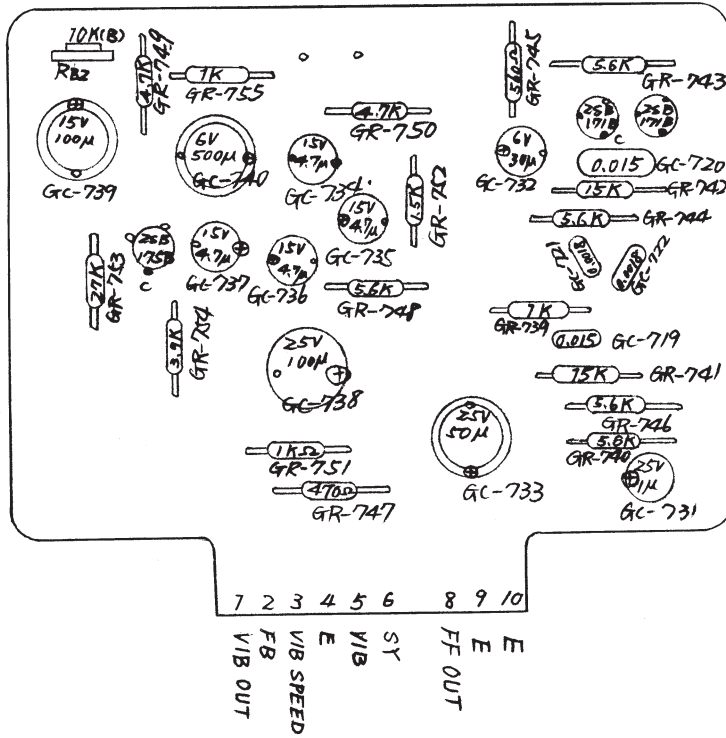
TONE	AG 761F 67 TONE F SCALE				
	Freq	Ca +Cb	Cc	Div	RA
E	2637	0.015	0.01	4TH	150Ω
D#	2489	0.015	0.01	"	"
D	23	0.015 + 0.0033	0.01	"	"
C#	2217	0.015 + 0.0047	0.012	"	"
C		0.015 + 0.0047	0.012	"	"
B	1976	0.022 + 0.0047	0.012	"	"
A#	1865	0.022 + 0.0047	0.012	"	"
A	1760	0.033	0.02	"	"
G#	1661	0.033	0.02	"	"
G	1568	0.033 + 0.0068	0.02	"	"
F#	1480	0.047	0.02	"	"
F	2749	0.012	0.01	"	"

GENERATOR CIRCUIT, AND VIBRATO OSC



AG-7 GENERATOR PRINT SHEET

FIG 3



AV-4(B)

