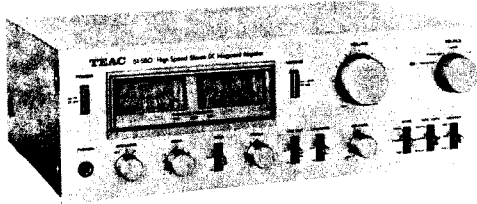


# TEAC®



## SERVICE MANUAL

# BX-550

High Speed DC Integrated Amplifier

# BX-330

DC Integrated Amplifier

The BX-550B and the BX-330B have a black finish; otherwise, they are the same as the BX-550 and the BX-330.

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### CAUTION

△Parts marked with this sign are safety critical components. They must always be replaced with identical components - refer to the TEAC Parts List and ensure exact replacement.

# BX-550/BX-330

## 1 SPECIFICATIONS AND SERVICE DATA

- Improvements may result in features or specifications changing without notice.

### SPECIFICATIONS

	BX-550	BX-330
<b>Input Sensitivity</b>		
PNONO MC	50 $\mu$ V/33 ohms	50 $\mu$ V/15 ohms
PHONO MM	2.5 mV/47 k ohms	2.5 mV/47 k ohms
TUNER, AUX	150 mV/10 k ohms	150 mV/10 k ohms
TAPE 1, 2	150 mV/10 k ohms	150 mV/10 k ohms
<b>Rated Output Voltage</b>		
TAPE REC 1, 2	150 mV/2.2 k ohms	150 mV/2.2 k ohms
<b>Rated Output Power</b>		
(Both channels driven, Distortion 0.1%, Impedance 8 ohms, 1 kHz)	55 W + 55 W	35 W + 35 W
<b>Required Speaker Impedance</b>		
SPEAKERS selector in position A or B	8 ~ 16 ohms	8 ~ 16 ohms
<b>Dimensions</b>		
Width x Height x Depth	410 x 140 x 320 (mm) (16-1/8" x 5-1/2" x 12-5/8")	410 x 140 x 320 (mm) (16-1/8" x 5-1/2" x 12-5/8")
<b>Weight</b>	9 kg (19-13/16 lbs) net	7.5 kg (16-9/16 lbs) net
<b>Power Requirements</b>		

MODEL	Voltage (V)	Frequency (Hz)	Power Consumption (W)	
			BX-550	BX-330
GENERAL EXPORT	100, 117, 220, 240	50/60	100	90
EUROPE	220	50	100	90
U.K., AUSTRALIA	240	50	100	90
U.S.A., CANADA	117	60	100	90

The power requirements for products distributed in the U.K., Australia, Canada and the United States and certain other areas in Europe are not adjustable.

### SERVICE DATA

**Power Muting Time** 3 ~ 8 Seconds

— AUX Section —

#### TONE Controls

Input: 7 mV  $\pm$  3 dB

Output: 1 V

	100 Hz	1 kHz	10 kHz
BASS: FLAT	0dB $\pm$ 1dB	0dB (Ref.)	0dB $\pm$ 1dB
TREBLE: FLAT	0dB $\pm$ 1dB	0dB (Ref.)	0dB $\pm$ 1dB
BASS: MAX	+7dB $\pm$ 1dB	0dB $\pm$ 1dB	+7dB $\pm$ 1dB
TREBLE: MAX	+7dB $\pm$ 1dB	0dB $\pm$ 1dB	+7dB $\pm$ 1dB
BASS: MIN	-7dB $\pm$ 1dB	0dB $\pm$ 1dB	-7dB $\pm$ 1dB
TREBLE: MIN	-7dB $\pm$ 1dB	0dB $\pm$ 1dB	-7dB $\pm$ 1dB

#### Harmonic Distortion

Output: 55 W (BX-550), 35 W (BX-330)

20 Hz: Less than 0.01%

1 kHz: Less than 0.008%

20 kHz: Less than 0.1%

#### Crosstalk

More than 42 dB (ratio) at 1 kHz.

#### Noise Level

VOLUME Control: MAX, INPUT: Shorted

Less than 560  $\mu$ V (-65 dB), Weighted

#### Damping Factor

43 or more at 1 kHz, 8 $\Omega$

21 or more at 20 kHz, 8 $\Omega$

#### LOUDNESS Control

Output: 150 mV

1 kHz: 0 dB (reference)

100 Hz: +8 dB  $\pm$  1 dB

20 kHz: +5 dB  $\pm$  1 dB

#### MUTING Circuit (BX-550)

Output: MUTING OUT, 10 V at 1 kHz

MUTING IN, 0.9 V  $\pm$  2 dB

#### LOW CUT Filter (BX-550)

Output: LOW CUT OUT, 10 V at 20 Hz

LOW CUT IN, 7 V  $\pm$  1 dB

#### TONE OUT Circuit (BX-550)

a) Frequency Response

TONE: OUT, VOLUME Control: MAX

Output: 1 V at 1 kHz (reference)

10 Hz: +0 dB

100 kHz: -4 dB

b) Harmonic Distortion

20 Hz: Less than 0.01%

1 kHz: Less than 0.008%

20 kHz: Less than 0.1%

c) Noise Level

Less than 320  $\mu$ V (-70 dB), Weighted

**— Phono MM Section —**

SOURCE Selector: PHONO-MM, VOLUME Control: MIN

**Input Level**Input: 1 kHz/2.5 mV (Signal source impedance:  $3.3\Omega$ )REC OUT: 150 mV  $\pm 3$  dB**Frequency Response**20 Hz: +19 dB  $\pm 1$  dB100 Hz: +13.1 dB  $\pm 0.5$  dB

1 kHz: 0 dB (reference)

10 kHz: -13.7 dB  $\pm 0.5$  dB20 kHz: -19.6 dB  $\pm 1$  dB**Harmonic Distortion**

Output: 7 V

20 Hz: Less than 0.01%

1 kHz: Less than 0.005%

20 kHz: Less than 0.1%

**Noise Level**Input:  $3.3\Omega$  terminateLess than 48  $\mu$ V (approx. -86 dB), Weighted**— Phono MC Section —**

SOURCE Selector: PHONO MC, VOLUME Control: MIN

**Input Level**Input: 1 kHz/50  $\mu$ V (Signal source impedance:  $3.3\Omega$ )REC OUT: 150 mV  $\pm 3$  dB**Frequency Response**20 Hz: +19 dB  $\pm 1$  dB

1 kHz: 0 dB (reference)

20 kHz: -19 dB  $\pm 1$  dB**Harmonic Distortion**

REC OUT: 1 V

20 Hz: Less than 0.1%

1 kHz: Less than 0.1%

20 kHz: Less than 0.7%

**Noise Level**Input:  $3.3\Omega$  terminateLess than 250  $\mu$ V (approx. -72 dB), Weighted

## 2 VOLTAGE CONVERSION

### VOLTAGE CONVERSION (GENERAL EXPORT MODEL ONLY)

BE SURE TO REMOVE THE POWER CORD FROM THE AC OUTLET BEFORE REMOVING THE OUTER CASE AND REPOSITIONING THE VOLTAGE CONVERSION PLUG.

1. Remove the top and side metal cover unit by removing the screws from each side.
2. Locate the voltage selector plug on the left side of the BX-550/BX-330.
3. Remove the plug by pulling it out, then re-insert it so that the arrow on the plug exactly lines up with the white line that indicates the appropriate voltage.
4. Replace the cover.

