

# JVC

# SERVICE MANUAL

**MODEL**  
**P-3030**  
**STEREO PREAMPLIFIER**



No. 2419  
MAY, 1977

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# 1. Specifications

Transistor & Diode	:	26 FETs, 41 Transistors & 19 Diodes
Input Terminal and Input Impedance	:	PHONO-1, 2 (Moving Magnet Type) 2 mV/100 $\Omega$ , 33 k $\Omega$ , 47 k $\Omega$ , 100 k $\Omega$ PHONO-3 (Moving Coil Type) 0.1 mV/30 $\Omega$ TUNER, AUX, TAPE PLAY 1, 2 140 mV/more than 50 k $\Omega$
Cartridge Load Select	:	(C) 100 pF, 220 pF, 330 pF, 470 pF (R) 100 $\Omega$ , 33 k $\Omega$ , 47 k $\Omega$ , 100 k $\Omega$
Phono Overload	:	PHONO-1, 2 (Moving Magnet Type) 300 mV (RMS) 1 kHz Before clip PHONO-3 (Moving Coil Type) 15 mV (RMS) 1 kHz Before clip
Output Terminal and Output Impedance	:	TAPE REC 1, 2 140 mV OUTPUT 1, 2 1 V/600 $\Omega$ (Rated output) 20 V (Max)
Total Harmonic Distortion (20 Hz – 20 kHz)	:	PHONO-1, 2 (Moving Magnet Type) 0.005 % or less (10 V) PHONO-3 (Moving Coil Type) 0.05 % or less (1 V) TUNER, AUX, TAPE PLAY 1, 2 0.005 % or less (10 V)
Frequency Response	:	PHONO-1, 2 RIAA $\pm$ 0.3 dB (20 Hz – 20 kHz) PHONO-3 RIAA $\pm$ 0.5 dB (30 Hz – 20 kHz) TUNER, AUX, TAPE PLAY 1, 2 10 Hz – 40 kHz $\pm$ 0.5 dB
Tone Control	:	50 Hz ( $\pm$ 10 $\pm$ 2 dB), 20 kHz ( $\pm$ 10 $\pm$ 2 dB)
Signal-to-Noise Ratio at rated output (IHF A network)	:	PHONO-1, 2 76 dB PHONO-3 66 dB TUNER, AUX, TAPE PLAY 1, 2 96 dB
Subsonic Filter	:	18 Hz 6 dB/Oct.

## 2. Precautions in Servicing

- If a turntable equipped with MM cartridge is connected to the PHONO-3 terminals (for exclusive use with an MC cartridge), most of high frequency sounds will be cut. The MC amplifier is overloaded, though the sound does not seem distorted.
- The 100  $\Omega$  position is exclusively for a high output MC cartridge.
- The cartridge load select switches are effective only for the PHONO-1 and PHONO-2 terminals.
- If excessive hum is encountered during record playing, check for induction caused by the other components placed around the preamplifier.

Employment of the preamplifier on top of a high power apparatus (like a power amplifier) will induce hum.

Keep it as far away from other apparatuses as possible. Nearby appliances containing even small transformers may cause induced hum if the transformers are imperfectly shielded.

# 3. Connection Diagram

## Important notes

1. Do not plug the power cord into an AC outlet until all connections are complete.
2. Switch the power off when connecting any component.
3. Connect plugs or wires firmly. Poor contact may result in hum.
4. Connect the components with the correct left and right channel connections. Reversed channels will degrade the stereo effect.
5. Do not connect equipment requiring more than the rated power to the AC outlets. Do not employ these AC outlets for equipment other than audio components.
6. Ground terminal (GND)  
If your turntable has a separate ground lead, connect it to this terminal.
7. No sound will be heard for about 5 or 6 seconds after the power is turned on. This is not due to any defect of the set, but due to the operation of the protective circuit which prevents output noises until the circuit components are stabilized.

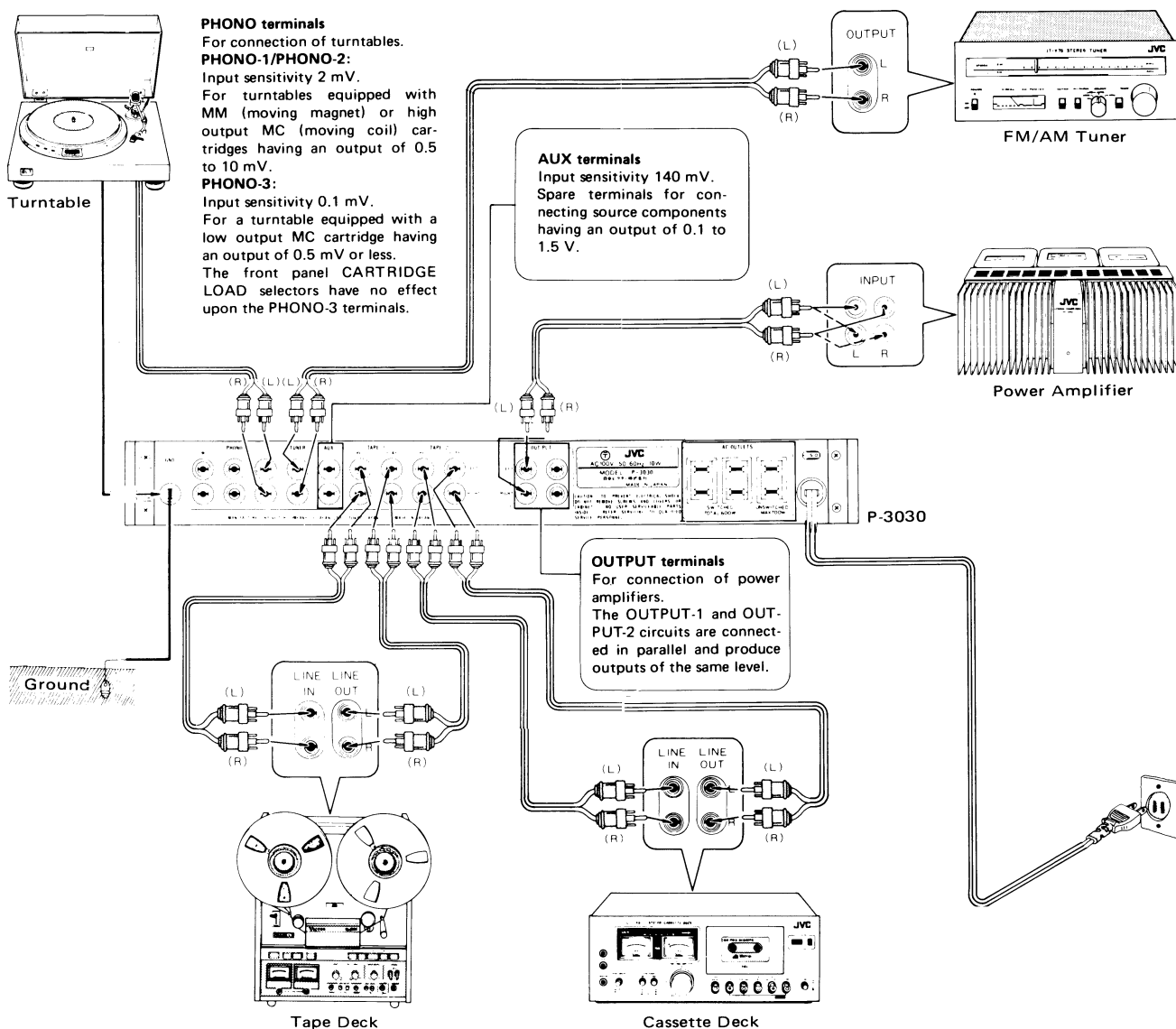


Fig. 1

## AC outlets

For the connection of other audio components only.

### SWITCHED:

Two SWITCHED outlets are switched off when the front panel power switch is off. If the power amplifier is connected to one of these outlets, its on and off power switching can be controlled with the power switch of this unit. The power capacity is rated at 600 W total. If the power amplifier is not a JVC product, check to make

sure that it is equipped with fuses or a circuit breaker to protect against current surges during switching. To give a rough reference, power amplifiers of less than 100 watts per channel can be connected. Those with output power more than that should be connected to the UNSWITCHED AC outlet.

### UNSWITCHED:

Power is not switched off when the front panel power switch is off. The capacity is 700 W.



## 4. How to Operate

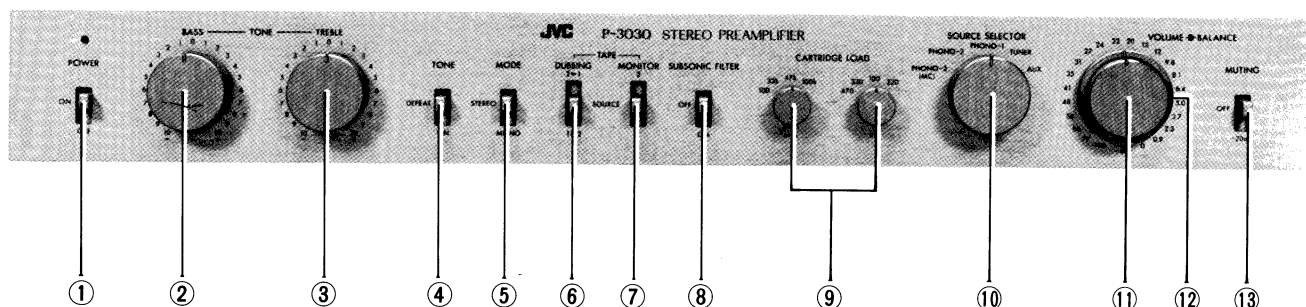


Fig. 2

### ① POWER switch

Flip up to turn power on.  
The power indicator will light.  
Flip down to turn power off.

### ② BASS control

Turn clockwise to boost bass response, counterclockwise to decrease bass response.

### ③ TREBLE control

Turn clockwise to boost treble response, counterclockwise to decrease treble response.

### ④ TONE switch

**DEFEAT:** Flip up to this position to obtain flat frequency response. The effects of the BASS and TREBLE controls are cancelled out.

**ON:** Flip down to this position to actuate the BASS and TREBLE controls.

### ⑤ MODE switch

**STEREO:** To hear stereo sound.

**MONO:** To hear mixed sounds of the left and right channels from both speakers.

### ⑥ DUBBING switch

**SOURCE:** Set to this position when recording a source connected to the rear panel PHONO, AUX and TUNER terminals.

**2 → 1:** Set to this position when dubbing from the tape deck connected to the TAPE-2 terminals to the tape deck connected to the TAPE-1 terminals.

**1 → 2:** Set to this position when dubbing from the tape deck connected to the TAPE-1 terminals to the tape deck connected to the TAPE-2 terminals.

### ⑦ TAPE MONITOR switch

**SOURCE:** Set to this position for listening or recording of the source selected with the SOURCE switch.

**TAPE-1:** Set to this position to listen to the tape deck connected to the TAPE-1 terminals.

**TAPE-2:** Set to this position to listen to the tape deck connected to the TAPE-2 terminals.

### ⑧ SUBSONIC FILTER switch

Flip down to ON to eliminate ultra-low noise from warped records and prevent speaker intermodulation distortion.

### ⑨ CARTRIDGE LOAD switches

Set to the proper cartridge impedance and capacitance according to the cartridge being used.

These switches are only effective when the PHONO-1 and PHONO-2 terminals are employed; they have no effect on the PHONO-3 terminals.

⑩ **SOURCE SELECTOR switch**

PHONO-1: To listen to records on the turntable connected to the PHONO-1 terminals.

PHONO-2: To listen to records on the turntable connected to the PHONO-2 terminals.

The input sensitivity is 2 mV (allowable from 0.5 to 10 mV). Therefore, connect a turntable equipped with a moving magnet or high output moving coil type cartridge.

PHONO-3: To listen to records on the turntable connected to the PHONO-3 terminals.

The input sensitivity is 0.1 mV (allowable from 0.05 to 0.5 mV). Connect a turntable equipped with a low output moving coil type cartridge.

**Note:** The CARTRIDGE LOAD switches cannot be used for the PHONO-3 terminals.

TUNER: To listen to radio broadcasts from the tuner connected to the TUNER terminals.

AUX: To listen to the source connected to the AUX terminals.

The input sensitivity of the AUX terminals is 140 mV. Connect a source having an output of 0.1 to 1.5 V.

⑪ **VOLUME control (inside knob)**

Adjusts the speaker or headphone volume.

The scale is graduated in dB attenuation increments starting from the fully clockwise maximum position.

⑫ **BALANCE control (outside knob)**

Adjusts the balance between the left and right speaker volumes. The control stops at the center click-stop position when turned in either direction.

⑬ **MUTING switch**

Flip to “-20 dB” to mute the sound to 1/10 normal level. Flipping to “OFF” returns the level to that adjusted with the VOLUME control.

# 5. Removal of Bottom Plate, Top Cover, Panels and Knobs

## Procedure

- 1. Bottom Plate**  
Remove the five screws (item No. ①).
- 2. Top Cover**  
Remove the PHONO-2 shorting pin and five screws ② then remove the cover, along with the protectors, from the chassis. Pull the cover further to the rear.
- 3. Side Panel**  
Remove the eight screws ③ from both sides.
- 4. Knobs**  
Remove all knobs, ④ through ⑧, on the front panel. Use a hex wrench to remove interior volume control knob ⑤.
- 5. Front Panel**  
Remove two screws ⑨ from above and two screws ⑩ from below, then pull the panel out to the front.