VIBRATO PRINT SHEET

USE BY TOP-7

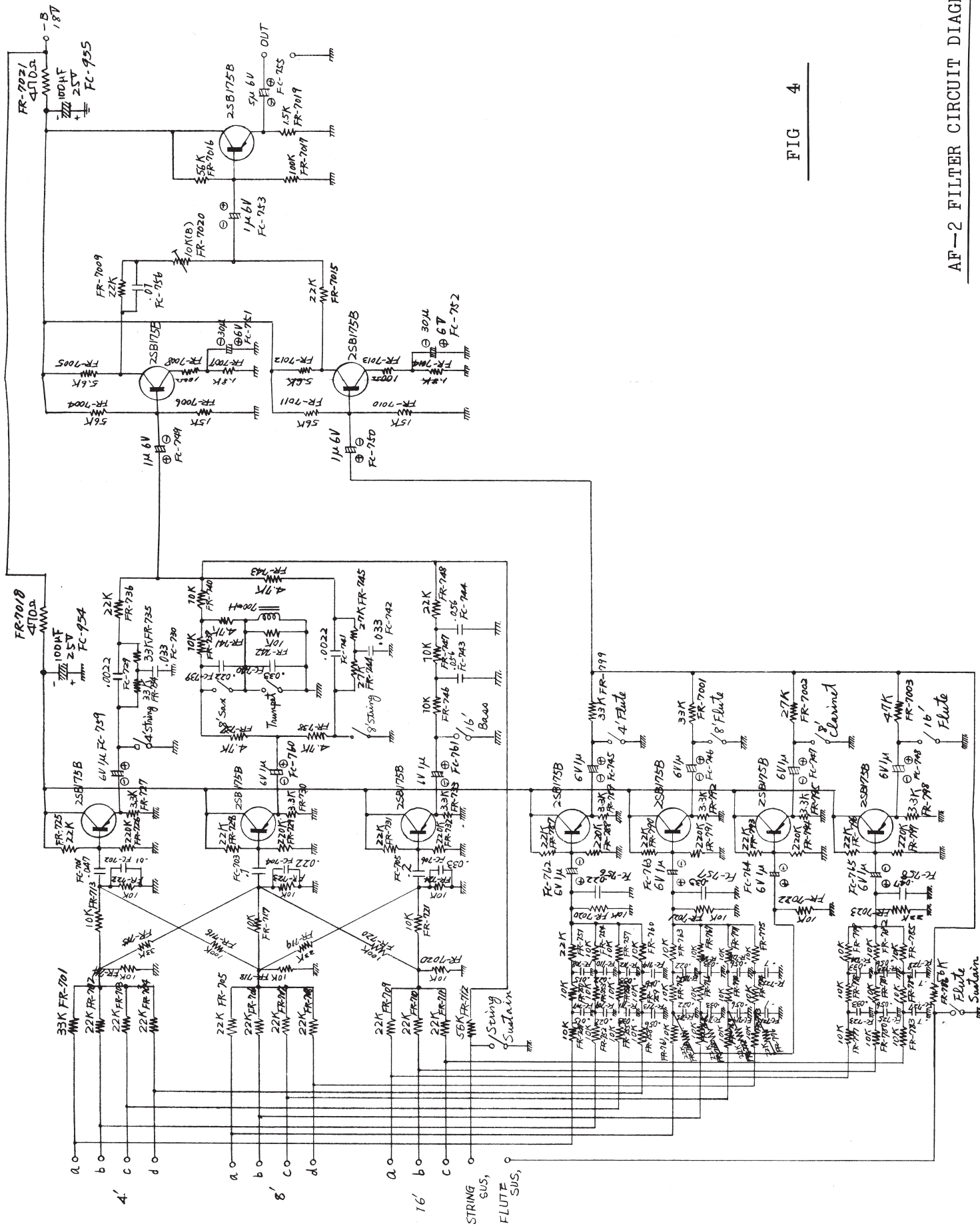


FIG 4

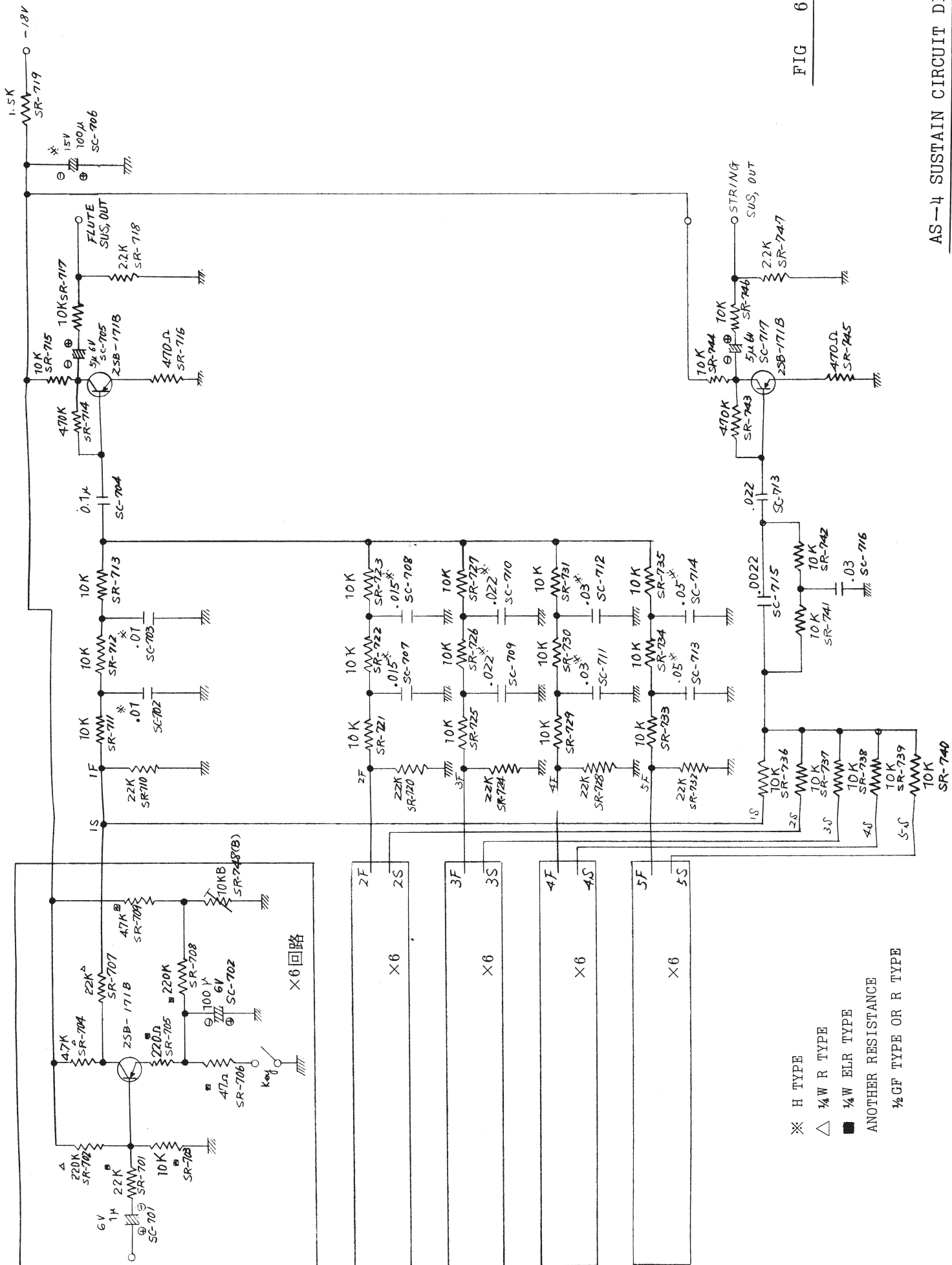