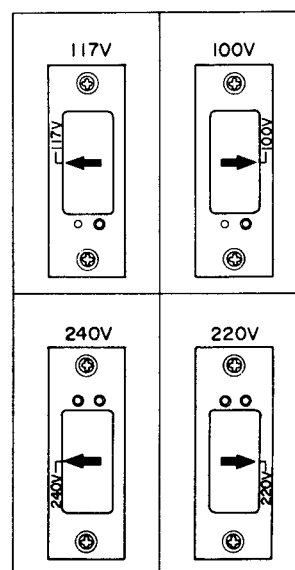
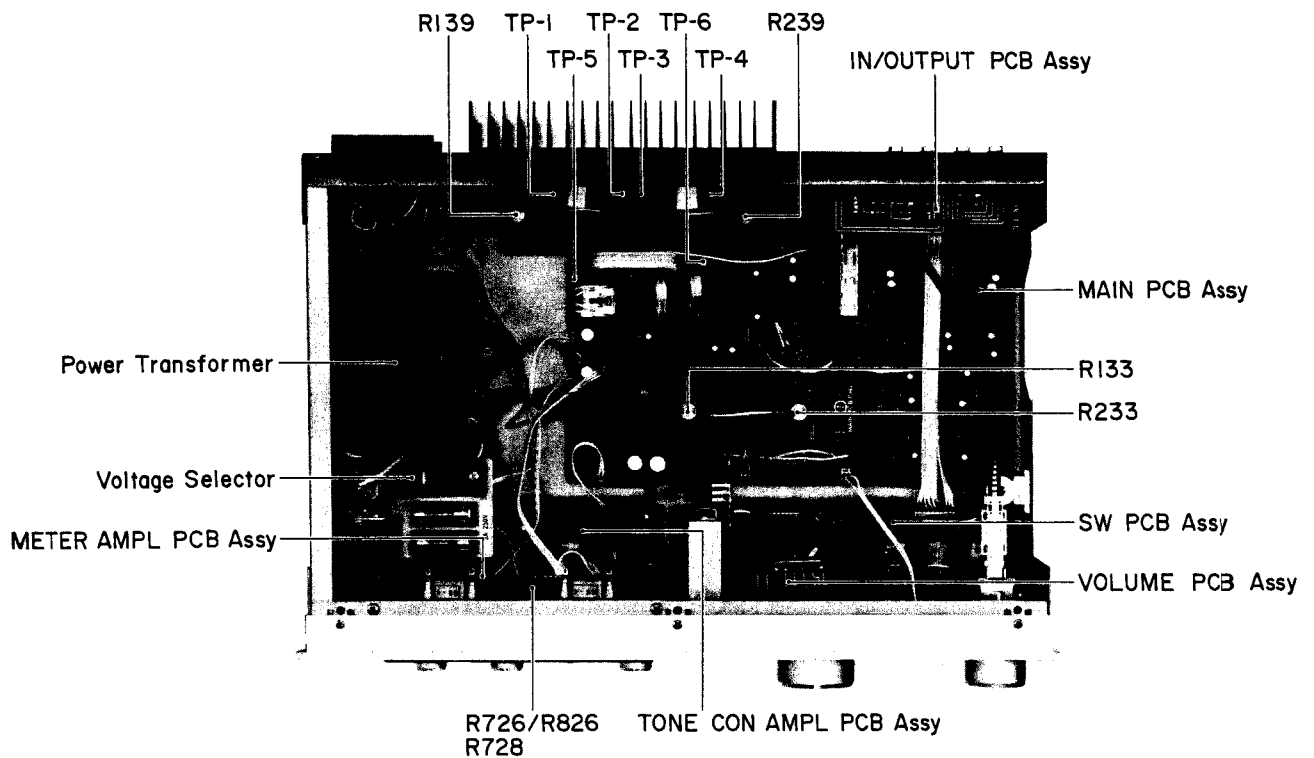


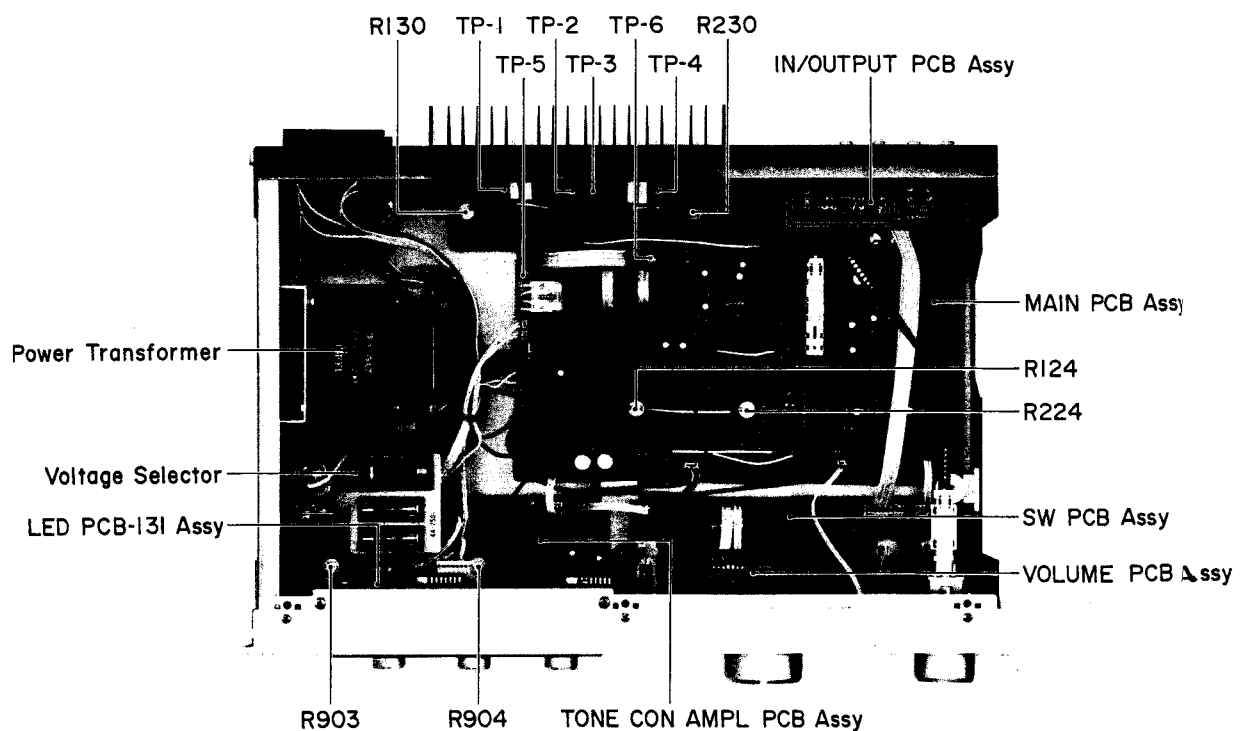
Fig. 1

## 3 PARTS LOCATION

### BX-550



### BX-330



## 4 ADJUSTMENTS

### 4-1 BEFORE ADJUSTMENT (Do not apply AC power)

1. Set the VOLUME control to MIN and the SPEAKERS selector to OFF.
2. Set the semi-fixed variable resistors to the following positions.

R133/R233 (BX-550)	] At the center position
R124/R224 (BX-330)	
R139/R239 (BX-550)	] Fully counter-clockwise position
R130/R230 (BX-330)	

### 4-2 MID-POINT POTENTIAL ADJUSTMENT

1. Depress POWER switch to ON.
2. Connect the DC voltmeter between T.P-5 (for L-ch) or T.P-6 (for R-ch) and GND.
3. Adjust R133/R233 (BX-550) or R124/R224 (BX-330) so that the voltmeter indicates  $0\text{ V} \pm 50\text{ mV DC}$ .

**Note:** A differential voltmeter is preferable.

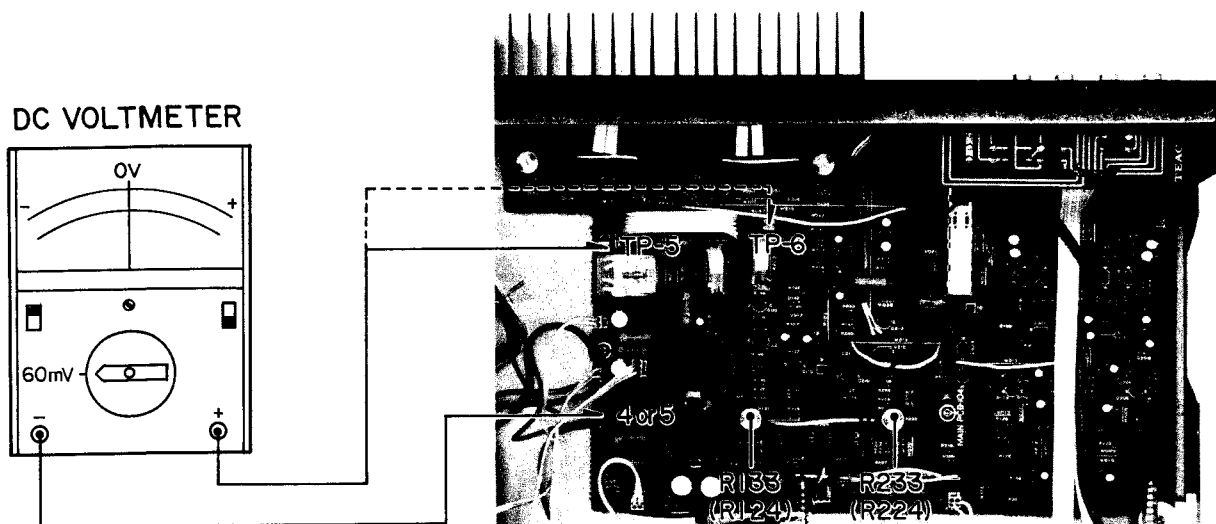


Fig. 2

# BX-550/BX-330

## 4-3 IDLING CURRENT ADJUSTMENT

1. Connect the DC voltmeter between T.P-1 and T.P-2 (L-ch).
2. Adjust R139 (BX-550) or R130 (BX-330) so that the DC voltmeter indicates approx. 100 mV.
3. After adjusting R139 (BX-550) or R130 (BX-330), allow 30 seconds for the amp to warm up.
4. Readjust R139 (BX-550) or R130 (BX-330) so that the DC voltmeter indicates 20~30 mV. (Idling current 30~45 mA).
5. Connect the DC voltmeter between T.P-4 and T.P-3 (R-ch)
6. Repeat procedures 1 to 4 above and adjust R239 (BX-550) or R230 (BX-330).