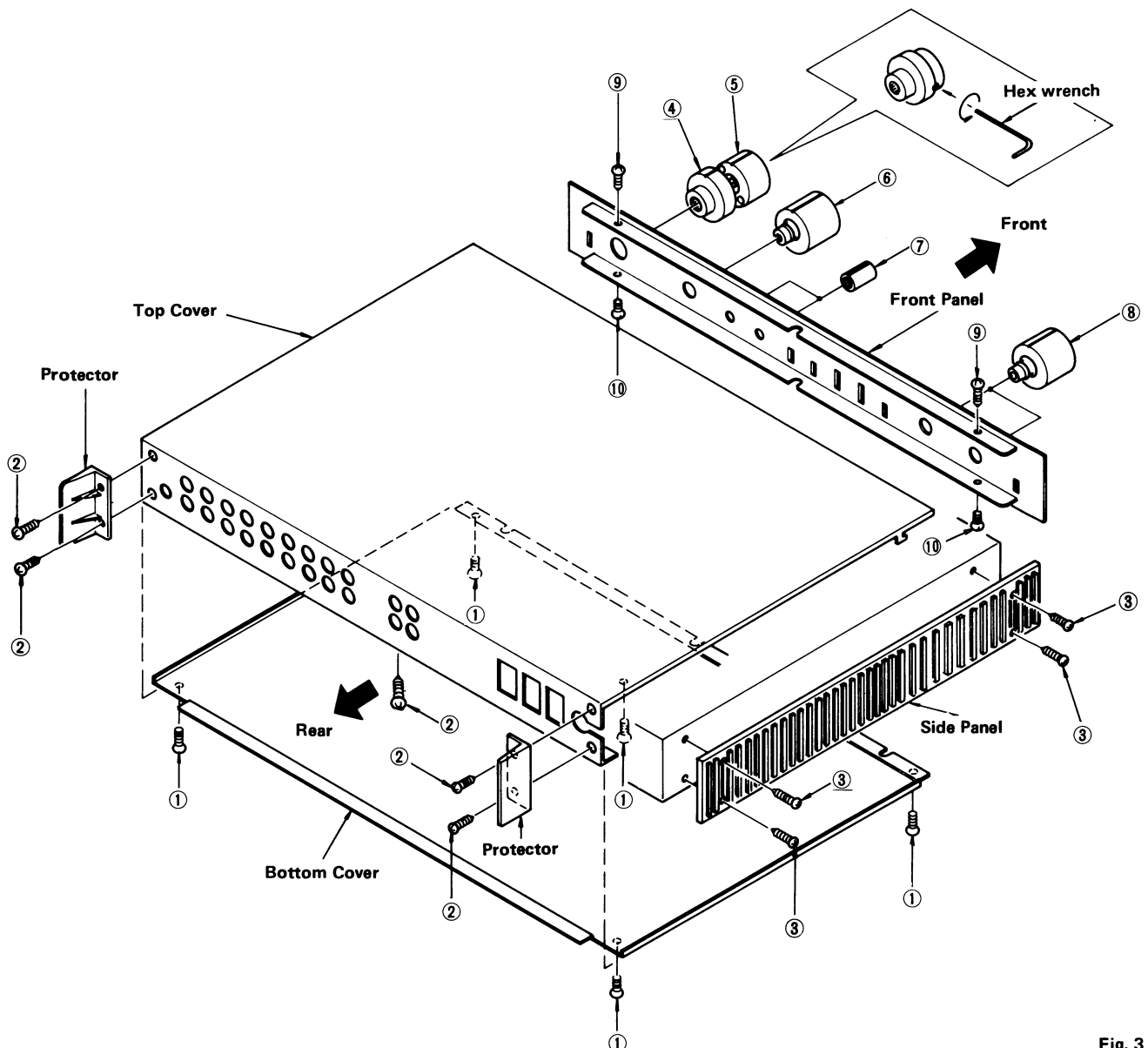


Fig. 3

# 6. Main Parts Location

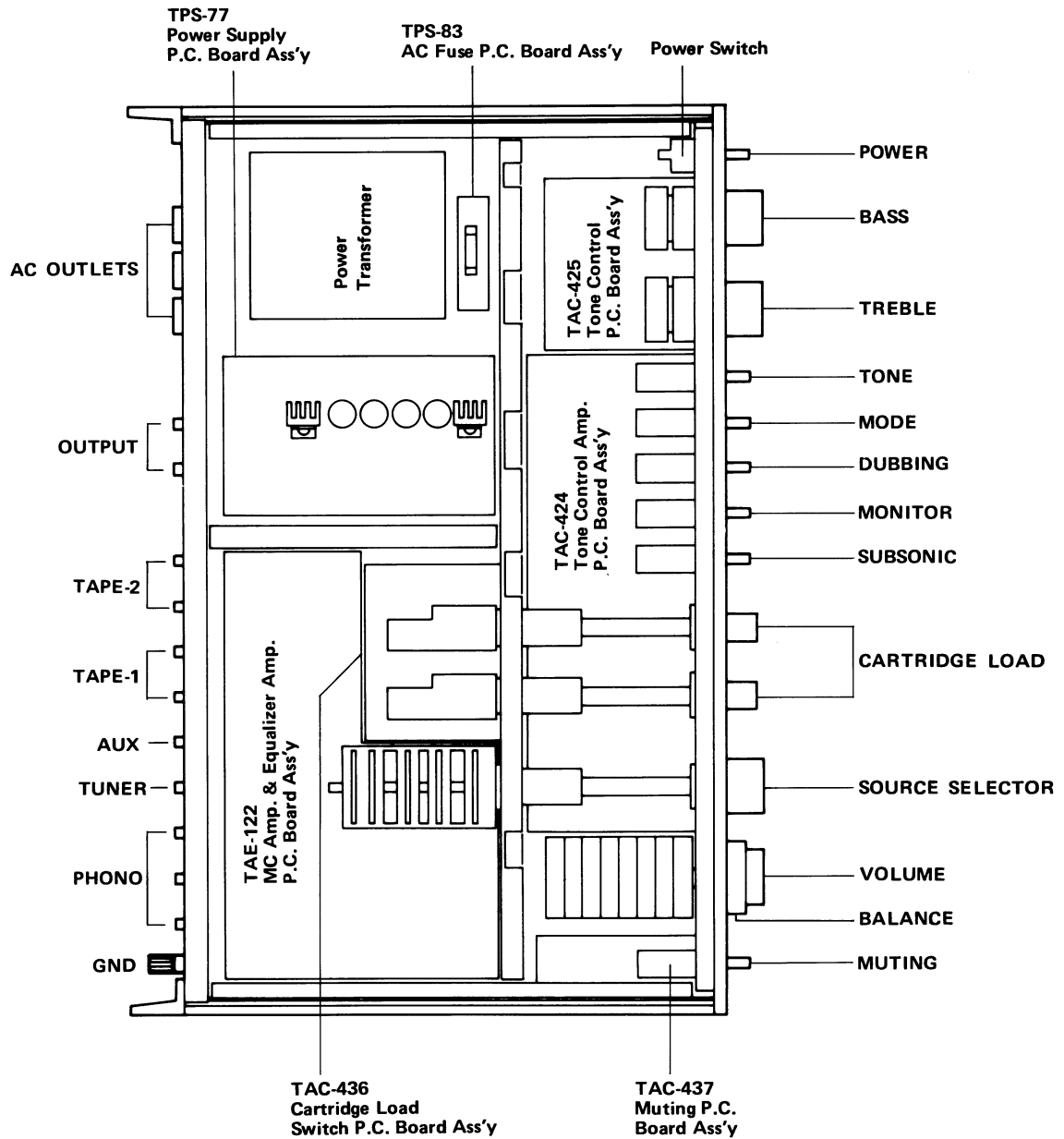


Fig. 4

# 7. Exploded Views and Parts List

## 7-(1) Front Panel, Top Cover and Bottom Plate

Top View

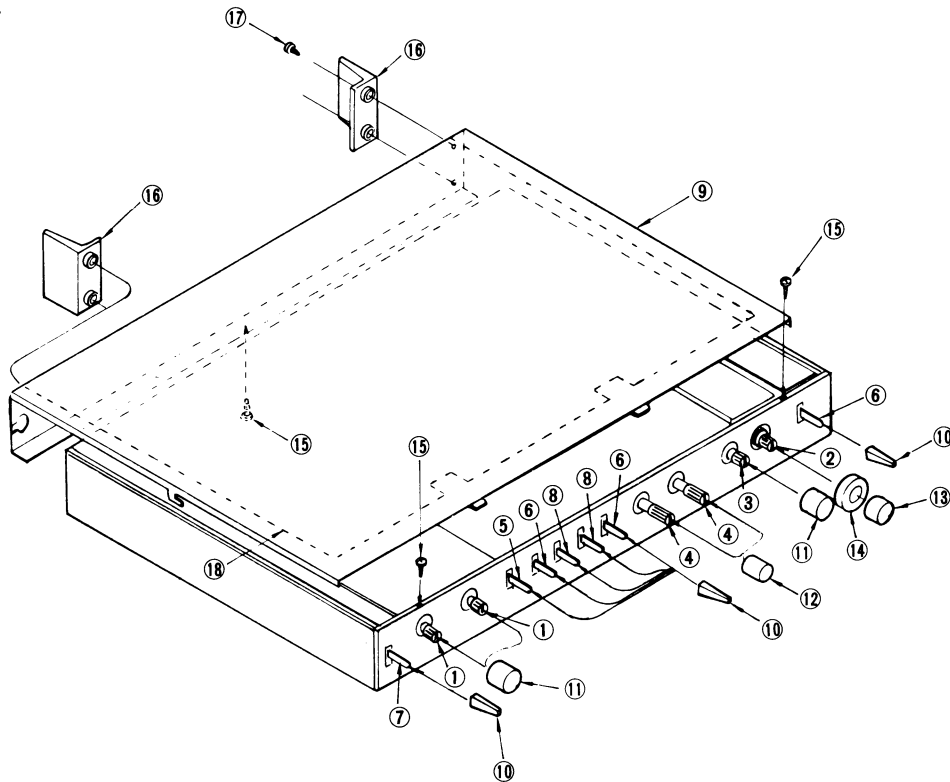


Fig. 5

### Parts List (Fig. 5)

Item No.	Part Number	Rating	Description	Q'ty
1	QVC3A2C-215V	100 k $\Omega$ (C)	Variable Resistor (TONE)	2
2	QVZ2601-001	250 k $\Omega$ (M, N)	" (BALANCE)	1
		" (B)	" (VOLUME)	
3	QSR0077-001		Rotary Switch (SOURCE)	1
4	QSR6044-200E		" (C. LOAD)	2
5	QSL4214-001		Lever Switch (TONE)	1
6	QSL4214-002		" (MODE)	1
7	QSL2224-003		" (POWER)	1
8	QSL4314-001		" (DUBBING)	2
			" (MONITOR)	
9	See page 28.		Metal Cover	1
10	E61525-001		Lever Knob	7
11	E61526-001		Tone Knob	2
12	E61527-001		Knob	3
13	E61528-001		Double Knob (Inside)	1
14	E61529-001		" (Outside)	1
15	SSSB3008M		Tapping Screw	10
16	E61529-002		Protector	2
17	SPSP3012NS		Screw	4
18	E22275-001		Protect Sheet	1