FIG 6

- ※ H TYPE
- △ ¼ W R TYPE
- ¼ W ELR TYPE
- ANOTHER RESISTANCE
- ¼ GF TYPE OR R TYPE

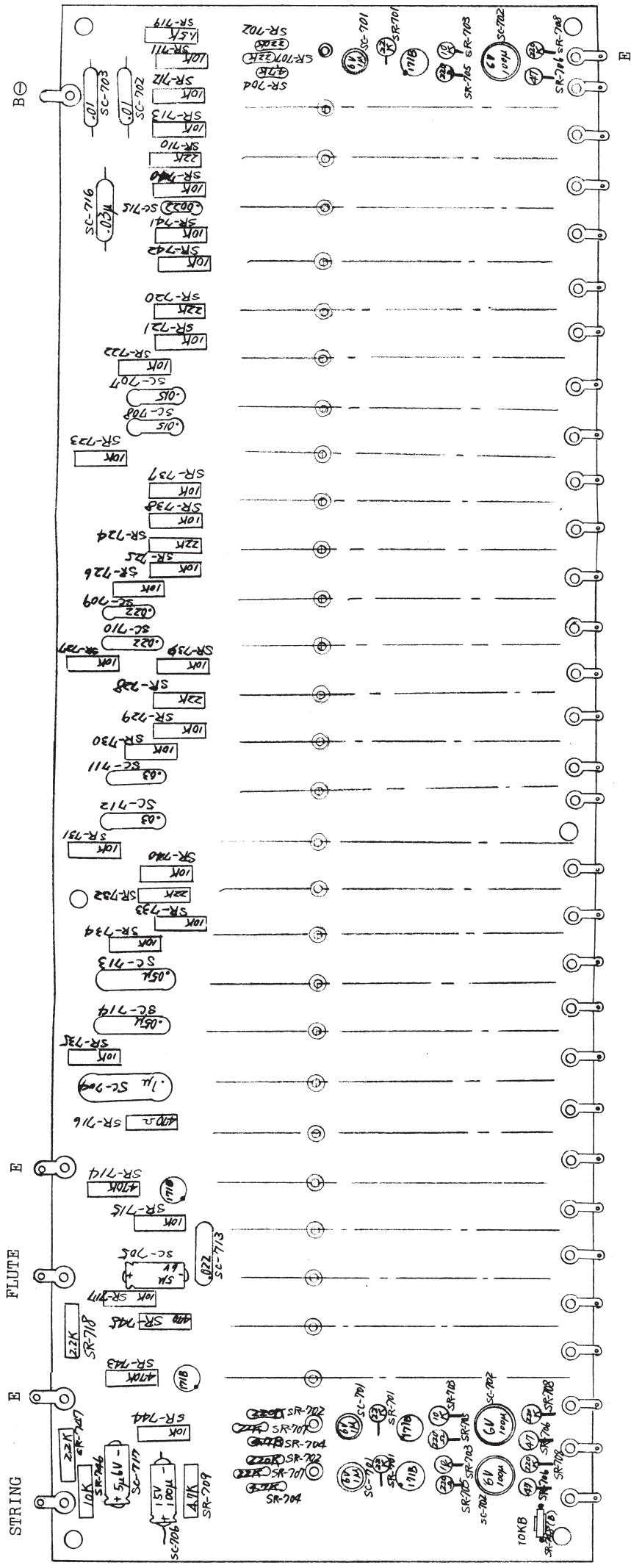
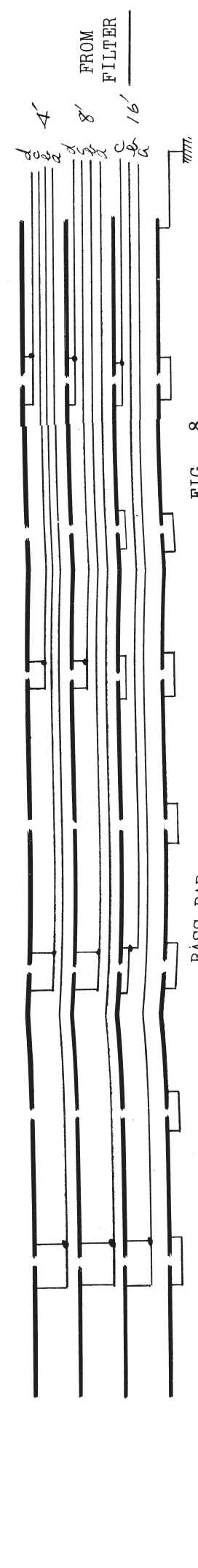
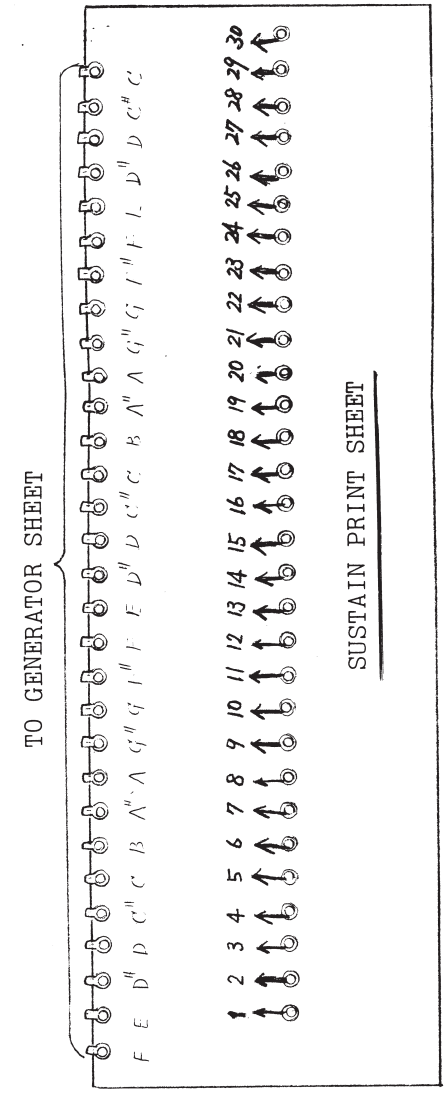