**NOTE:** When using an oscilloscope, instead of the DC voltmeter, carefully connect the oscilloscope so that the oscilloscope GND terminal is not connected to the GND of the amplifier, thereby causing a short. Use the oscilloscope in an ungrounded state.

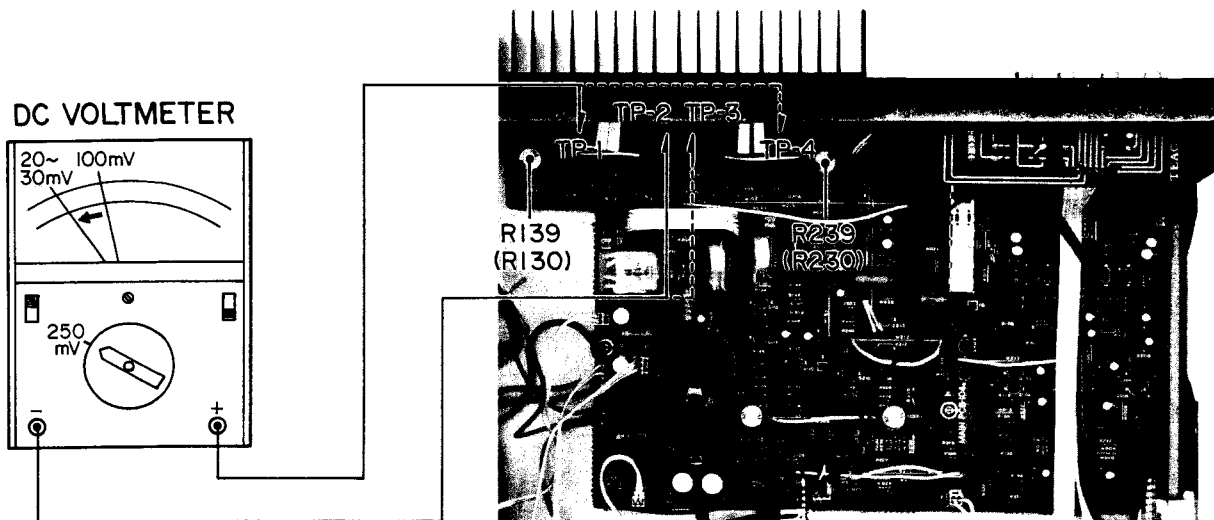


Fig. 3

### 4-4-1 POWER OUTPUT METER ADJUSTMENT (BX-550)

Refer to Fig. 4.

1. Connect the AC voltmeter to SPEAKERS terminal A.
2. Set the SPEAKERS selector to A and the SOURCE selector to AUX.
3. Set the VOLUME control to MAX.
4. Apply a 1-kHz input signal to provide an output power of 1 W (approx. 2.83 Vrms) to the AUX terminals.
5. Adjust R726 so that the Power Output Meters indicate 1W.
6. Connect the DC voltmeter between pin 8 and pin 2 of U701.
7. Adjust R826 so that the DC voltmeter indicates 0V.
8. Set the VOLUME control to MIN.
9. Connect the DC voltmeter between the collector of Q702 and GND.
10. Adjust R728 so that the DC voltmeter indicates 0V.

### 4-4-2 LED METER ADJUSTMENT (BX-330)

Refer to Fig. 5.

1. Connect the AC voltmeter to SPEAKERS terminal A.
2. Set the SPEAKERS selector to A and the SOURCE selector to AUX.
3. Set the VOLUME control to MAX.
4. Apply a 1-kHz input signal to provide an output power of 1W (approx. 2.83 Vrms) to the AUX terminal.
5. Adjust R903 (L-ch)/R904 (R-ch) so that the POWER LEVEL meter just begins to indicate 3W.