# Bottom View

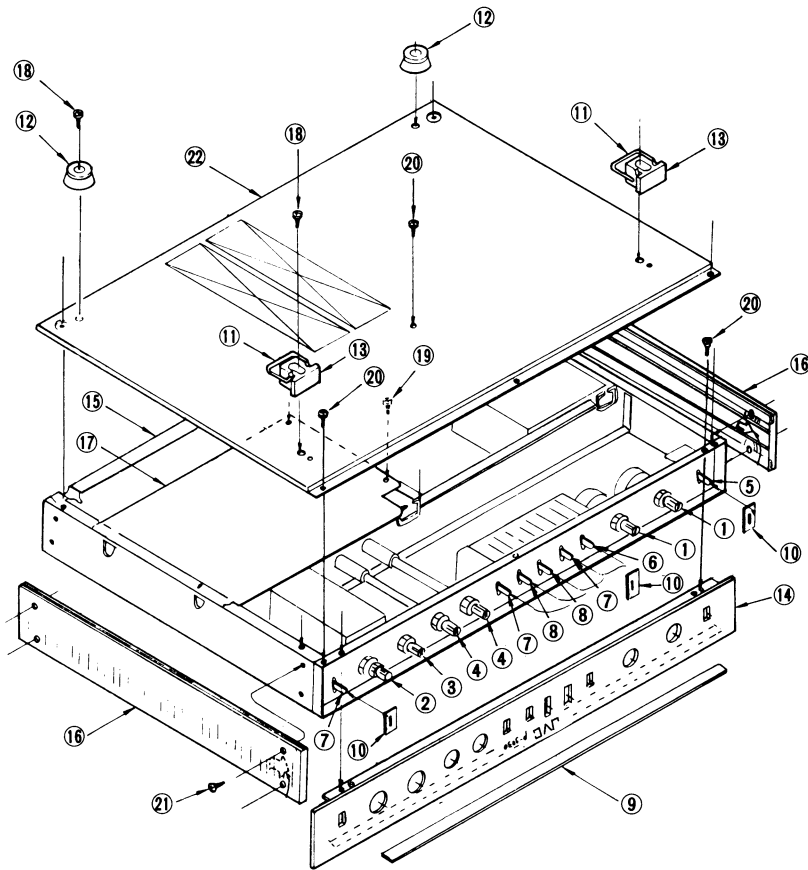


Fig. 6

## Parts List (Fig. 6)

Item No.	Part Number	Rating	Description	Q'ty
1	QVC3A2C-215V	100 kΩ (C)	Variable Resistor (TONE)	2
2	QVZ2601-001	250 kΩ (M, N)	" (BALANCE)	1
		" (B)	" (VOLUME)	
		500 kΩ (B)	" (VOLUME)	
3	QSR0077-001		Rotary Switch (SOURCE)	1
4	QSR6044-200E		" (CARTRIDGE LOAD)	2
5	QSL2224-003		Lever Switch (POWER)	1
6	QSL4214-001		" (TONE)	1
7	QSL4214-002		" (MODE)	3
			" (MUTING)	3
			" (SUBSONIC)	
8	QSL4314-001		Lever Switch (DUBBING)	2
			" (MONITOR)	
9	E45204-009		Plate	1
10	E61521-001		Spacer	3
11	E61543-001		Adjuster	2
12	E47227-008		Foot Ass'y	2
13	E61542-001		"	2
14	E22268-003		Front Panel Ass'y	1
15	E34858-001		Bracket	1
16	E34881-001		Side Panel	2
17	E34875-001		Shield Plate	1
18	SBSB3012M		Tapping Screw	4
19	SDSB3008M		"	4
20	SSSB3008M		"	10
21	SHSP3010RS		Screw	8
22	E22272-002		Bottom Cover	1

## 7-(2) Rear Panel

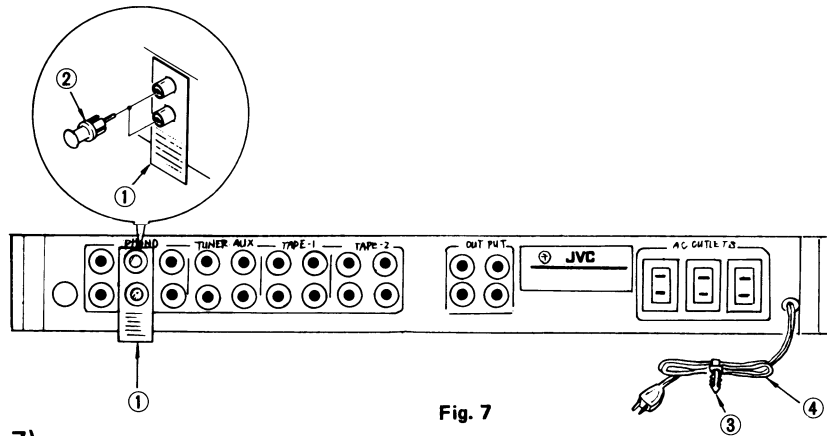


Fig. 7

### Parts List (Fig. 7)

Item No.	Part Number	Rating	Description	Q'ty
1	E48422-002		Caution Tag	1
2	E03449-001		Short Plug	1
3	E03709-001		Free Up Belt	1
4	See page 28.		Power Cord	1

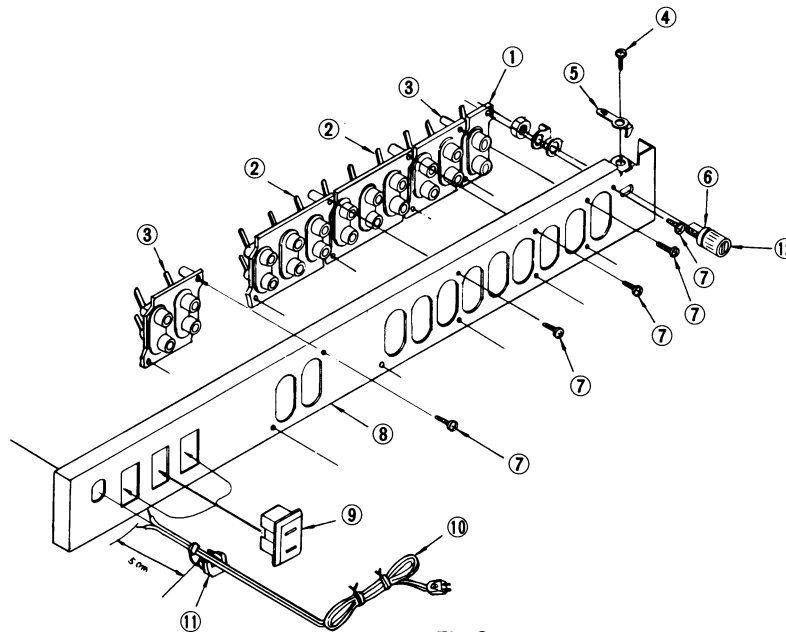


Fig. 8

### Parts List (Fig. 8)

Item No.	Part Number	Rating	Description	Q'ty
1	E03591-20E		Pin Jack	1
2	E03591-61C		"	2
3	E03591-41C		"	2
4	SDSB3008M		Tapping Screw	41
5	E61102-001		Lug	1
6	E61520-001		Spacer	1
7	SDSP3008MS		Screw	6
8	E22267-002		Rear Panel	1
9	See page 28..		AC Socket	3
10	"		Power Cord	1
11	OHS3876-162		Cord Stopper	1
12	E03619-001		Ground Terminal	1

# 8. Adjustment Procedure

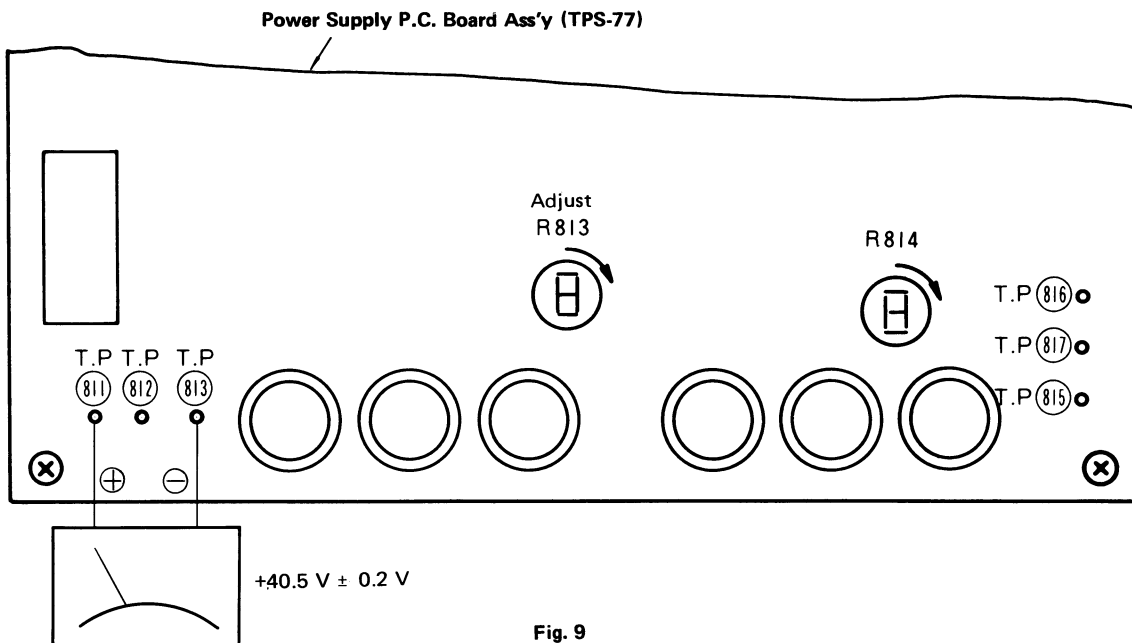


Fig. 9

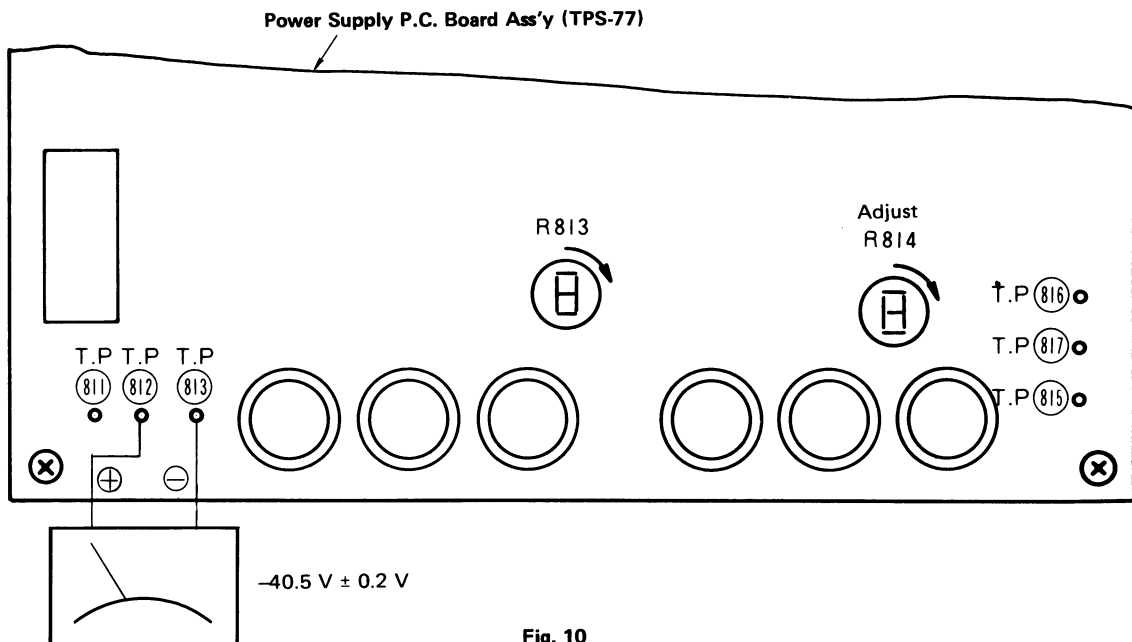


Fig. 10

## Adjustment

Voltage adjustment of the regulated voltage power supply for the equalizer circuit.

1. Before turning power on, turn R813 (or R814) fully counterclockwise.
2. Connect the plus lead of a precision voltmeter to test point (T.P.) 811 and the minus lead to T.P. 813, then turn power on.
3. Turn R813 little by little in the direction of the arrow until the voltmeter reads  $40.5 \pm 0.2$  V.
4. Reconnect the minus lead to T.P. 812 and the plus lead to T.P. 813, then slowly turn R814 until the voltmeter reads  $40.5 \pm 0.2$  V.