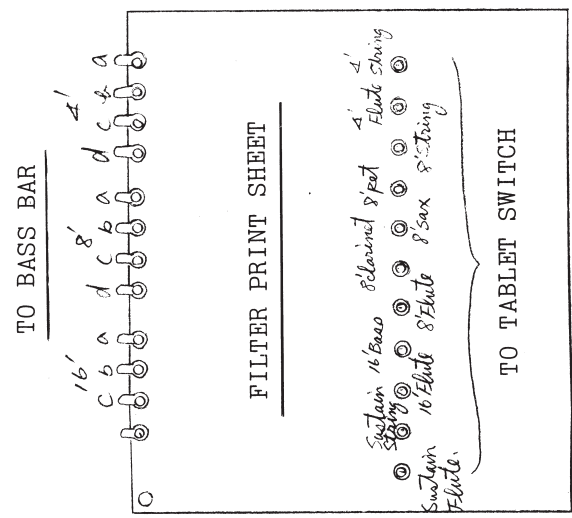
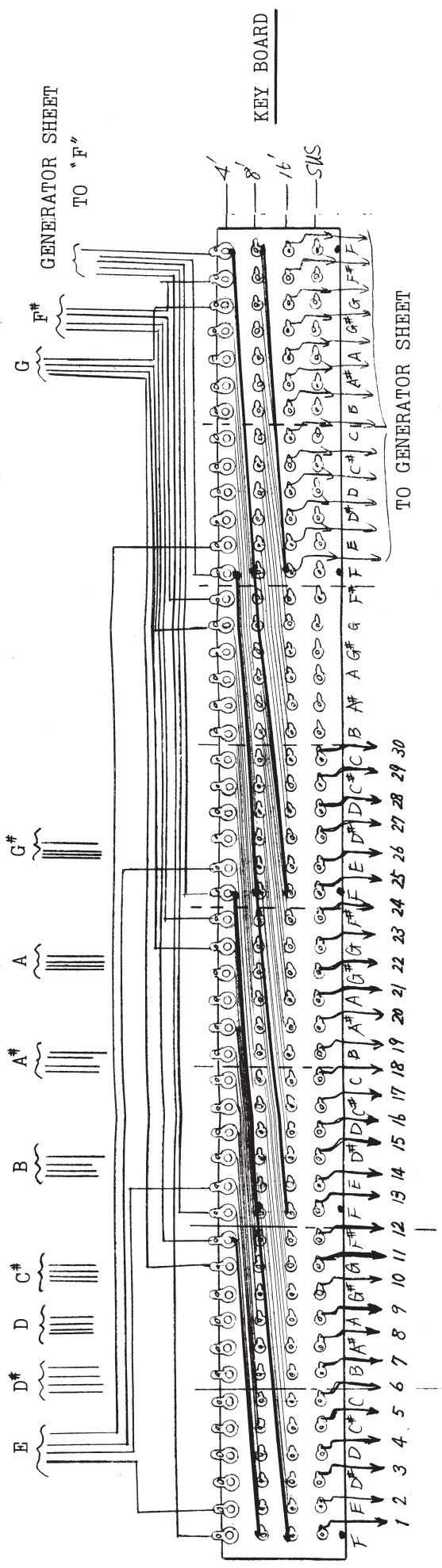
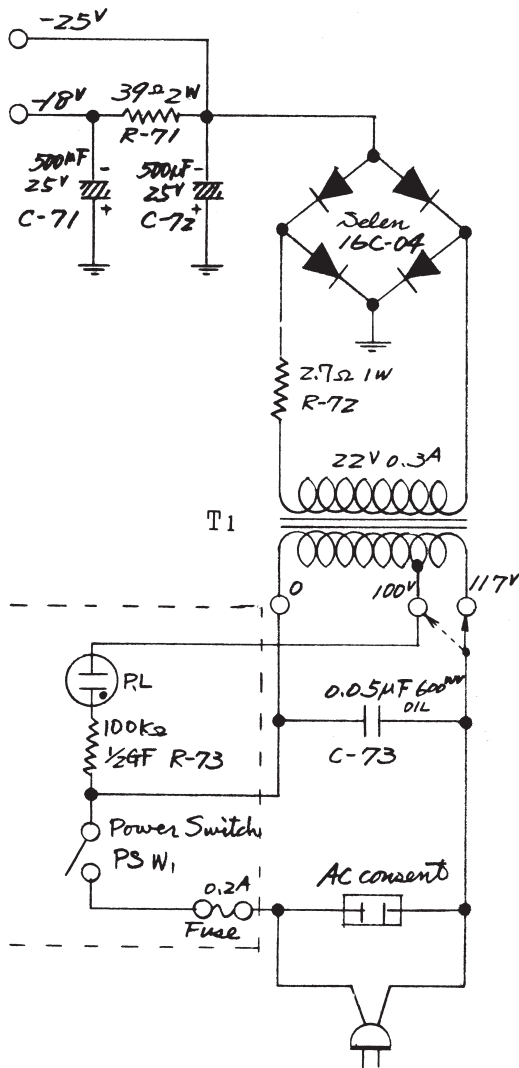