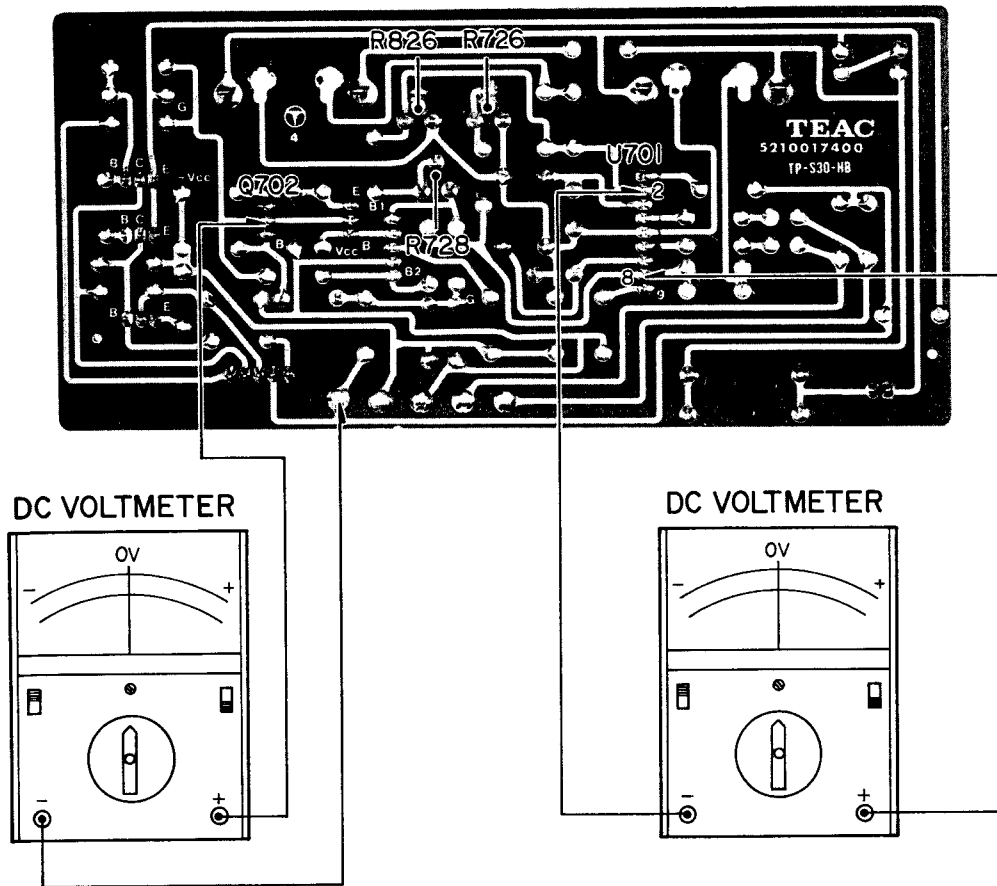


Fig. 4

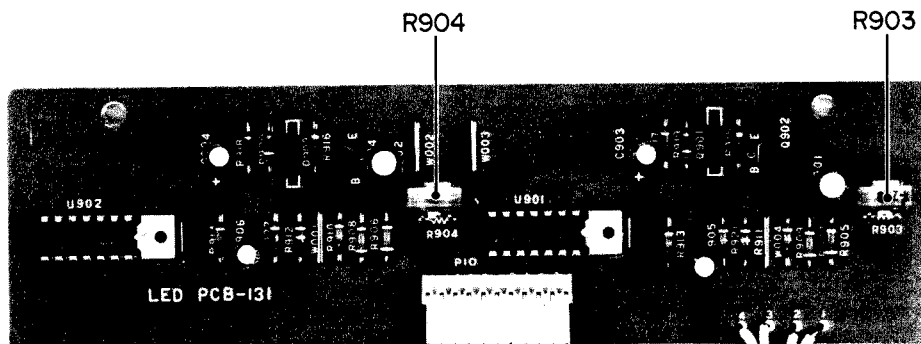
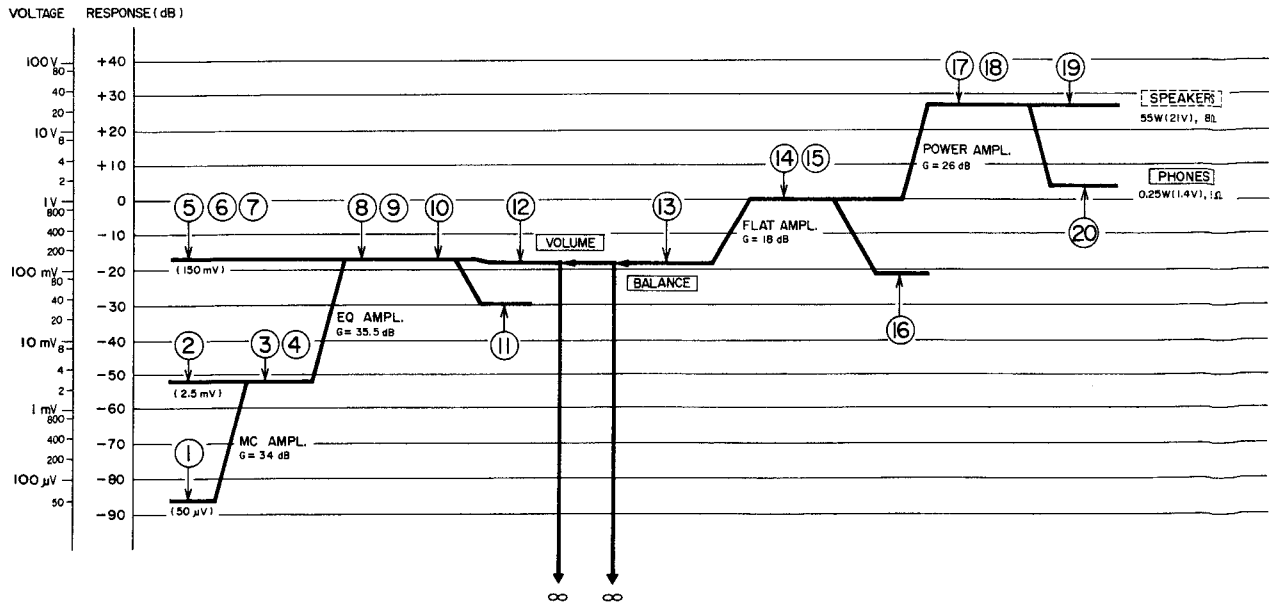
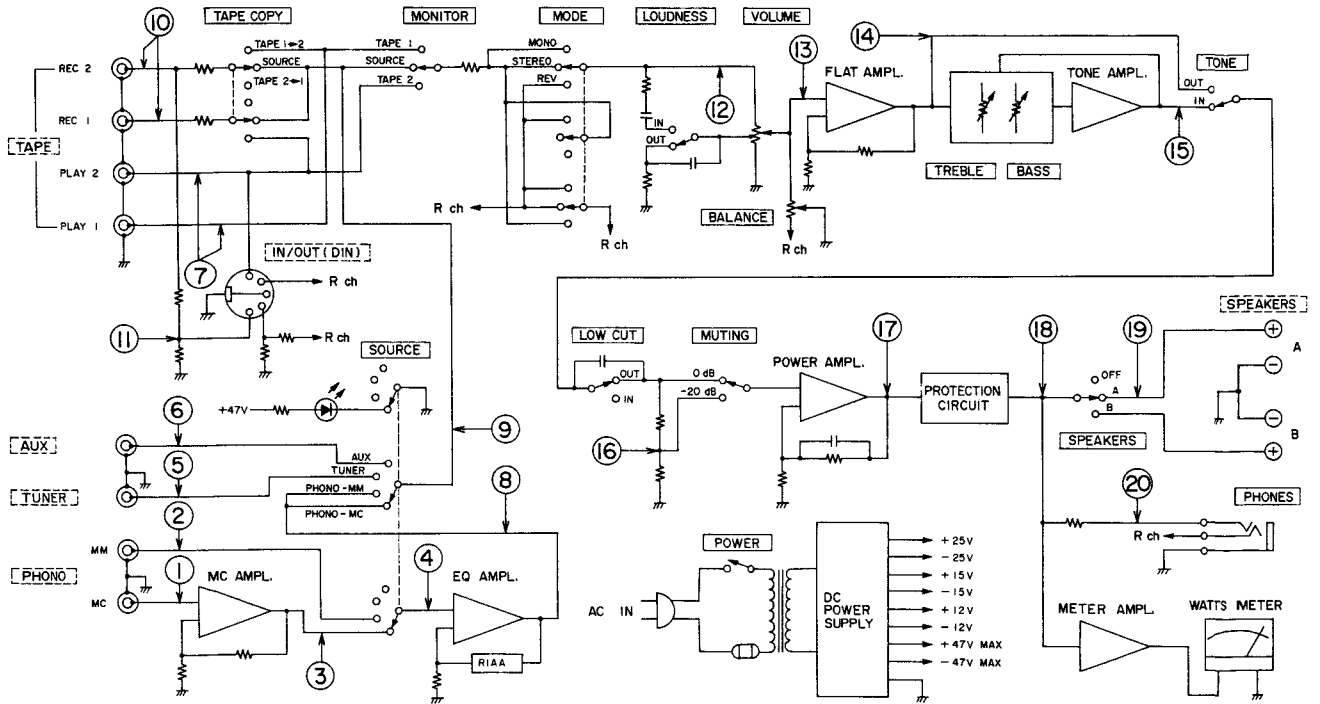


Fig. 5

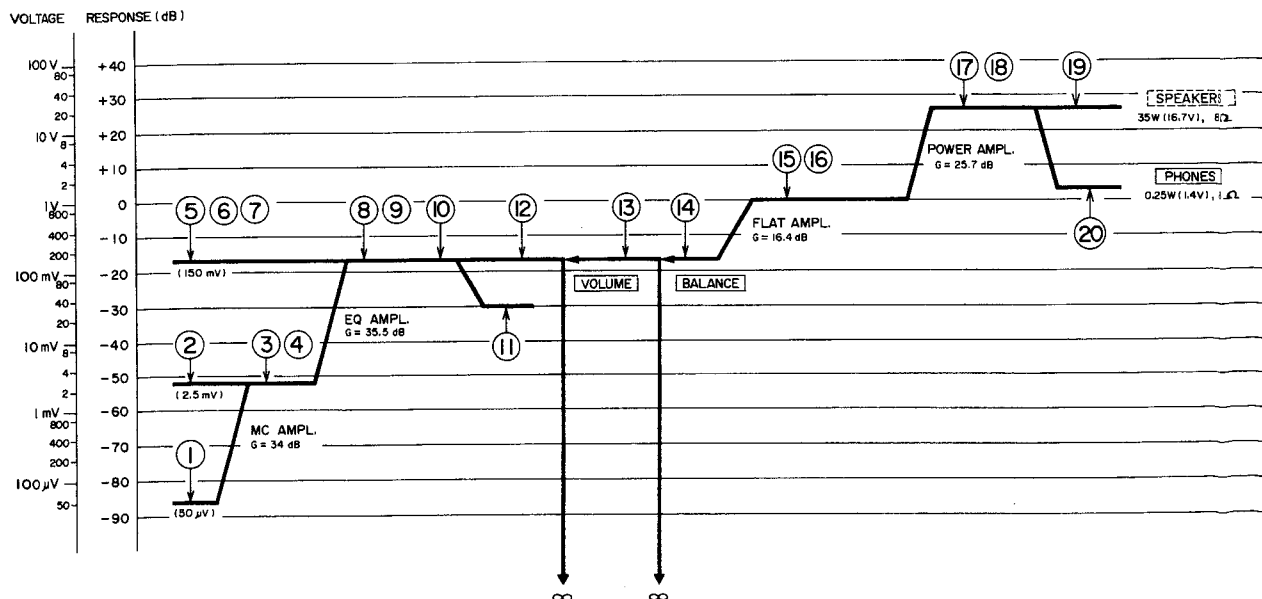
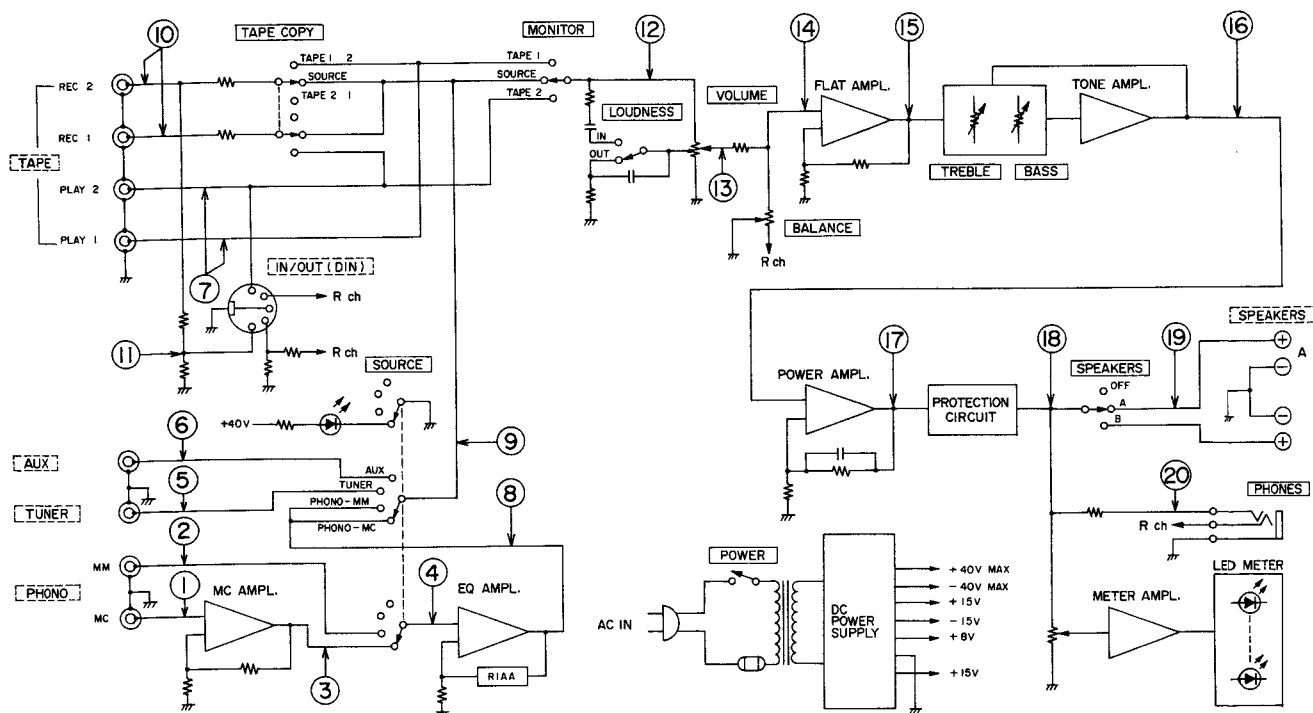
## 5 BLOCK AND LEVEL DIAGRAM