# 9. Block Diagram

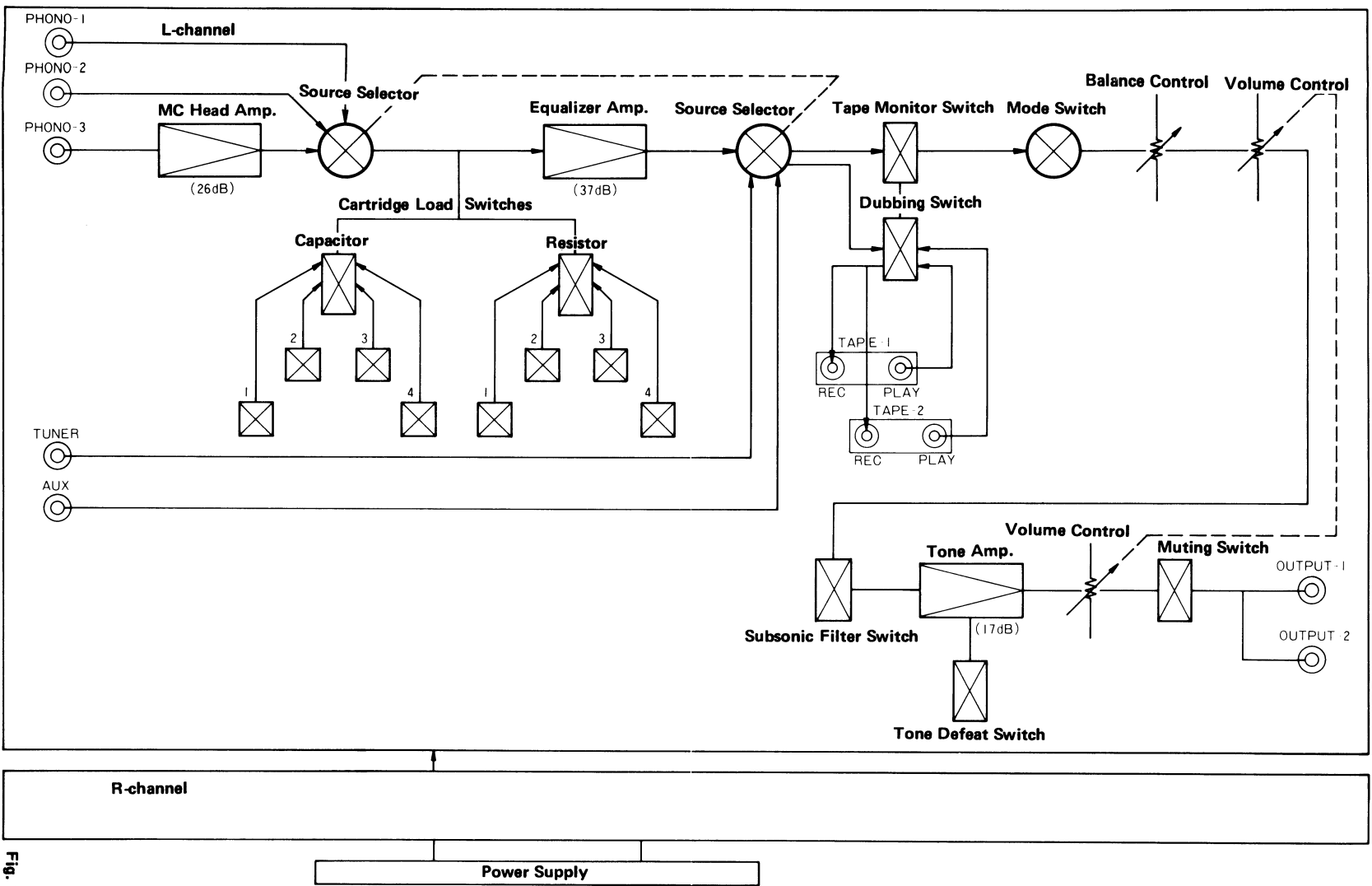


Fig. 11

# 10. Wiring Diagram of P.C. Board Ass'y

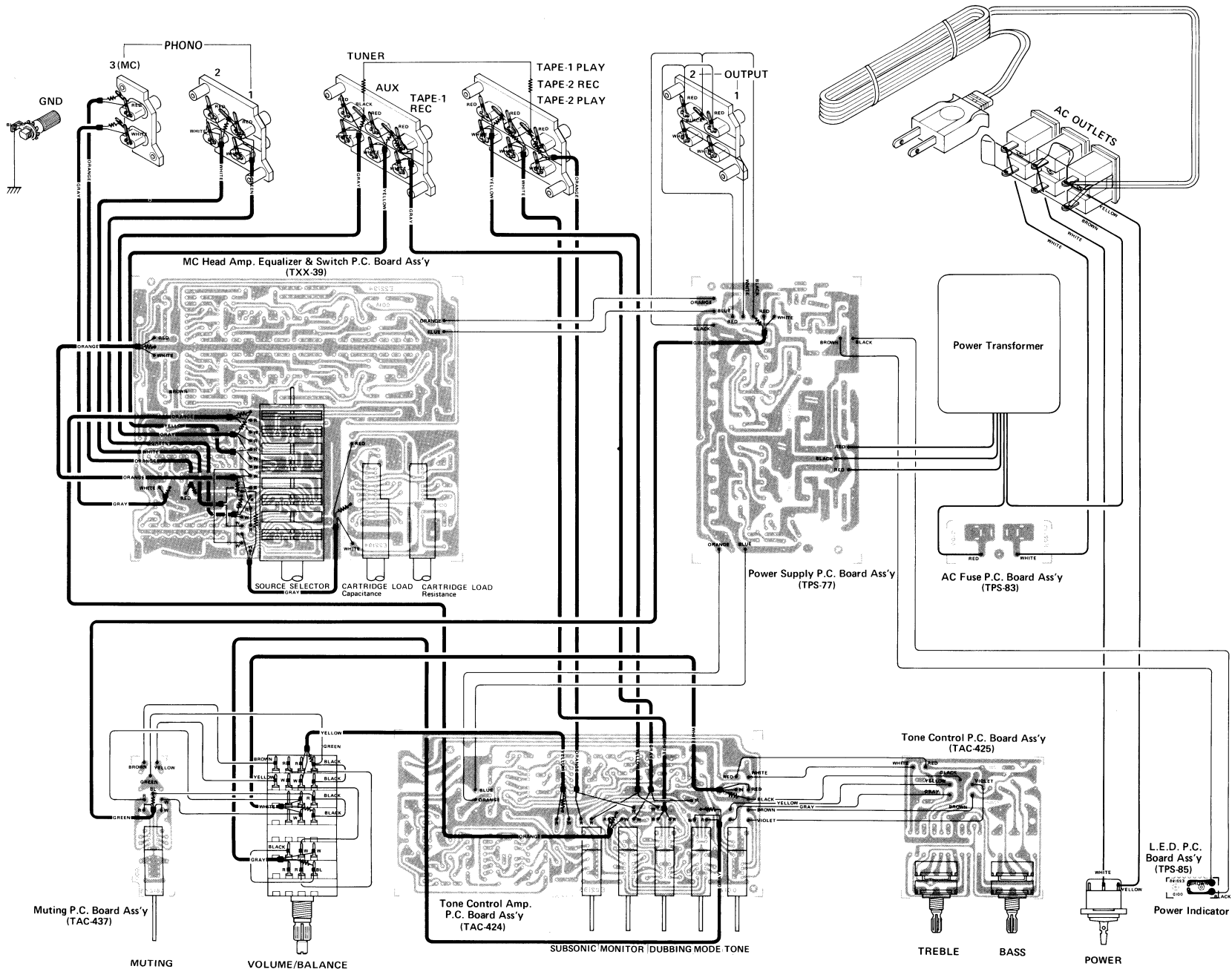


Fig. 12

# 11. Printed Circuit Board Ass'y and Parts List

## 11-(1) TPS-77 Power Supply P.C. Board Ass'y

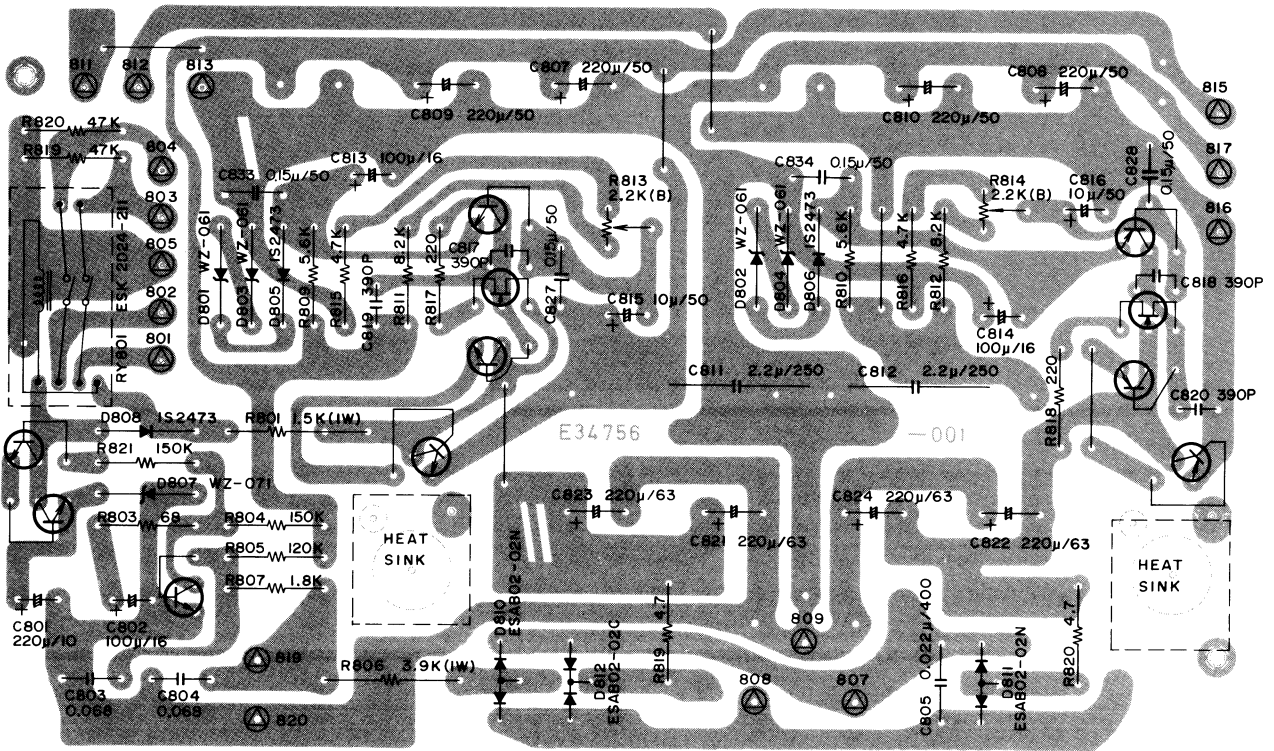


Fig. 13.

### Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	fT		
X801	2SC1904 (B, V)	1000 mW	100 MHz	Silicon (NPN)	Fuji
X802	2SC1775AV (E, F)	300 mW	200 MHz	" ( " )	Hitachi
X803	2SC1775AV (E, F)	"	"	" ( " )	"
X805	2SC1775AV (E, F)	"	"	" ( " )	"
X806	2SA872AV (D, E)	"	"	" (PNP)	"
X807	2SD313V (D, E)	30 W	8 MHz	" (NPN)	"
X808	2SB507V (D, E)	"	"	" (PNP)	Sanyo
X809	2SC1775AV (E, F)	300 mW	200 MHz	" (NPN)	Hitachi
X810	2SA872AV (E)	"	"	" (PNP)	"
X811	2SK68A (L, M)	"	"	F.E.T. (Nch)	NEC
X812	2SK68A (L, M)	"	"	" ( " )	"

### Diodes

Item No.	Part Number	Rating	Description	Maker
D801	WZ-061	6.1 V	Zener Diode	J.R.C.
D802	WZ-061	"	"	"
D803	WZ-061	"	"	"
D804	WZ-061	"	"	"
D805	1S2473		Diode	Toyo Dengu
D806	1S2473		"	"
D807	WZ-071A	7.1 V	Zener Diode	J.R.C.
D808	1S2473		Diode	Toyo Dengu
D810	ESAB02-02N	( + )	"	Fuji
D811	ESAB02-02N	"	"	"
D812	ESAB02-02C	( - )	"	"

### Capacitors

Item No.	Part Number	Rating		Description
C801	QEW51AA-227	220 $\mu$ F	10 V	Electrolytic
C802	QEW51CA-107	100 $\mu$ F	16 V	"
C803	QFM31HJ-683	0.068 $\mu$ F	50 V	Mylar
C804	QFM31HJ-683	"	"	"
C805	CF93MMA2G-223	0.022 $\mu$ F	400 V	"
C807	QEW51HA-227	220 $\mu$ F	50 V	Electrolytic
C808	QEW51HA-227	"	"	"
C809	QEW51HA-227	"	"	"
C810	QEW51HA-227	"	"	"
C811	CF93MMA2E-225K	2.2 $\mu$ F	250 V	Metalized Mylar
C812	CF93MMA2E-225K	"	"	"
C813	QEW51CA-107	100 $\mu$ F	16 V	Electrolytic
C814	QEW51CA-107	"	"	"
C815	QEW51HA-106	10 $\mu$ F	50 V	"
C816	QEW51HA-106	"	"	"
C817	QFM31HK-122	1200 pF	"	Ceramic
C818	QFM31HK-122	"	"	"
C821	QEW51JA-227	220 $\mu$ F	63 V	Electrolytic
C822	QEW51JA-227	"	"	"
C823	QEW51JA-227	"	"	"
C824	QEW51JA-227	"	"	"
C827	QFM31HK-154	0.15 $\mu$ F	50 V	Mylar
C828	QFM31HK-154	"	"	"
C833	QFM31HK-154	"	"	"
C834	QFM31HK-154	"	"	"

### Resistors

Item No.	Part Number	Rating		Description
R801	QRG017J-152	1.5 k $\Omega$	1 W	Uninflammable O.M.F.
R803	QRD141J-680	68 $\Omega$	1/4 W	Carbon
R804	QRD141J-154	150 k $\Omega$	"	"
R805	QRD141J-124	120 k $\Omega$	"	"
R806	QRG017J-392	3.9 k $\Omega$	1 W	Uninflammable O.M.F.
R807	QRD141J-182	1.8 k $\Omega$	1/4 W	Carbon
R809	QRD141J-562	1.5 k $\Omega$	"	"
R810	QRD141J-562	"	"	"
R811	QRD141J-822	8.2 k $\Omega$	"	"
R812	QRD141J-822	"	"	"
R813	QVP4A0B-222	2.2 k $\Omega$		Variable
R814	QVP4A0B-222	"		"
R815	QRD141J-472	4.7 k $\Omega$	1/4 W	Carbon
R816	QRD141J-472	"	"	"
R817	QRD141J-221	220 $\Omega$	"	"
R818	QRD141J-221	"	"	"
R819	QRD126J-4R7	4.7 $\Omega$	1/2 W	Uninflammable Carbon
R820	QRD126J-4R7	"	"	"

### Others

Item No.	Part Number	Rating	Description
LY801	ESK2D24-211 E61537-001 SPSP3005M	24 V/11 mA  3 x 5 mm	Relay Heat Sink Screw