FIG 7

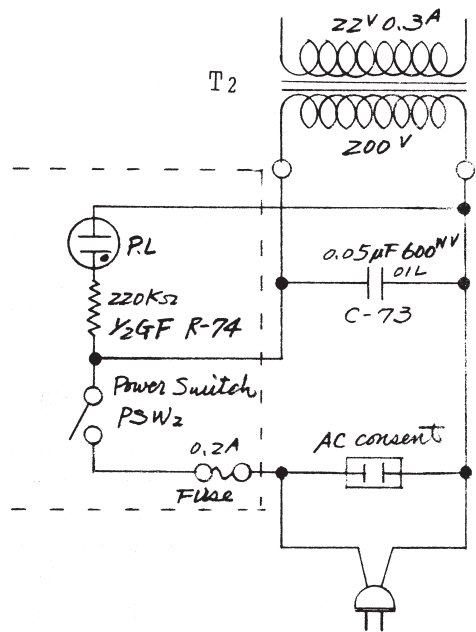
AS-4 SUSTAIN SHEET



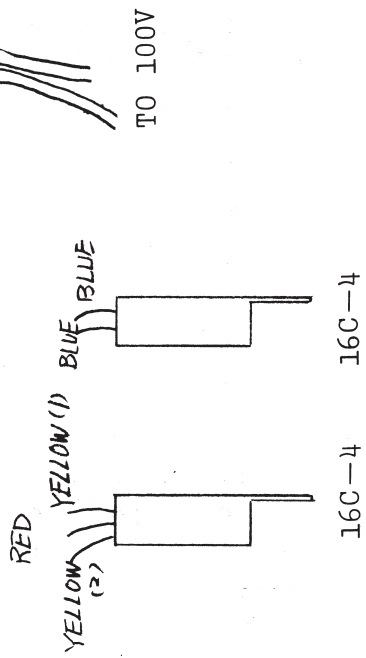
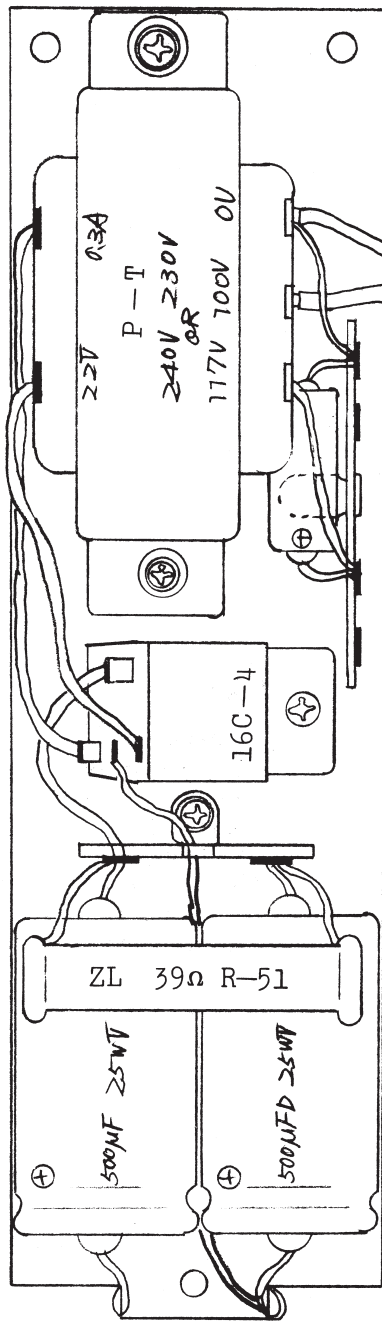