BX-550





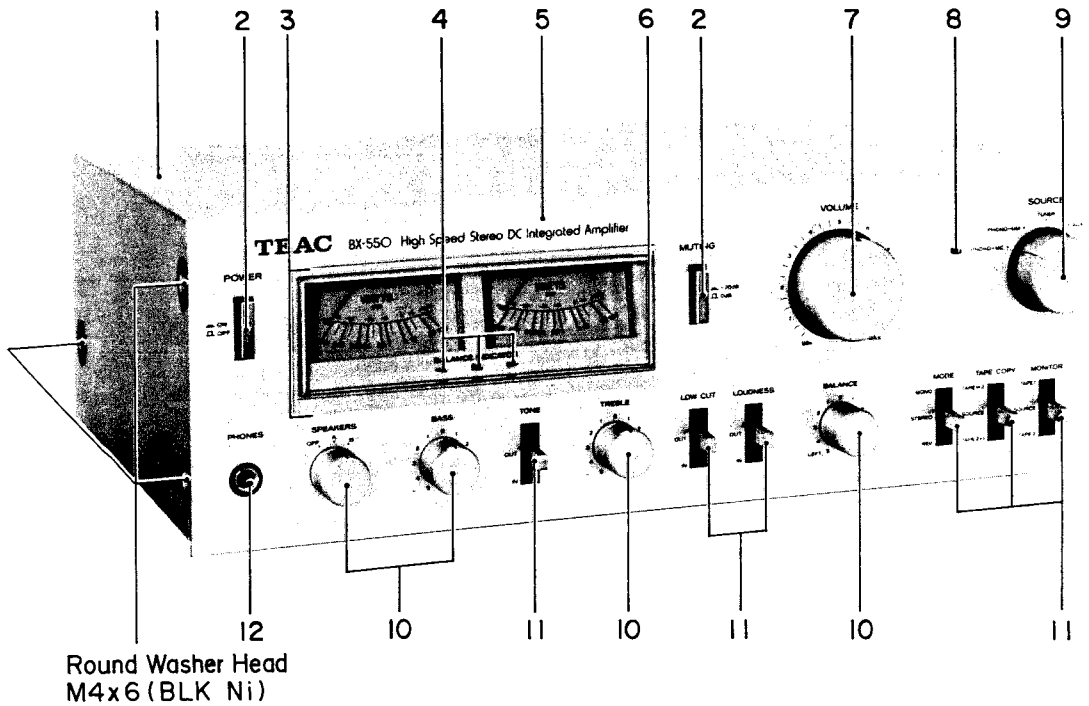
## BX-330



# BX-550

## 6 PARTS LOCATION AND PARTS LIST (BX-550)

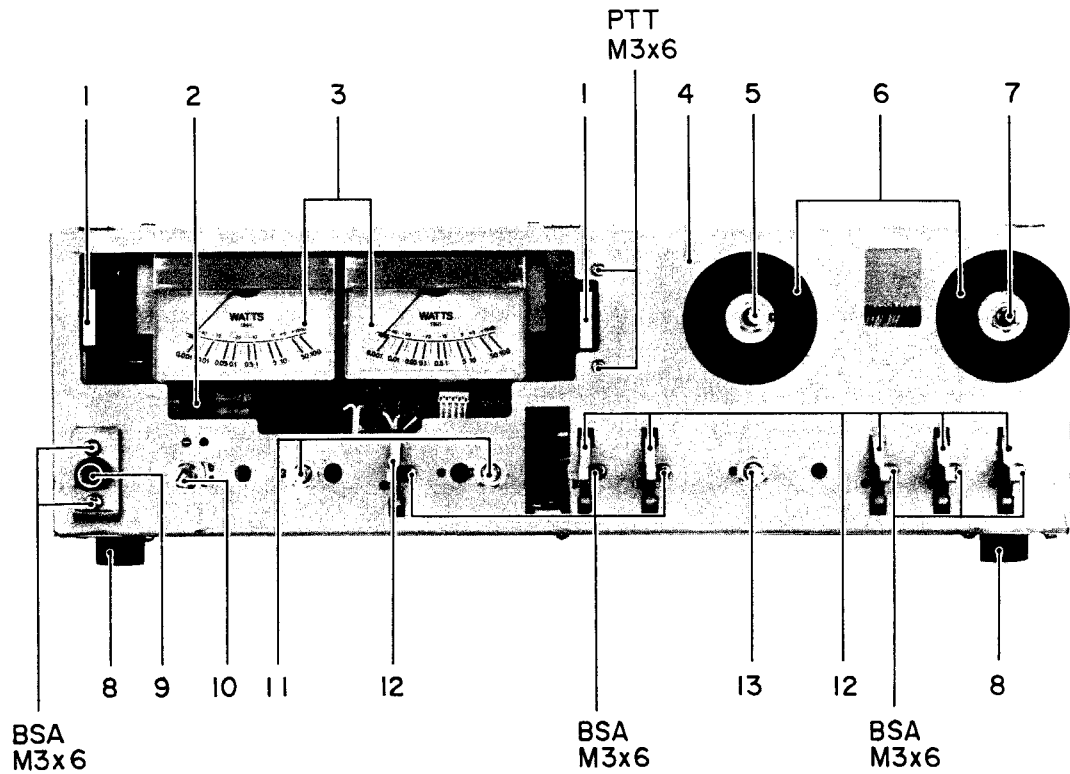
### PARTS LOCATION-1



Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1 - 1	*5800009900	Cover, Top	BX-550
	*5552438000	Cover, Top	BX-550B
1 - 2	*5534730000	Button, Push; A	BX-550
	*5800017700	Button, Push; A	BX-550B
1 - 3	*5800087700	Escutcheon Assy, Meter; B	BX-550 Part of 1 - 5
	*5800087800	Escutcheon Assy, Meter; BB	BX-550B Part of 1 - 5
1 - 4	*5800078800	Escutcheon, LED	BX-550
1 - 5	5800087300	Panel Assy, Front; B	BX-550
	5800087400	Panel Assy, Front; BB	BX-550B
1 - 6	*5800078700	Cover, Meter	Part of 1 - 3
1 - 7	5800078900	Knob, VR	BX-550
	5800079000	Knob, VR (B)	BX-550B
1 - 8	*5800074800	Lens, LED	BX-550
1 - 9	5800074500	Knob, Selector	BX-550
	5800074600	Knob, Selector (B)	BX-550B
1 - 10	5800074300	Knob, VR; S	BX-550
	5800074400	Knob, VR; S (B)	BX-550B
1 - 11	5800009600	Knob, Lever SW	BX-550
	5800018300	Knob, Lever SW	BX-550B
1 - 12	*5124022000	Jack, PHONES	BX-550B