### 11-(2) TPS-83 AC Fuse P.C. Board Ass'y

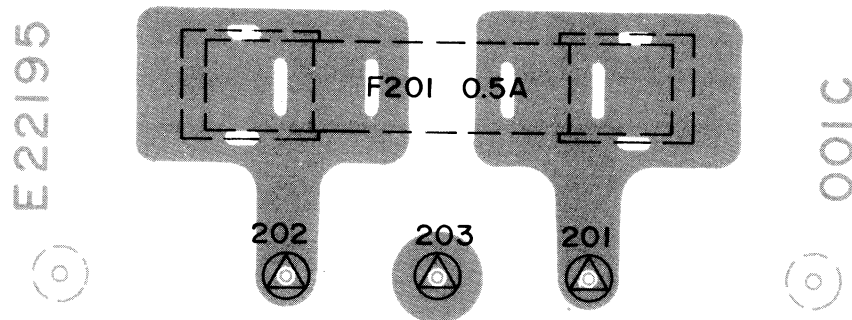


Fig. 14

Item No.	Part Number	Description		
F201	QMF61U2-R50	Fuse	U, P, F, LA	100-120 V
	QMF60S1-R25	"	Other Countries	220-240 V
	QMF51A2-R20	"	SEMKO, SEV	220 V
	E45524-001	C. Clip	U, P, F, LA	100-120 V
	E45524-001	"	Other Countries	220-240 V
	QMG1321-002	Fuse Holder	SEMKO, SEV	

### 11-(3) TPS-85 L.E.D. P.C. Board Ass'y

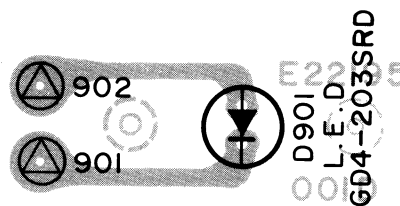


Fig. 15

Item No.	Part Number	Description	Maker
D901	GD4-203SRD	L.E.D.	Stanley

# 11-(4) TAE-122 MC Head Amp. & Equalizer Amp. P.C. Board Ass'y

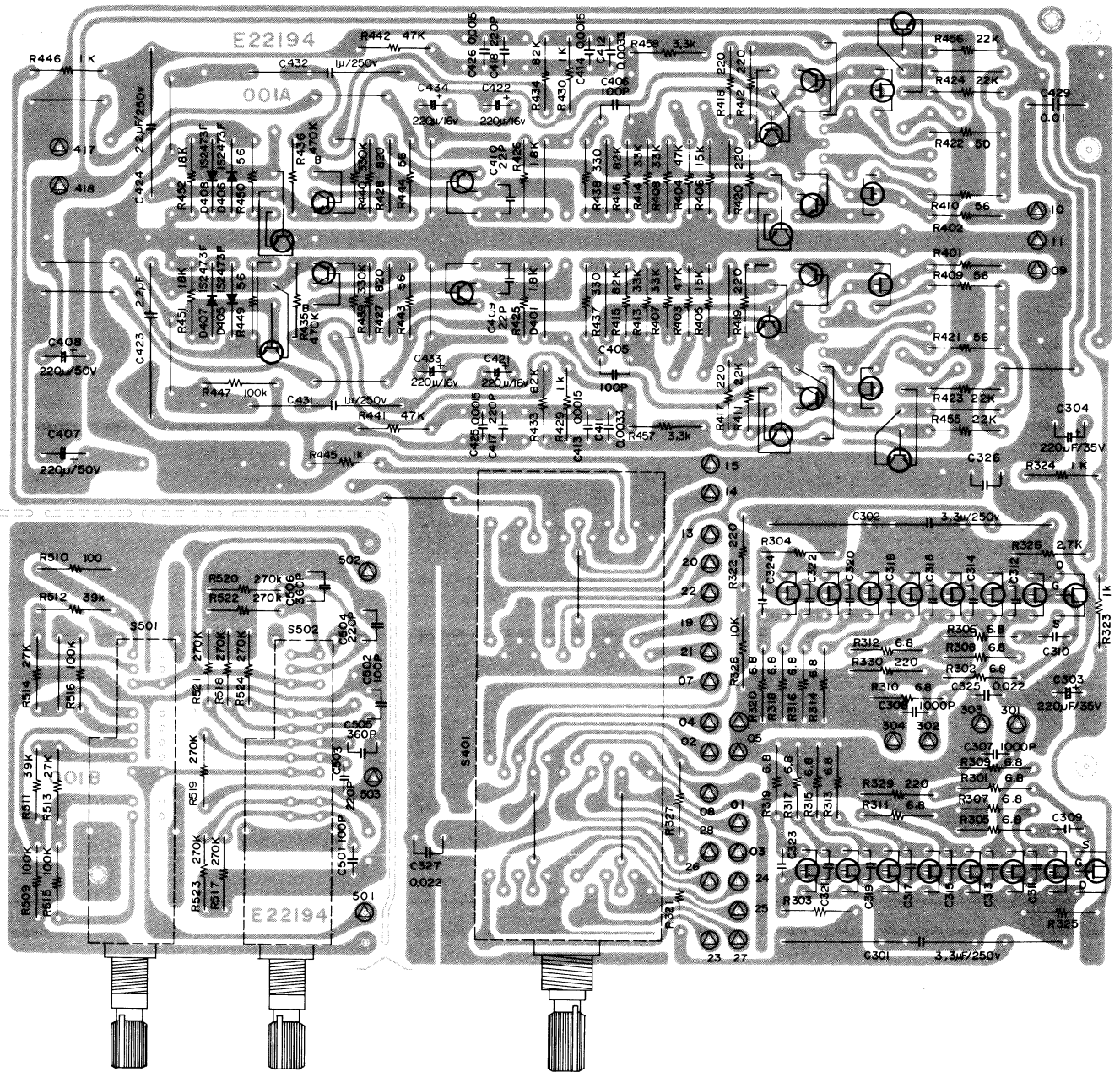


Fig. 16

### Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	ft		
X301	2SK68A (K)	250 mW		F.E.T. (Nch)	NEC
X302	2SK68A (K)				
X303	2SK68A (K)				
X304	2SK68A (K)				
X305	2SK68A (K)				
X306	2SK68A (K)	"	"	"	"
X307	2SK68A (K)				
X308	2SK68A (K)				
X309	2SK68A (K)				
X310	2SK68A (K)				
X311	2SK68A (K)				
X312	2SK68A (K)				

### Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	ft		
X313	2SK68A (K)	250 mW		F.E.T.	NEC
X314	2SK68A (K)			"	"
X315	2SK68A (K)			"	"
X316	2SK68A (K)			"	"
X401	2SK68A (L, M)			"	"
X402	2SK68A (L, M)	300 mW	200 MHz	"	"
X403	2SK68A (L, M)			"	"
X404	2SK68A (L, M)			"	"
X405	2SC1775AV (E, F)			"	"
X406	2SC1775AV (E, F)			"	"
X407	2SC1775AV (E, F)			"	"
X408	2SC1775AV (E, F)	"	"	"	"
X409	2SC1775AV (F1)	"	"	"	"
X410	2SC1775AV (F1)	"	"	"	"
X411	2SC1775AV (F1)	"	"	"	"
X412	2SC1775AV (F1)	1000 mW	100 MHz	"	"
X413	2SC1775AV (E, F)			"	"
X414	2SC1775AV (E, F)			"	"
X415	2SA872AV (D, E)			"	"
X416	2SA872AV (D, E)			"	"
X417	2SC1904 (B, V)			"	"
X418	2SC1904 (B, V)	"	"	"	"
X419	2SC1904 (B, V)	"	"	"	"
X420	2SC1904 (B, V)	"	"	"	"

### Diodes

Item No.	Part Number	Rating	Description	Maker
D405	1S2473F			Toyo Dengu
D406	1S2473F			"
D407	1S2473F			"
D408	1S2473F			"

### Capacitors

Item No.	Part Number	Rating		Description
C301	MTB-2E-335K	3.3 $\mu$ F	250 V	Metalized Mylar
C302	MTB-2E-335K	"	"	"
C303	QEW51VA-227	220 $\mu$ F	35 V	Electrolytic
C304	QEW51VA-227	"	"	"
C307	QCF11HP-102	1000 pF	50 V	Ceramic
C308	QCF11HP-102	"	"	"
C309	QCS11HJ-820	82 pF	"	"
C310	QCS11HJ-820	"	"	"
C311	QCS11HJ-820	"	"	"
C312	QCS11HJ-820	"	"	"
C313	QCS11HJ-820	"	"	"
C314	QCS11HJ-820	"	"	"
C315	QCS11HJ-820	"	"	"
C316	QCS11HJ-820	"	"	"
C317	QCS11HJ-820	"	"	"
C318	QCS11HJ-820	"	"	"
C319	QCS11HJ-820	"	"	"
C320	QCS11HJ-820	"	"	"
C321	QCS11HJ-820	"	"	"
C322	QCS11HJ-820	"	"	"
C323	QCS11HJ-820	"	"	"
C324	QCS11HJ-820	"	"	"
C325	QCF11HP-223	0.022 $\mu$ F	"	"
C326	QCF11HP-223	"	"	"

### Capacitors

Item No.	Part Number	Rating		Description
C327	QCF11HP-223	0.022 $\mu$ F	50 V	Ceramic
C405	QCS31HJ-101	100 pF	"	"
C406	QCS31HJ-101	"	"	"
C407	QEW51HA-227	220 $\mu$ F	"	Electrolytic
C408	QEW51HA-227	220 $\mu$ F	"	"
C409	QCS12HJ-220	220 pF	"	Ceramic
C410	QCS12HJ-220	"	"	"
C411	QFM31HJ-332	3300 pF	"	Mylar
C412	QFM31HJ-332	"	"	"
C413	QFM31HJ-152	1500 pF	"	"
C414	QFM31HJ-152	"	"	"
C417	QCS31HJ-221	220 pF	"	Ceramic
C418	QCS31HJ-221	"	"	"
C419	QFM31HJ-152	1500 pF	"	Mylar
C420	QFM31HJ-152	"	"	"
C421	QEW51CA-227	220 $\mu$ F	16 V	Electrolytic
C422	QCF12HP-103	0.01 $\mu$ F	50 V	Ceramic
C423	CF93MMA2E-225K	2.2 $\mu$ F	250 V	Metalized Mylar
C424	CF93MMA2E-225K	"	"	"
C429	QCF12HP-103	0.01 $\mu$ F	50 V	Ceramic
C431	CF93MMA2E-105K	1.0 $\mu$ F	250 V	Metalized Mylar
C432	CF93MMA2E-105K	"	"	"
C434	QCF12HP-103	0.01 $\mu$ F	50 V	Ceramic

### Resistors

Item No.	Part Number	Rating		Description
R301	QRD141J-6R8	6.8 $\Omega$	1/4 W	Carbon
R302	QRD141J-6R8	"	"	"
R303	QRD141J-821	820 $\Omega$	"	"
R304	QRD141J-821	"	"	"
R305	QRD141J-6R8	6.8 $\Omega$	1/4 W	"
R306	QRD141J-6R8	"	"	"
R307	QRD141J-6R8	"	"	"
R308	QRD141J-6R8	"	"	"
R309	QRD141J-6R8	"	"	"
R310	QRD141J-6R8	"	"	"
R311	QRD141J-6R8	"	"	"
R312	QRD141J-6R8	"	"	"
R313	QRD141J-6R8	"	"	"
R314	QRD141J-6R8	"	"	"
R315	QRD141J-6R8	"	"	"
R316	QRD141J-6R8	"	"	"
R317	QRD141J-6R8	"	"	"
R318	QRD141J-6R8	"	"	"
R319	QRD141J-6R8	"	"	"
R320	QRD141J-6R8	"	"	"
R321	QRD141J-221	220 $\Omega$	"	"
R322	QRD141J-221	"	"	"
R323	QRG129J-102	1 k $\Omega$	1/2 W	Uninflammable O.M.F.
R324	QRG129J-102	"	"	"
R325	QRZ0019-272	2.7 k $\Omega$	1/4 W	Carbon
R326	QRZ0019-272	"	"	"
R327	QRD141J-103	10 k $\Omega$	"	"
R328	QRD141J-103	"	"	"
R329	QRD141J-221	220 $\Omega$	"	"
R330	QRD141J-221	"	"	"
R401	QRD141J-100	10 $\Omega$	"	"
R402	QRD141J-100	"	"	"
R403	QRZ0019-473	47 k $\Omega$	"	"
R404	QRZ0019-473	"	"	"