-CASE OF 110V~117V-

POWER SOURCE CIRCUIT



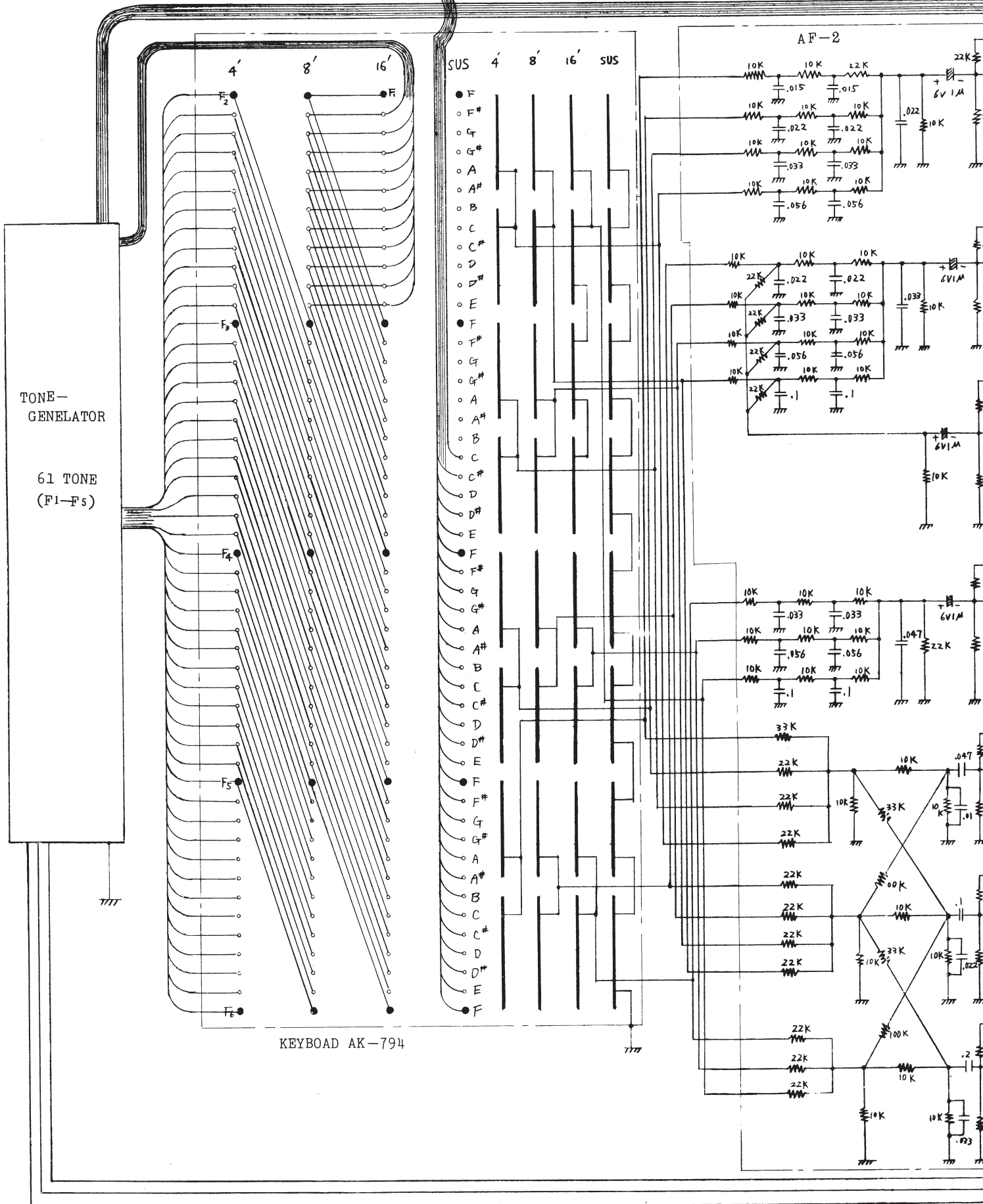
-CASE OF 220V~240V-



POWER SOURCE

FROM
SUSTAIN SHEET

SVSTAIN IN-PUT
C₂~F₅ 30 TONE



SUS 4' 8' 16' SUS

- F
- F#
- G
- G#
- A
- A#
- B
- C
- C#
- D
- D#
- E
- F
- F#
- G
- G#
- A
- A#
- B
- C
- C#
- D
- D#
- E
- F
- F#
- G
- G#
- A
- A#
- B
- C
- C#
- D
- D#
- E
- F
- F#
- G
- G#
- A
- A#
- B
- C
- C#
- D
- D#
- E
- F

KEYBOARD AK-794

AF-2

TONE-
GENERATOR

61 TONE
(F1-F5)