## PARTS LOCATION-2

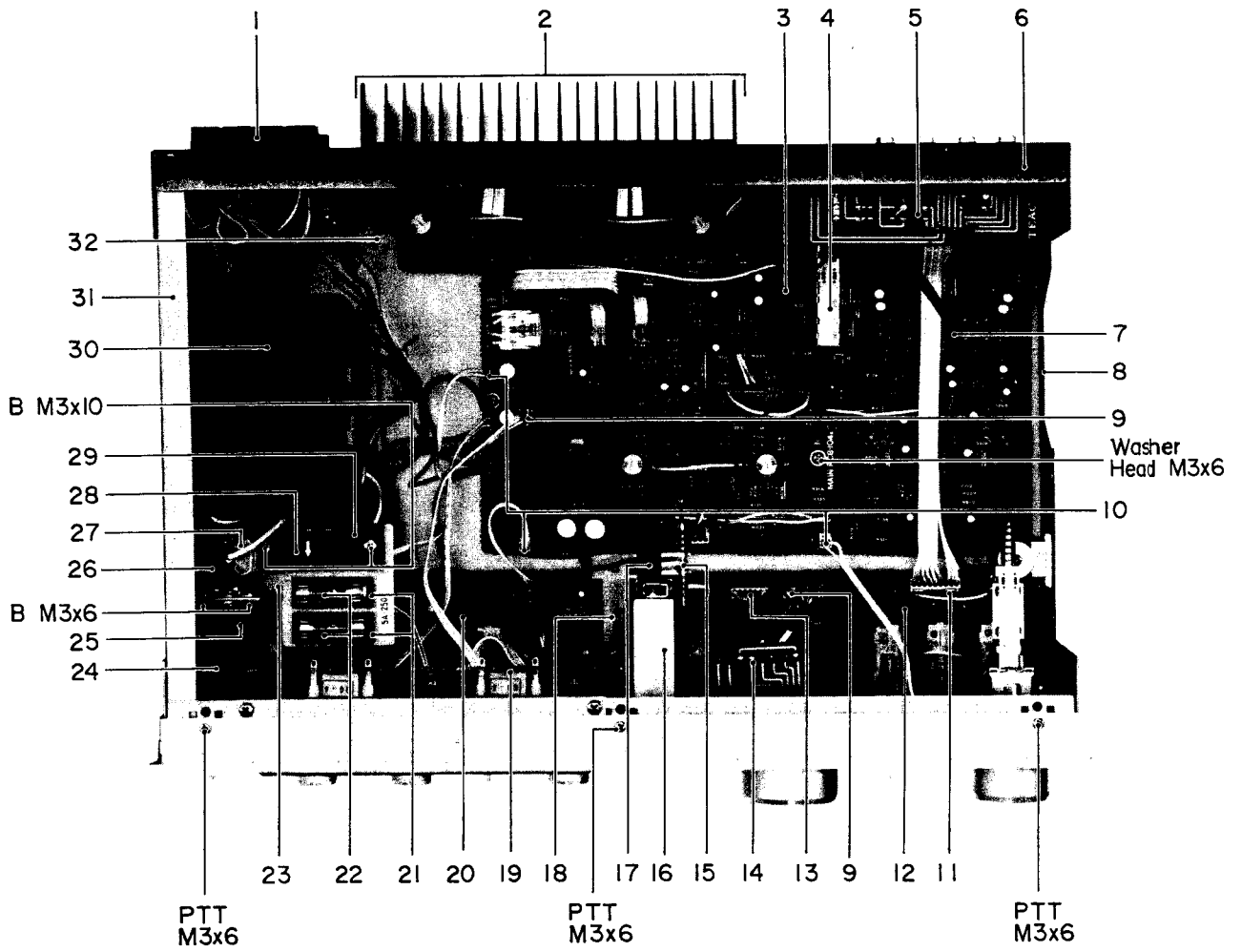


Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2 - 1	5534730000	Button, Push; A	BX-550
	5800017700	Button, Push; A	BX-550B
2 - 2	*5200017400	PCB-111 Assy, METER AMPL	[GE, E, UK, A]
	*5200017410	PCB-111 Assy, METER AMPL	[US, C]
2 - 3	*5296001300	Meter, Wattage	Part of 2 - 2
2 - 4	*5800078300	Chassis, Front	
2 - 5	*5282406402	Var. Res., 100k $\Omega$ (B) x 2	Part of 3 - 15
2 - 6	*5800082000	Mask, Var, Res.	
2 - 7	*5301202600	Switch, Rotary (Slide type)	
2 - 8	*5534432000	Foot	
2 - 9	*5124022000	Jack, PHONES	
2 - 10	*5301202700	Switch, Rotary	Part of 3 - 21
2 - 11	*5150243000	Var. Res., 50k $\Omega$ (B) x 2	Part of 3 - 21
2 - 12	*5800009600	Knob, Lever SW	BX-550
	*5800018300	Knob, Lever SW	BX-550B
2 - 13	*5282009302	Var. Res., 300k $\Omega$ (B)	Part of 3 - 13

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
 [A]: AUSTRALIA [L]: LIMITED AREA