### Resistors

Item No.	Part Number	Rating		Description
R405	QRZ0019-153	15 k $\Omega$	1/4 W	Carbon
R406	QRZ0019-153	"	"	"
R407	QRZ0019-333	33 k $\Omega$	"	"
R408	QRZ0019-333	"	"	"
R409	QRD141J-560	56 $\Omega$	"	"
R410	QRD141J-560	"	"	"
R411	QRZ0019-223	22 k $\Omega$	"	"
R412	QRZ0019-223	"	"	"
R413	QRZ0019-333	33 k $\Omega$	"	"
R414	QRZ0019-333	"	"	"
R415	QRZ0019-823	82 k $\Omega$	"	"
R416	QRZ0019-823	"	"	"
R417	QRD141J-221	220 $\Omega$	"	"
R418	QRD141J-221	"	"	"
R419	QRD141J-221	"	"	"
R420	QRD141J-221	"	"	"
R421	QRD141J-560	56 $\Omega$	"	"
R422	QRD141J-560	"	"	"
R423	QRZ0019-223	22 k $\Omega$	"	"
R424	QRZ0019-223	"	"	"
R425	QRZ0019-182	1.8 k $\Omega$	"	" Low Noise
R426	QRZ0019-182	"	"	" "
R427	QRD141J-821	820 $\Omega$	"	"
R428	QRZ0019-332	3.3 k $\Omega$	"	" Low Noise
R429	QRD141J-102	1 k $\Omega$	"	"
R430	QRD141J-102	"	"	"
R433	QRZ0019-104	100 k $\Omega$	"	" Low Noise
R434	QRZ0019-104	"	"	" "
R435	QRZ0019-474	470 k $\Omega$	"	" "
R436	QRZ0019-474	"	"	"
R437	QRD141J-331	330 $\Omega$	"	"
R438	QRD141J-331	"	"	"
R439	QRZ0019-474	470 k $\Omega$	"	" Low Noise
R440	QRZ0019-474	"	"	" "
R441	QRZ0019-473	47 k $\Omega$	"	" "
R442	QRZ0019-473	"	"	" "
R443	QRG129J-560	56 $\Omega$	1/2 W	Unflammable O.M.F.
R444	QRG129J-560	"	"	"
R445	QRD141J-102	1 k $\Omega$	1/4 W	Carbon
R446	QRD141J-102	"	"	"
R447	QRZ0019-104	100 k $\Omega$	"	" Low Noise
R448	QRZ0019-104	"	"	" "
R449	QRG129J-560	56 $\Omega$	1/2 W	Unflammable O.M.F.
R450	QRG129J-560	"	"	"
R451	QRZ0019-183	18 k $\Omega$	1/4 W	Carbon Low Noise
R452	QRZ0019-183	"	"	" "
R455	QRZ0019-223	22 k $\Omega$	"	" "
R456	QRZ0019-223	"	"	"
R457	QRZ0019-332	3.3 k $\Omega$	"	" Low Noise
R458	QRZ0019-332	"	"	" "

### Others

Item No.	Part Number	Rating	Description
S401	QSR0077-001		Rotary Switch
S501	QSR6044-200E		"
S502	QSR6044-200E		"

# 11-(5) TAC-424 Tone Control Amp. P.C. Board Ass'y

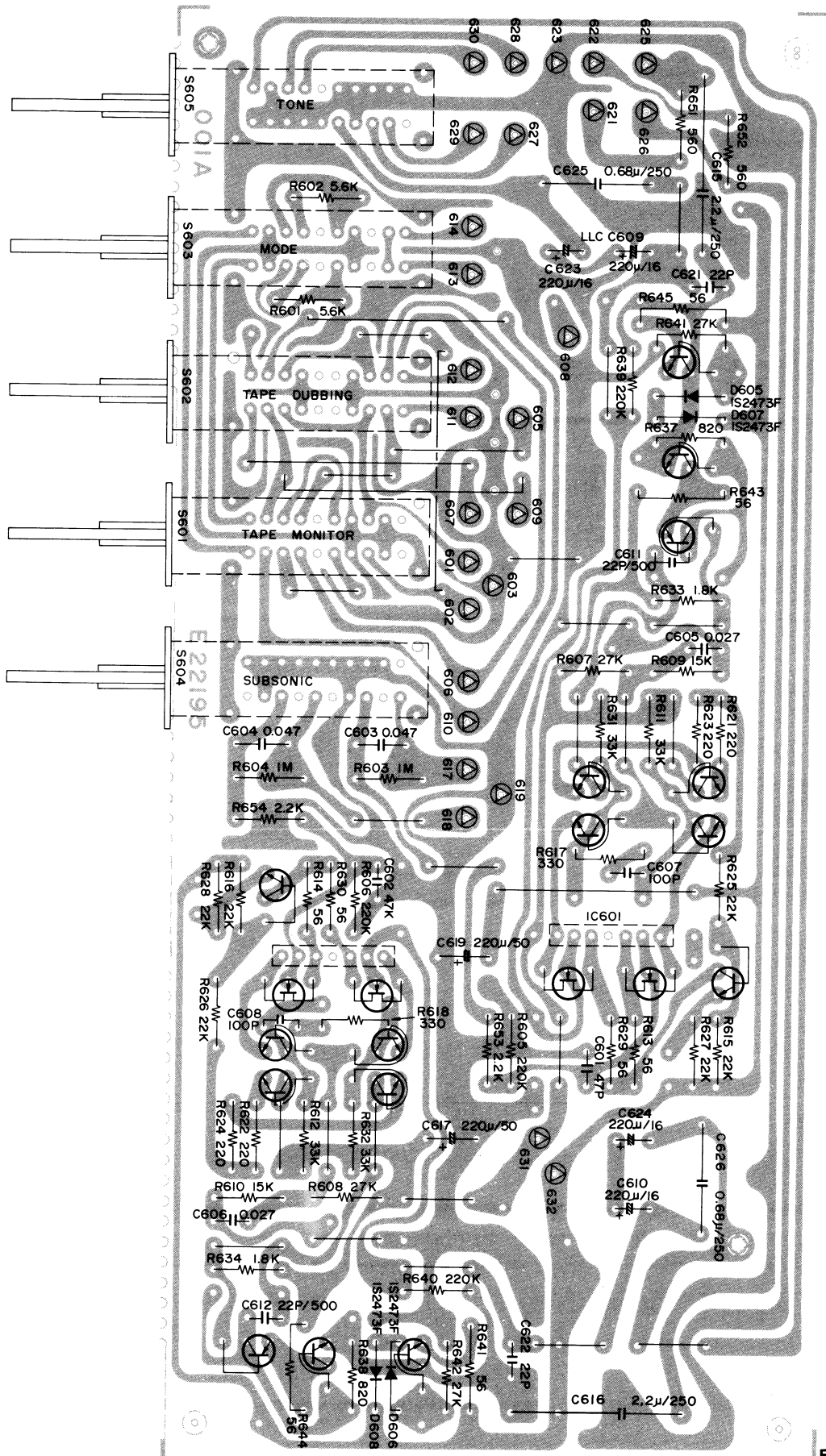


Fig. 17

### Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	fT		
X601	2SK68A (L, M)	250 mW		F.E.T.	NEC
X602	2SK68A (L, M)	"		"	"
X603	2SK68A (L, M)	"		"	"
X604	2SK68A (L, M)	"		"	"
X605	2SC1775AV (E, F)	300 mW	200 MHz	Silicon (N.P.N.)	Hitachi
X606	2SC1775AV (E, F)	"	"	"	"
X607	2SC1775AV (E, F)	"	"	"	"
X608	2SC1775AV (E, F)	"	"	"	"
X609	2SC1775AV (E, F)	"	"	"	"
X610	2SC1775AV (E, F)	"	"	"	"
X611	2SC1775AV (E, F)	"	"	"	"
X612	2SC1775AV (E, F)	"	"	"	"
X613	2SC1775AV (E, F)	"	"	"	"
X614	2SC1775AV (E, F)	"	"	"	"
X615	2SA872AV (D, F)	"	"	" (P.N.P.)	"
X616	2SA872AV (D, F)	"	"	"	"
X617	2SC1904 (B, V)	1000 mW	100 MHz	" (N.P.N.)	Fuji
X618	2SC1904 (B, V)	"	"	"	"
X619	2SC1904 (B, V)	"	"	"	"
X620	2SC1904 (B, V)	"	"	"	"

### Diodes

Item No.	Part Number	Rating	Description	Maker
D605	1S2473F			Toyo Dengu
D606	1S2473F			"
D607	1S2473F			"
D608	1S2473F			"

### Capacitors

Item No.	Part Number	Rating		Description	
C601	QCS31HJ-470	47 pF	50 V	Ceramic	
C602	QCS31HJ-470	"	"	"	
C603	QFM31HJ-473	0.047 $\mu$ F	"	Mylar	
C604	QFM31HJ-473	"	"	"	
C605	QFM31HJ-273	0.027 $\mu$ F	"	"	
C606	QFM31HJ-273	"	"	"	
C607	QCS31HJ-101	100 pF	"	Ceramic	
C608	QCS31HJ-101	"	"	"	
C609	QEW51CA-227	220 $\mu$ F	16 V	Electrolytic	
C610	QEW51CA-227	"	"	"	
C611	QCS12HJ-220	22 pF	500 V	Ceramic	
C612	QCS12HJ-220	"	"	"	
C615	CF93MMA2E-225K	2.2 $\mu$ F	250 V	Metalized Mylar	
C616	CF93MMA2E-225K	"	"	"	
C617	QEW51HA-227	220 $\mu$ F	50 V	Electrolytic	
C619	QEW51HA-227	"	"	"	
C621	QCS31HJ-220	22 pF	"	Ceramic	
C622	QCS31HJ-220	"	"	"	
C623	QEW51CA-227	220 $\mu$ F	16 V	Electrolytic	
C624	QEW51CA-227	"	"	"	
C625	CF93MMA2E-684K	0.68 $\mu$ F	250 V	Metalized Mylar	
C626	CF93MMA2E-684K	"	"	"	

### Resistors

Item No.	Part Number	Rating		Description
R601	QRD181J-562	5.6 kΩ	1/8 W	Carbon
R602	QRD181J-562	"	"	"
R603	QRD181J-105	1 MΩ	"	"
R604	QRD181J-105	"	"	"
R605	QRD181J-224	220 kΩ	"	"
R606	QRD181J-224	"	"	"
R607	QRD181J-273	27 kΩ	"	"
R608	QRD181J-273	"	"	"
R609	QRD181J-153	15 kΩ	"	"
R610	QRD181J-153	"	"	"
R611	QRD181J-333	33 kΩ	"	"
R612	QRD181J-333	"	"	"
R613	QRD181J-560	56 Ω	"	"
R614	QRD181J-560	"	"	"
R615	QRD181J-223	22 kΩ	"	"
R616	QRD181J-223	"	"	"
R617	QRD181J-331	330 Ω	"	"
R618	QRD181J-331	"	"	"
R621	QRD181J-221	220 Ω	"	"
R622	QRD181J-221	"	"	"
R623	QRD181J-221	"	"	"
R624	QRD181J-221	"	"	"
R625	QRD181J-223	22 kΩ	"	"
R626	QRD181J-223	"	"	"
R627	QRD181J-223	"	"	"
R628	QRD181J-223	"	"	"
R629	QRD181J-560	56 Ω	"	"
R630	QRD181J-560	"	"	"
R631	QRD181J-333	33 kΩ	"	"
R632	QRD181J-333	"	"	"
R633	QRD181J-182	1.8 kΩ	"	"
R634	QRD181J-182	"	"	"
R637	QRD181J-821	820 Ω	"	"
R638	QRD181J-821	"	"	"
R639	QRD181J-224	220 kΩ	"	"
R640	QRD181J-224	"	"	"
R641	QRD181J-273	27 kΩ	"	"
R642	QRD181J-273	"	"	"
R643	QRG129J-560	56 Ω	"	Unflammable O.M.F.
R644	QRG129J-560	"	"	"
R645	QRG129J-560	"	"	"
R646	QRG129J-560	"	"	"
R651	QRD181J-561	560 Ω	"	Carbon
R652	QRD181J-561	"	"	"
R653	QRD181J-222	2.2 kΩ	"	"
R654	QRD181J-222	"	"	"

### Others

Item No.	Part Number	Description
	QSL4314-001	Lever Switch MONITOR, DUBBING
	QSL4214-002	" SUBSONIC
	QSL4214-001	" TONE

# 11-(6) TAC-425 Tone Control P.C. Board Ass'y

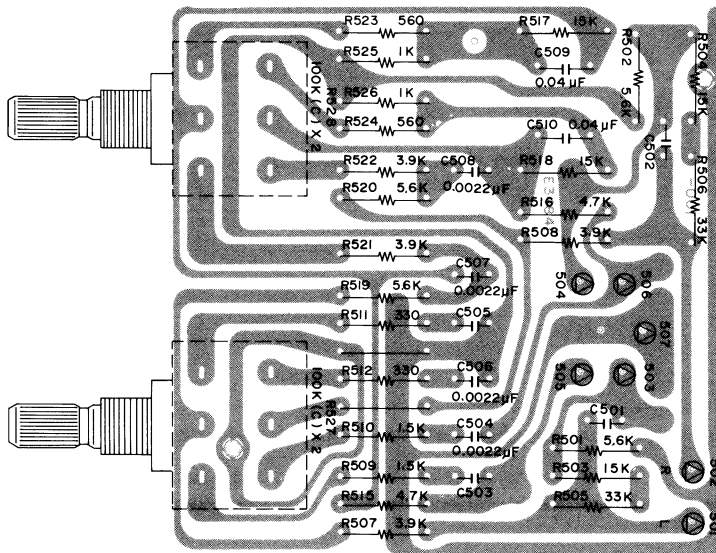


Fig. 18

## Capacitors

Item No.	Part Number	Rating		Description
C503	QFM31HJ-222	0.0022 $\mu$ F	50 V	Mylar
C504	QFM31HJ-222	"	"	"
C505	QFM31HJ-223	0.022 $\mu$ F	"	"
C506	QFM31HJ-223	"	"	"
C507	QFM31HJ-223	"	"	"
C508	QFM31HJ-223	"	"	"
C509	QFM31HJ-224	0.22 $\mu$ F	"	"
C510	QFM31HJ-224	"	"	"

## Resistors

Item No.	Part Number	Rating		Description
R501	QRD141J-562	5.2 k $\Omega$	1/4 W	Carbon
R502	QRD141J-562	"	"	"
R503	QRD141J-153	15 k $\Omega$	"	"
R504	QRD141J-153	"	"	"
R505	QRD141J-333	33 k $\Omega$	"	"
R506	QRD141J-333	"	"	"
R507	QRD141J-392	3.9 k $\Omega$	"	"
R508	QRD141J-392	"	"	"
R509	QRD141J-152	1.5 k $\Omega$	"	"
R510	QRD141J-152	"	"	"
R511	QRD141J-331	330 $\Omega$	"	"
R512	QRD141J-331	"	"	"
R515	QRD141J-472	4.7 k $\Omega$	"	"
R516	QRD141J-472	"	"	"
R517	QRD141J-153	15 k $\Omega$	"	"
R518	QRD141J-153	"	"	"
R519	QRD141J-562	5.6 k $\Omega$	"	"
R520	QRD141J-562	"	"	"
R521	QRD141J-392	3.9 k $\Omega$	"	"
R522	QRD141J-392	"	"	"
R523	QRD141J-561	560 $\Omega$	"	"
R524	QRD141J-561	"	"	"
R525	QRD141J-102	1 k $\Omega$	"	"
R526	QRD141J-102	"	"	"
R527	QVC3A2C-215V	100 k $\Omega$ C	"	Variable
R528	QVC3A2C-215V	"	"	"

# 11-(7) TAC-436 Cartridge Load Switch P.C. Board Ass'y

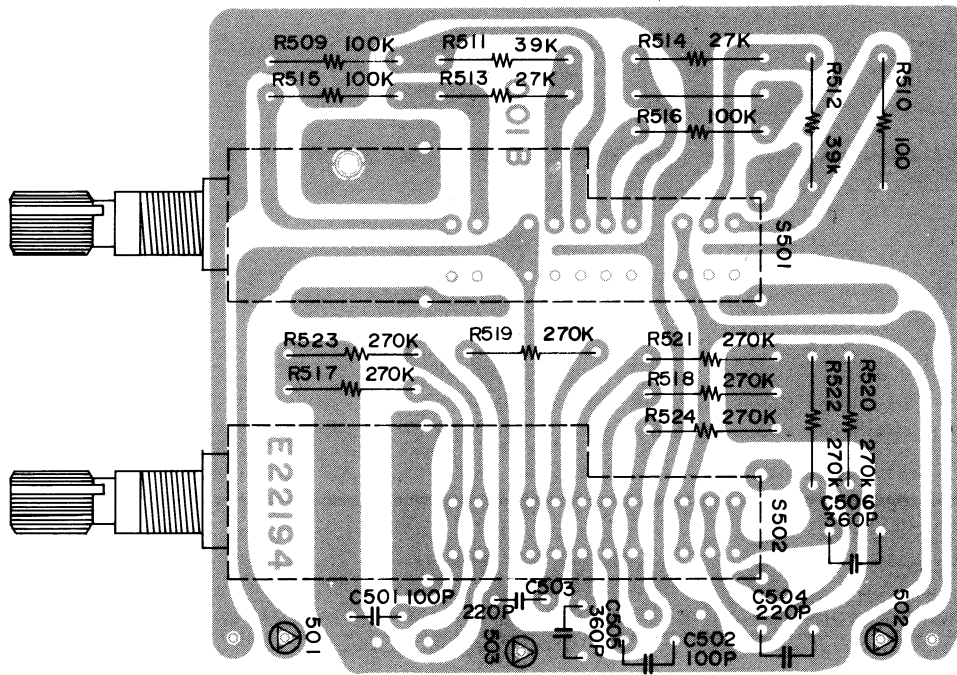


Fig. 19

### Capacitors

Item No.	Part Number	Rating		Description
C501	QCS31HJ-121	120 $\Omega$	1/4 W	Ceramic
C502	QCS31HJ-121	"	"	"
C503	QCS31HJ-221	220 $\Omega$	"	"
C504	QCS31HJ-221	"	"	"
C505	QCS31HJ-361	360 $\Omega$	"	"
C506	QCS31HJ-361	"	"	"

### Resistors

Item No.	Part Number	Rating		Description
R509	QRD141J-101	100 $\Omega$	1/4 W	Carbon
R510	QRD141J-101	"	"	"
R511	QRZ0019-393	39 k $\Omega$	"	"
R512	QRZ0019-393	"	"	"
R513	QRZ0019-273	27 k $\Omega$	"	"
R514	QRZ0019-273	"	"	"
R515	QRZ0019-104	100 k $\Omega$	"	"
R516	QRZ0019-104	"	"	"
R517	QRZ0019-274	270 k $\Omega$	"	"
R518	QRZ0019-274	"	"	"
R519	QRZ0019-274	"	"	"
R520	QRZ0019-274	"	"	"
R521	QRZ0019-274	"	"	"
R522	QRZ0019-274	"	"	"
R523	QRZ0019-274	"	"	"
R524	QRZ0019-274	"	"	"

### Others

Item No.	Part Number	Description
S501	QSR6044-200E	Rotary Switch
S502	QSR6044-200E	"

## 11-(8) TAC-437 Muting P.C. Board Ass'y

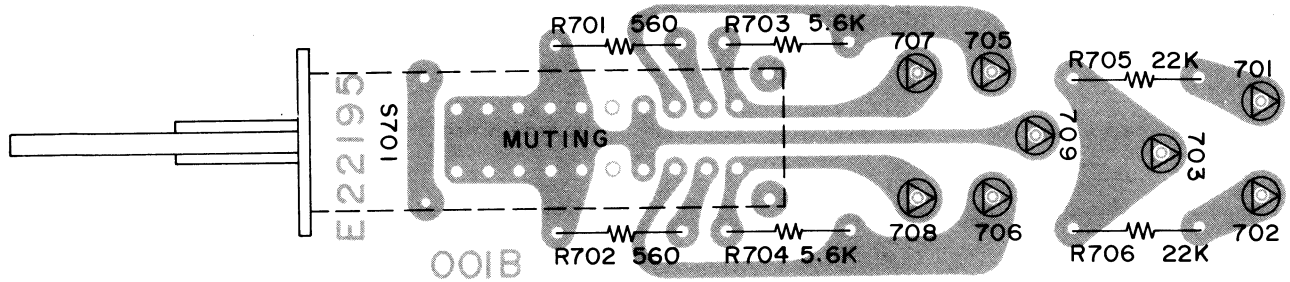


Fig. 20

### Resistors

Item No.	Part Number	Rating	Description
R701	QRD181J-561	560 Ω 1/8 W	Carbon
R702	QRD181J-561	" "	"
R703	QRD181J-562	5.6 kΩ	"
R704	QRD181J-562	" "	"
R705	QRD181J-223	22 kΩ	"
R706	QRD181J-223	" "	"

### Others

Item No.	Part Number	Description
	QSL4214-002	Lever Switch

## 12. Accessories List

Part Number	Description	Q'ty
E30580-625A	Instruction Book	1
E64207-002	Envelope for Accessories	1
E03479-001	Signal Cord	1
E03449-001	Short Pin Plug	1
E48422-002	C. Tag (short pin)	1
BT20032	JVC Warranty Card	1
BT20023	Service Procedure	1
BT20024B	Caution	1