**PARTS LOCATION-3**

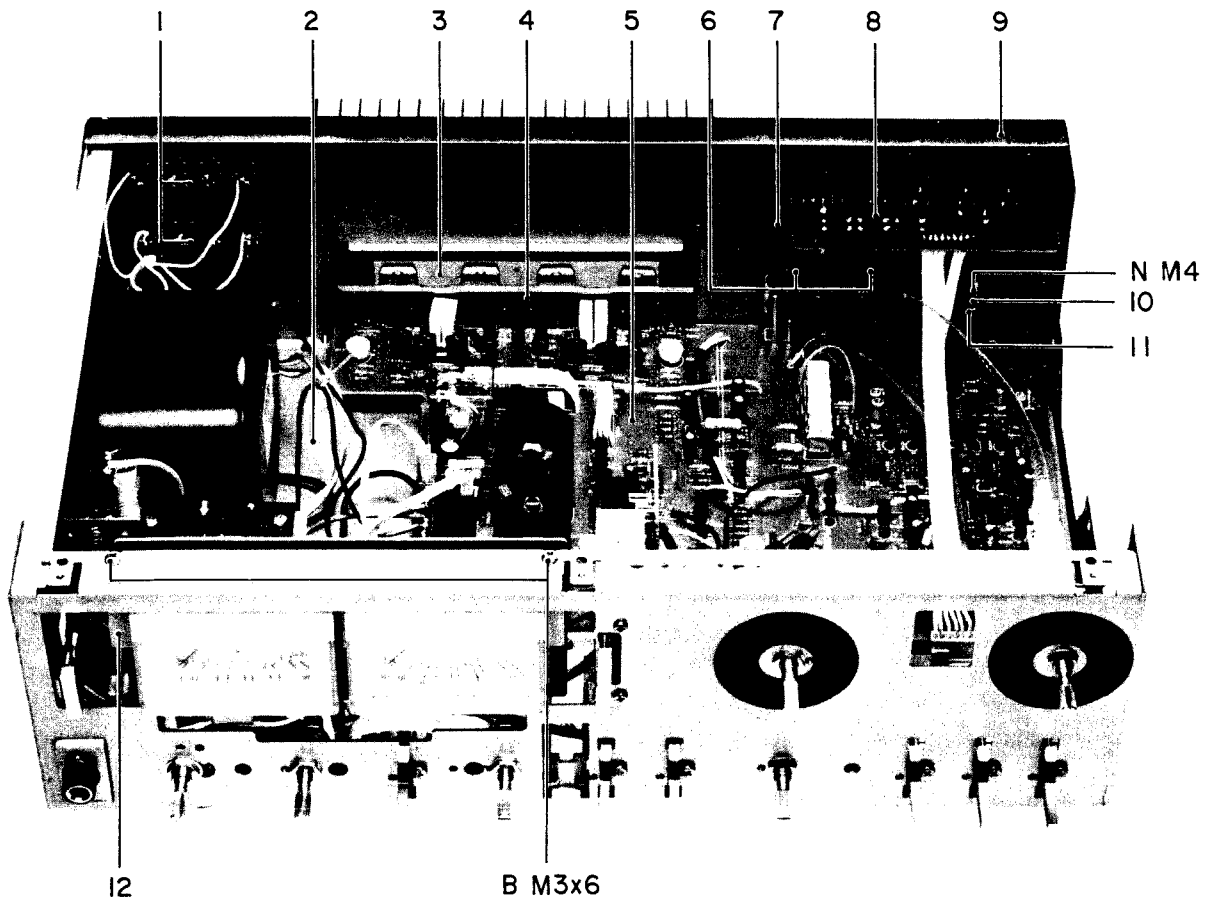


Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
3 - 1	*5122399000	Terminal, Push; 4P	
3 - 2	*5553331000	Heatsink, A2	
3 - 3	*5200016200	PCB-104 Assy, MAIN	[GE, E, UK, A]
	*5200016210	PCB-104 Assy, MAIN	[US, C]
3 - 4	*5300907600	Switch, Slide; 6 - 4	Part of 3 - 3
3 - 5	*5200015400	PCB-118 Assy, IN/OUTPUT	[GE, E, UK, A]
	*5200015410	PCB-118 Assy, IN/OUTPUT	[US, C]
3 - 6	*5800089700	Panel, Rear	[US, C, GE]
	*5800089800	Panel, Rear	[E, UK, A]
3 - 7	*5302100300	Wire, Flexible	
3 - 8	*5553329000	Chassis, C; R	
3 - 9	*5122165000	Connector Socket, 3P (WHT)	
3 - 10	*5122164000	Connector Socket, 2P (WHT)	
3 - 11	*5122171000	Connector Socket, 9P (WHT)	
3 - 12	*5200017600	PCB-150 Assy, SW	[GE, E, UK, A]
	*5200017610	PCB-150 Assy, SW	[US, C]
3 - 13	*5122170000	Connector Socket, 8P (WHT)	
3 - 14	*5200017000	PCB-123 Assy, VR	[GE, E, UK, A]
	*5200017010	PCB-123 Assy, VR	[US, C]
3 - 15	*5200018500	PCB Assy, MUTING SW	[GE, E, UK, A]
	*5200018510	PCB Assy, MUTING SW	[US, C]
3 - 16	*5800075300	Bracket, Muting SW	
3 - 17	*5134113000	Switch, Push; 2 - 2	Part of 3 - 16
3 - 18	*5555786000	Support, PCB; A	
3 - 19	*5200017400	PCB-111 Assy, METER AMPL	[GE, E, UK, A]
	*5200017410	PCB-111 Assy, METER AMPL	[US, C]
3 - 20	*5200016400	PCB-105 Assy, TONE CON AMPL	[GE, E, UK, A]
	*5200016410	PCB-105 Assy, TONE CON AMPL	[US, C]
3 - 21	*5041234000	Holder, Fuse	[US, C, GE]
	*5142096000	Holder, Fuse	[E, UK, A]
3 - 22	△ 5142115000	Fuse, 5A 250V	[US, C]
	△ 5142190000	Fuse, T2.5A 250V	[E, UK, A]
	△ 5142213000	Fuse, 5A 250V	[GE]
3 - 23	*5800078400	Bracket, Voltage Selector	
3 - 24	*5800074700	Bar, Joint; Power Switch	
3 - 25	*5786360500	R-pin, φ5	
3 - 26	△ 5134111000	Switch, Push; Power	[GE]
	△ 5134112000	Switch, Push; Power	[US, C]
	△ 5300019400	Switch, Push; Power	[E, UK, A]
3 - 27	△ 5052910000	Spark Killer, 0.033μF + 120Ω/125V	[US]
	△ 5052911000	Spark Killer, 0.033μF + 120Ω/250V	[C]
	△ 5267702500	Spark Killer, 0.0047μF/250V	[A, E, UK]
	△ 5292002500	Spark Killer, 0.01μF + 300Ω	[GE]
3 - 28	*5133014000	Plug, Voltage Selector	[GE]
3 - 29	*5133015000	Socket, Voltage Selector	[GE]
3 - 30	△ 5152224000	Transformer, Power	[US, C]
	△ 5320002700	Transformer, Power	[GE]
	△ 5320002800	Transformer, Power	[E, UK, A]
3 - 31	*5552446000	Chassis, L; Transformer Support	
3 - 32	*5552447000	Chassis, Bottom	

[US]: U.S.A.    [C]: CANADA    [GE]: GENERAL EXPORT    [E]: EUROPE    [UK]: U.K.  
 [A]: AUSTRALIA    [L]: LIMITED AREA

## PARTS LOCATION-4

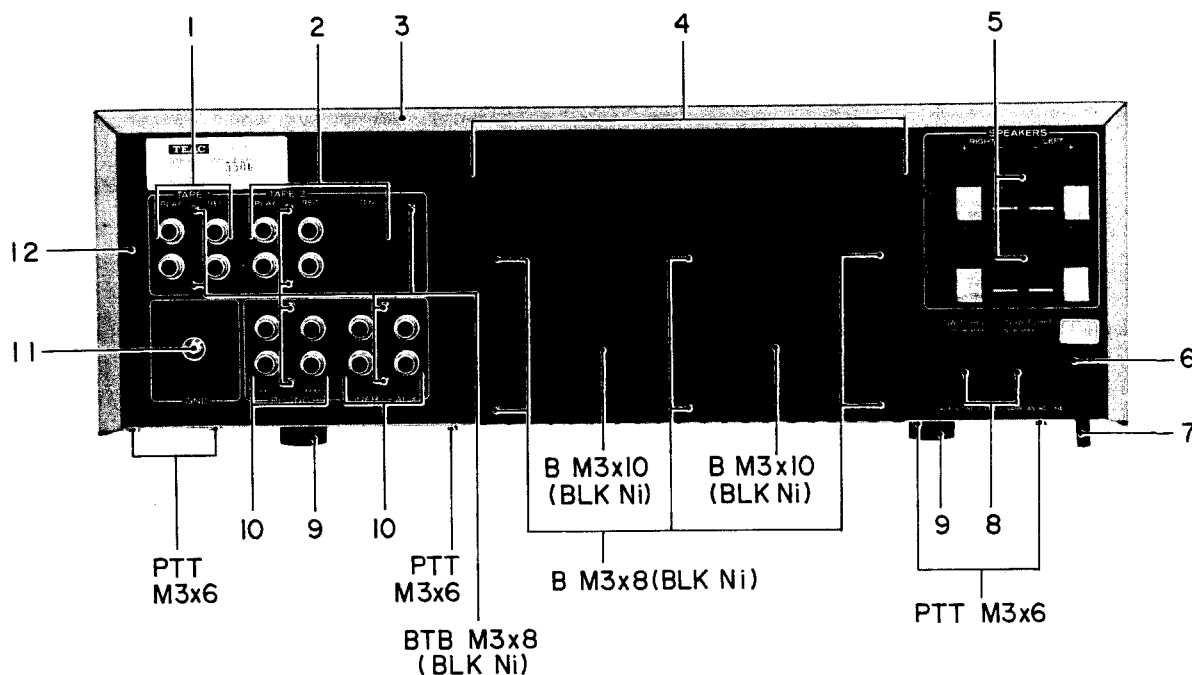


Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
4 - 1	*5122399000	Terminal, Push; 4P	
4 - 2	*5552447000	Chassis, Bottom	
4 - 3	*5555846000	Sheet, Insulating	
4 - 4	*5553334000	Support, Transistor	
4 - 5	*5200016200	PCB-104 Assy, MAIN	[GE, E, UK, A]
	*5200016210	PCB-104 Assy, MAIN	[US, C]
4 - 6	*5128103000	Jack, Pin; 4P	Part of 4 - 5
4 - 7	*5128102000	Jack Assy, Pin; 4P (w/DIN)	Part of 4 - 8
4 - 8	*5200015400	PCB-118 Assy, IN/OUTPUT	[GE, E, UK, A]
	*5200015410	PCB-118 Assy, IN/OUTPUT	[US, C]
4 - 9	*5800089700	Panel, Rear	[US, C, GE]
	*5800089800	Panel, Rear	[E, UK, A]
4 - 10	*5045407100	Terminal, GND	
4 - 11	*5786700600	Lug, GND	
4 - 12	*5800078600	Bracket, Meter	

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 [A]: AUSTRALIA [L]: LIMITED AREA