# 13. Packing Materials and Part Numbers

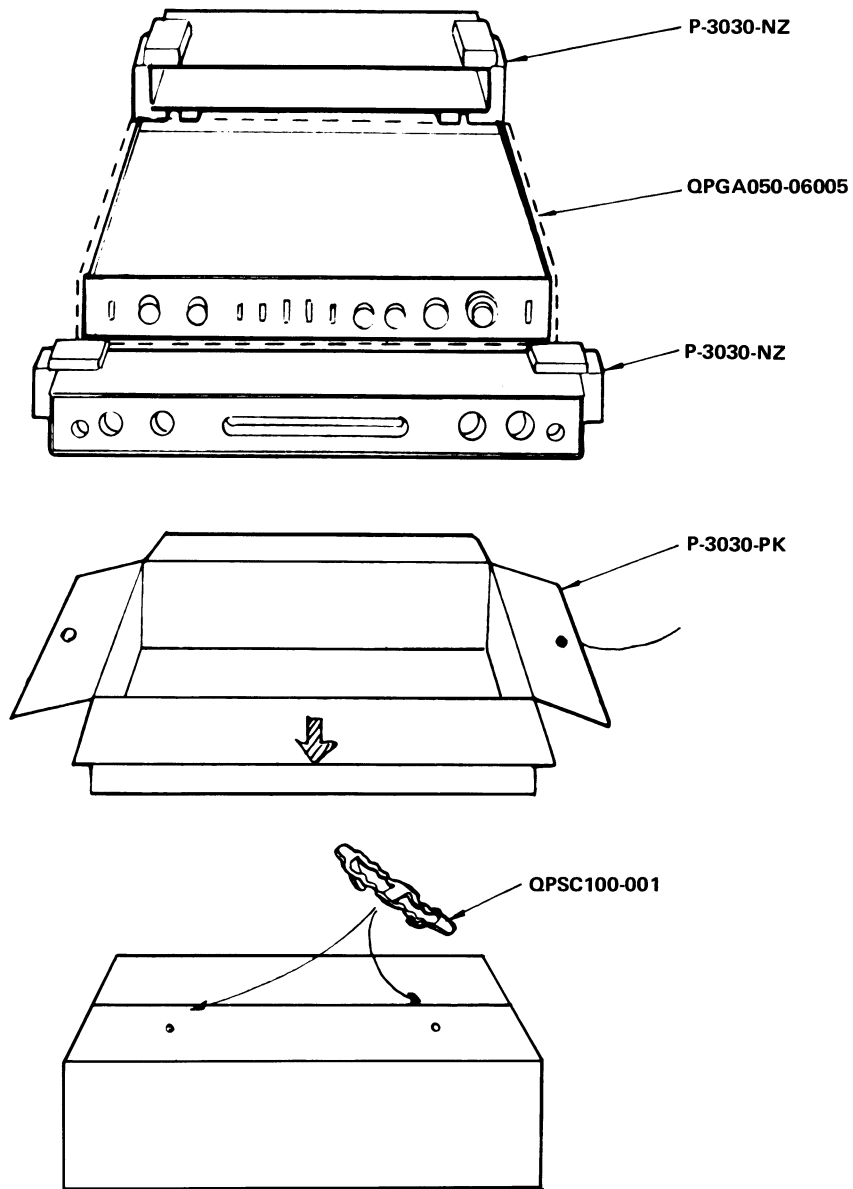


Fig. 21



# 14. Transistor Lead Identification

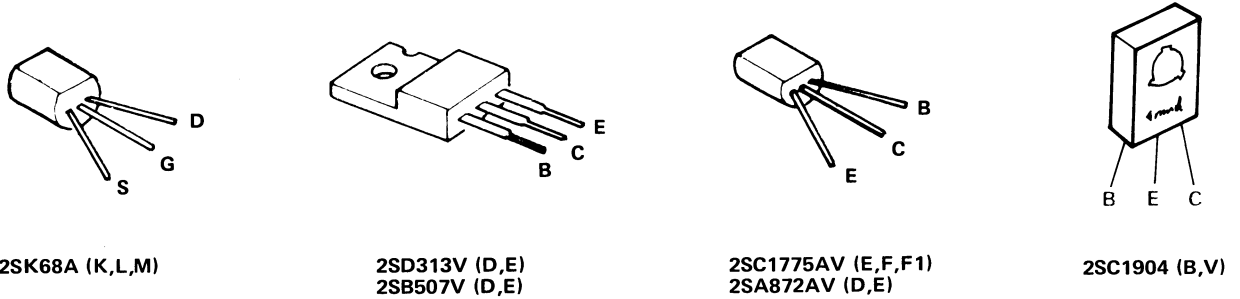
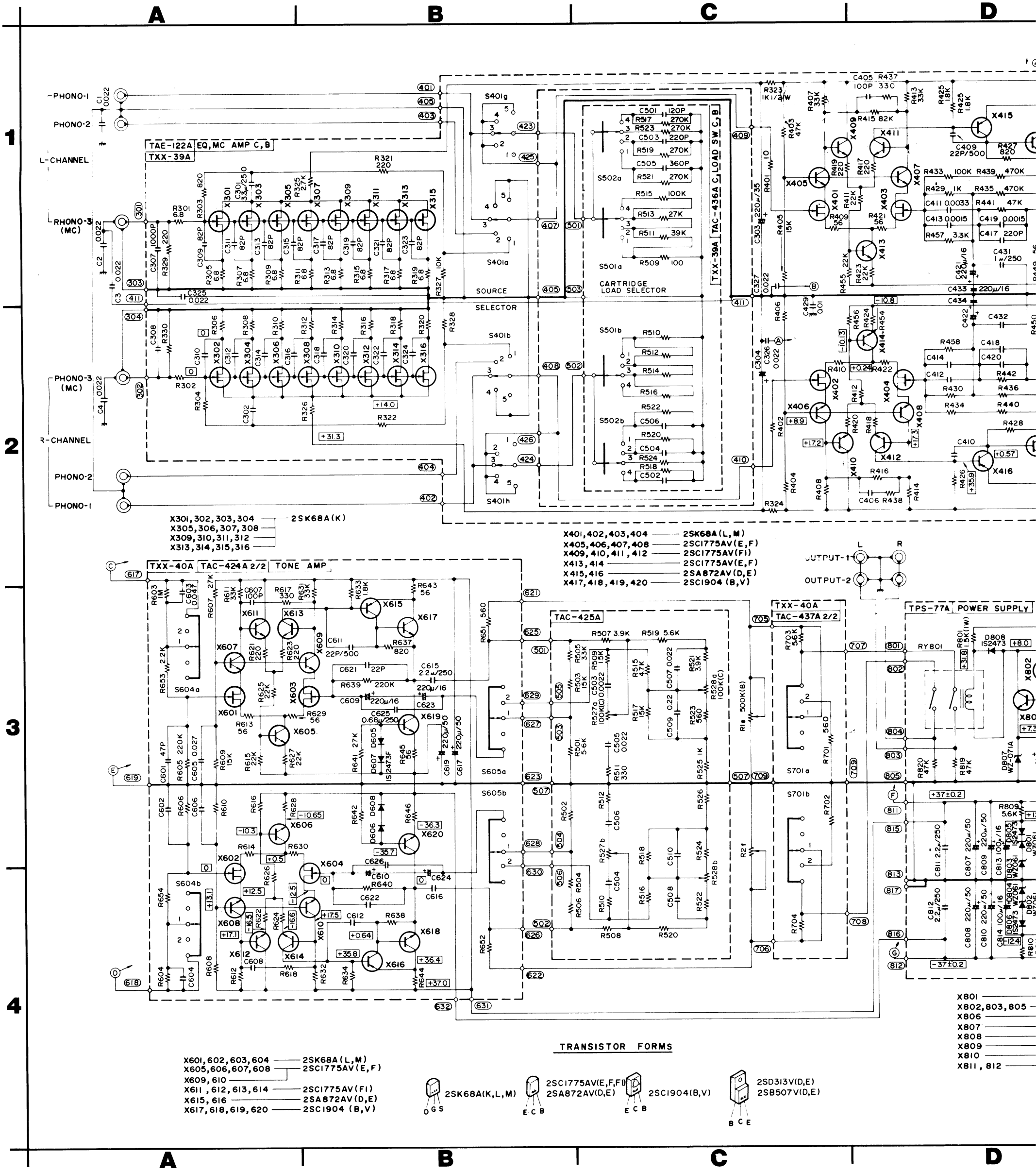


Fig. 22

# 15. Parts List with Specified Numbers for Designated Areas

Page	Item No.	Description	Original (LA)	For Europe (E)	For Other Countries
8	9	Metal Cover	E22273-003	E22273-004	E22273-003
10	9	AC Socket	QMC0235-002	Not included	QMC0235-002
10	4, 10	Power Cord	QMP1700-244	QMP3800-240	QMP1700-244
		Voltage Select Plug	E03676-001	Not included	E03676-001
		Voltage Select Socket	E03676-002	"	E03676-002
		Stud	E44182-004S	"	E44182-004S
16	F201	Fuse (F201)	QMF61U2-R50	QMF51A2-R20	QMF61U2-R50 (for AC 220 V & AC 240 V only)
16	F202, 203	Fuse (F202, 203)	Not included	QMF51A2-R20	Not included
		Plug Cover	"	E48663-001	"
		Fuse Holder	"	QMG1321-002	"
		Fuse Bracket	"	E61904-001	"
		Terminal Board	"	T41479-00B	"
		Shield Plate	"	E48277-001	"

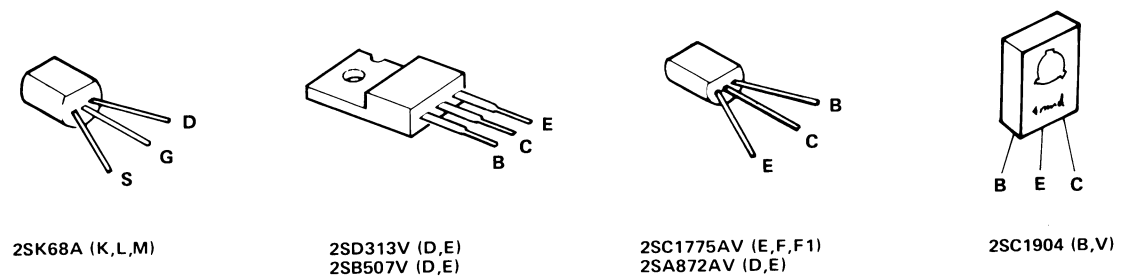
# 16. P-3030 Schematic Diagram



### Printed Circuit Board Ass'y Locations

P.C. Board Ass'y	Description	Page
TPS-77	Power Supply P.C. Board Ass'y	14
TPS-83	AC Fuse P.C. Board Ass'y	16
TPS-85	L.E.D. P.C. Board Ass'y	16
TAE-122	MC Amp. & Equalizer Amp. P.C. Board Ass'y	17
TAC-424	Tone Control Amp. P.C. Board Ass'y	21
TAC-425	Tone Control P.C. Board Ass'y	24
TAC-436	Cartridge Load Switch P.C. Board Ass'y	25
TAC-437	Muting P.C. Board Ass'y	26

### Transistor Lead Identification



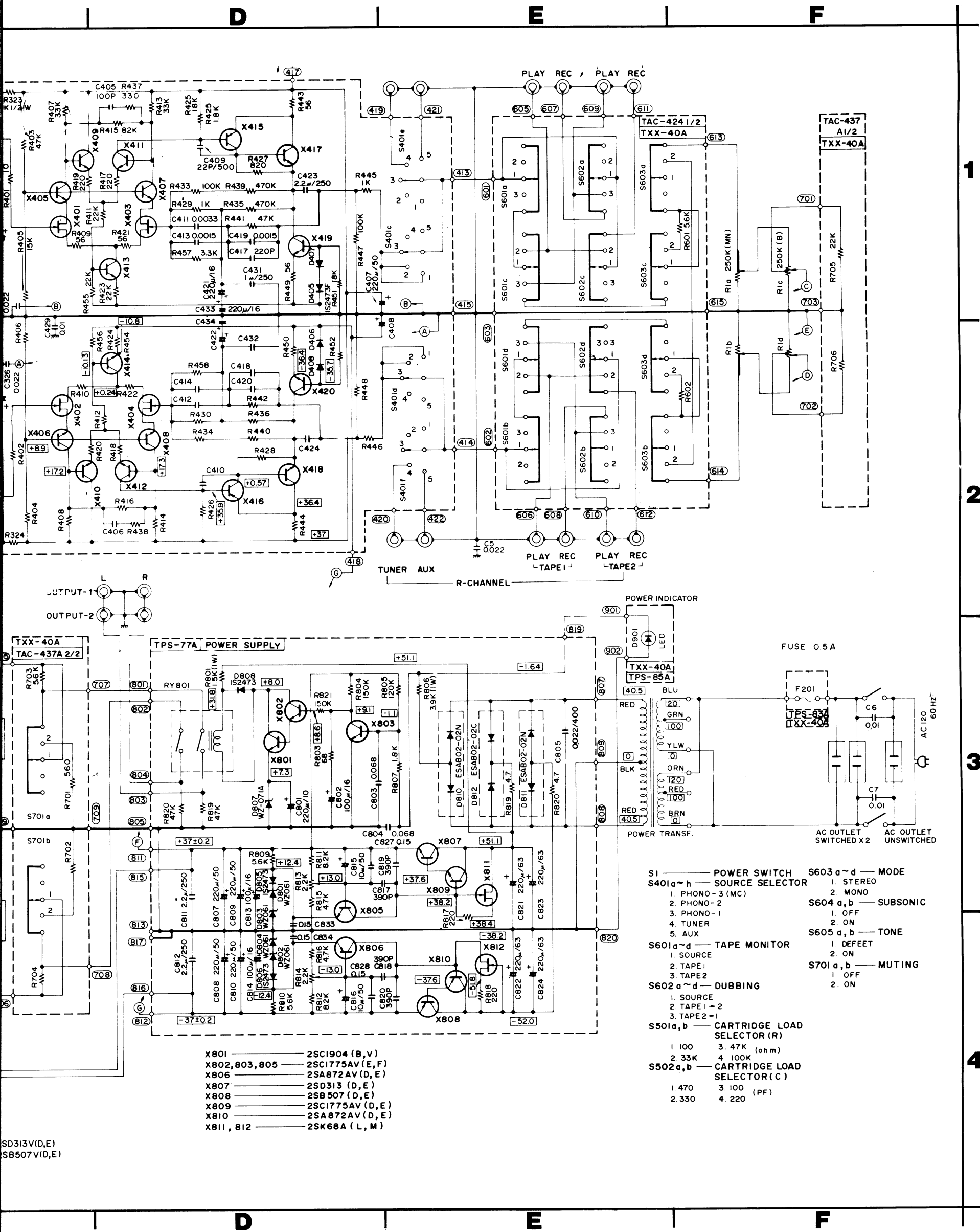


Fig. 23

2SC1775AV (E,F,F1)  
2SA872AV (D,E)

2SC1904 (B,V)

# 17. P-3030 Schematic Diagrams for Designated Areas

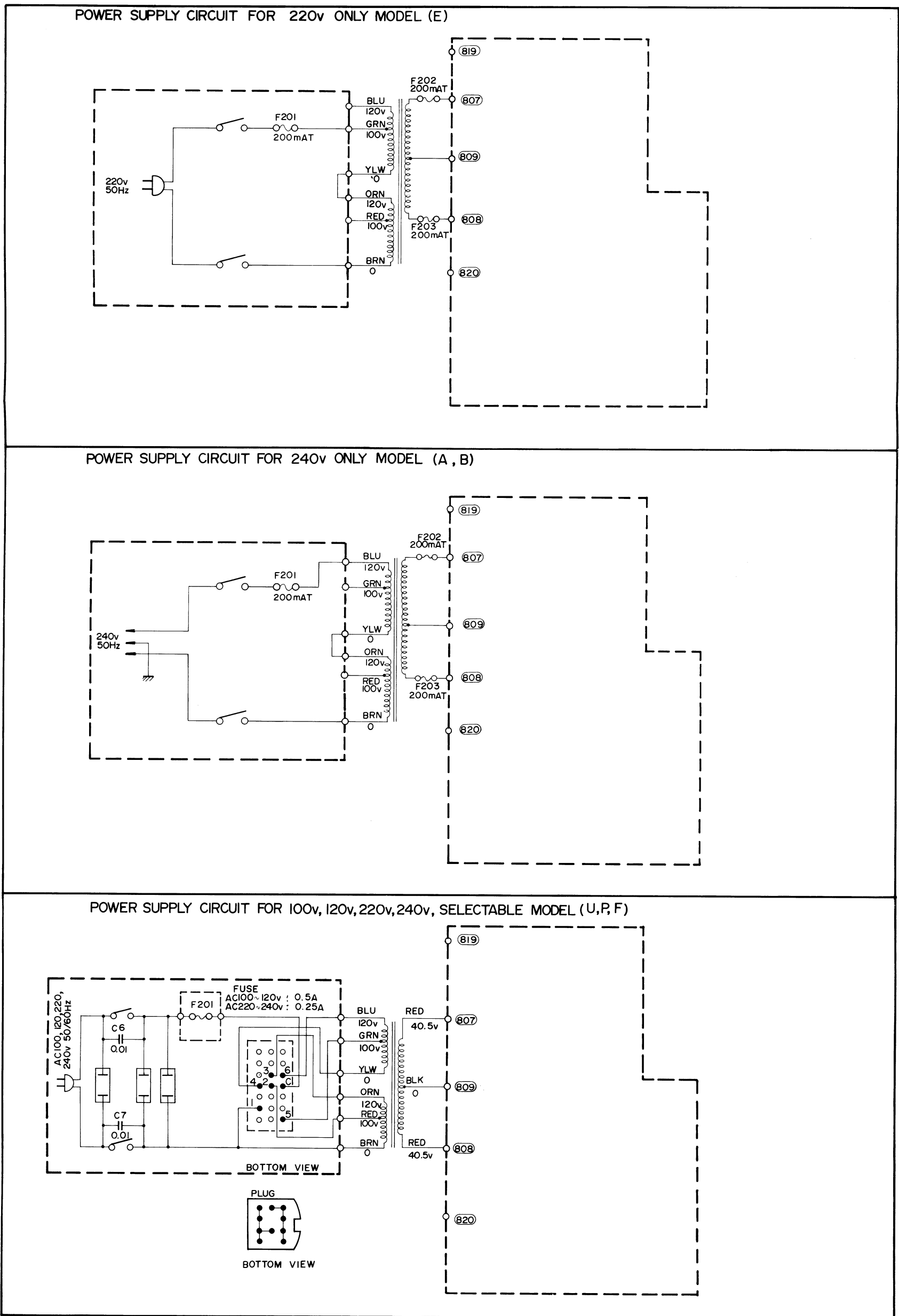


Fig. 24