## PARTS LOCATION-5

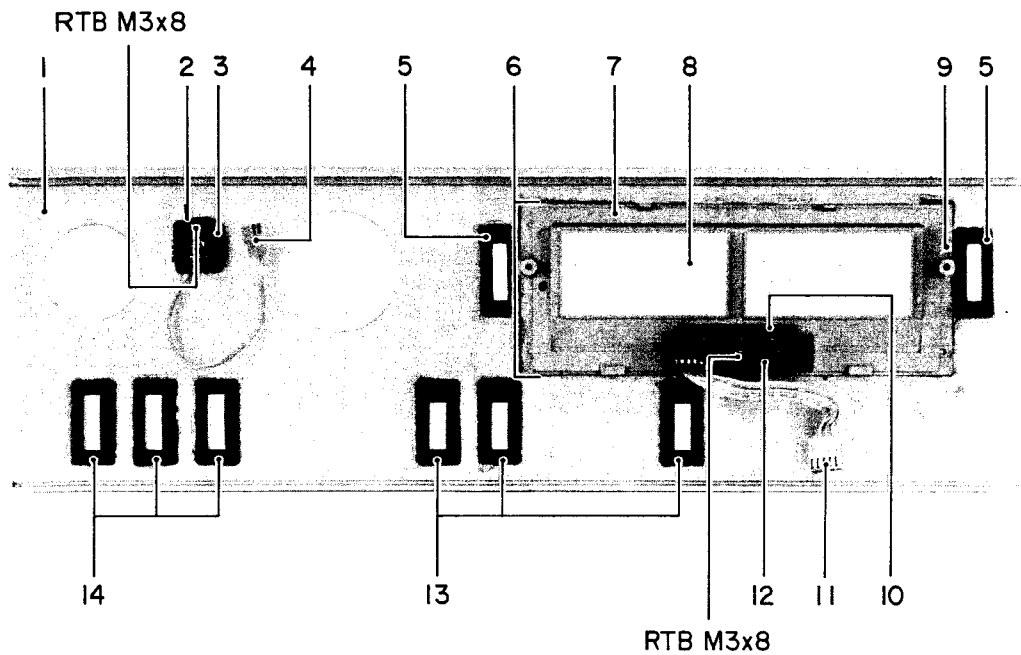


Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
5 - 1	*5128103000	Jack, Pin; 4P	Part of 4 - 8
5 - 2	*5128102000	Jack Assy, Pin; 4P (w/DIN)	Part of 4 - 8
5 - 3	*5800009900	Cover, Top	BX-550
	*5552438000	Cover, Top	BX-550B
5 - 4	*5553331000	Heatsink, A2	
5 - 5	*5122399000	Terminal, Push; 4P	
5 - 6	*5534660000	Strain Relief, AC Power Cord	[All except UK]
	*5534661000	Strain Relief, AC Power Cord	[UK]
5 - 7	△*5128047000	Cord, AC Power	[UK]
	△ 5128075000	Cord, AC Power	[US, C, GE]
	△*5128094000	Cord, AC Power	[E]
	△*5350008300	Cord, AC Power	[A]
5 - 8	△*5332010600	Socket, AC Power	[US, C, GE]
5 - 9	*5534432000	Foot	
5 - 10	*5128103000	Jack, Pin; 4P	Part of 4 - 5
5 - 11	*5045407100	Terminal, GND	
5 - 12	*5800089700	Panel, Rear	[US, C, GE]
	*5800089800	Panel, Rear	[E, UK, A]

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 [A]: AUSTRALIA [L]: LIMITED AREA

## PARTS LOCATION-6



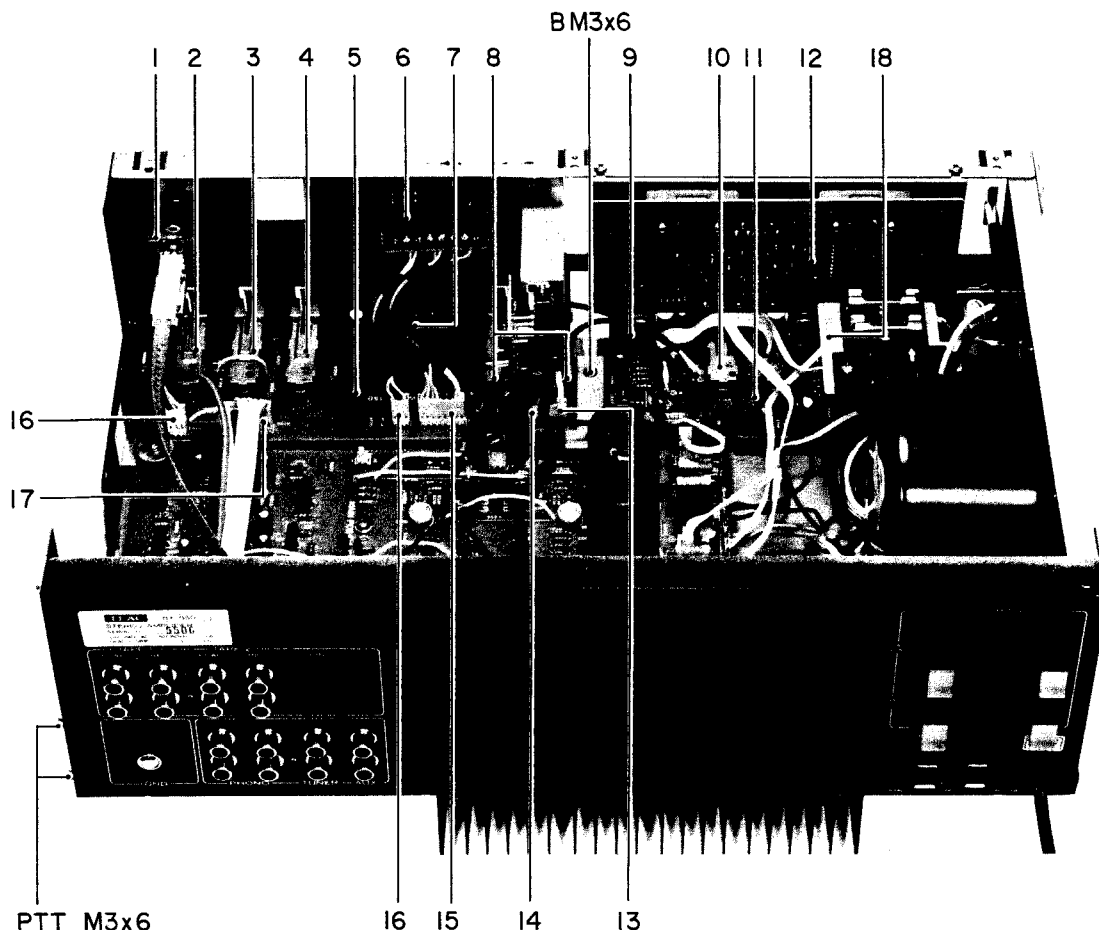
Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
6 - 1	*5800077600	Panel, Front; B	BX-550 Part of 1 - 5
	*5800077700	Panel, Front; B (B)	BX-550B Part of 1 - 5
6 - 2	*5800074800	Lens, LED	Part of 1 - 5
6 - 3	*5200014800	PCB-129 Assy, LED	[GE, E, UK, A]
	*5200014810	PCB-129 Assy, LED	[US, C]
6 - 4	*5122165000	Connector Socket, 2P (WHT)	BX-550 Part of 1 - 5
6 - 5	*5800008200	Escutcheon, PW	BX-550B Part of 1 - 5
	*5800018000	Escutcheon, PW	BX-550
6 - 6	*5800087700	Escutcheon Assy, Meter; B	BX-550B
	*5800087800	Escutcheon Assy, Meter; BB	
6 - 7	*5800076300	Escutcheon, B	Part of 6 - 6
6 - 8	*5800078700	Cover, Meter	Part of 6 - 6
6 - 9	*5800077200	Escutcheon, A	BX-550 Part of 6 - 6
	*5800077300	Escutcheon, A (B)	BX-550B Part of 6 - 6
6 - 10	*5800078800	Escutcheon, LED	Part of 6 - 6
6 - 11	*5122167000	Connector Socket, 5P (WHT)	[GE, E, UK, A]
6 - 12	*5200017800	PCB-133 Assy, LED	[US, C]
	*5200017810	PCB-133 Assy, LED	BX-550 Part of 1 - 5
6 - 13	*5800074900	Escutcheon, SW (2PG)	BX-550B Part of 1 - 5
	*5800075000	Escutcheon, SW (2PB)	
6 - 14	*5800075100	Escutcheon, SW (3PG)	BX-550 Part of 1 - 5
	*5800075200	Escutcheon, SW (3PB)	BX-550B Part of 1 - 5

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
 [A]: AUSTRALIA [L]: LIMITED AREA



## PARTS LOCATION-7



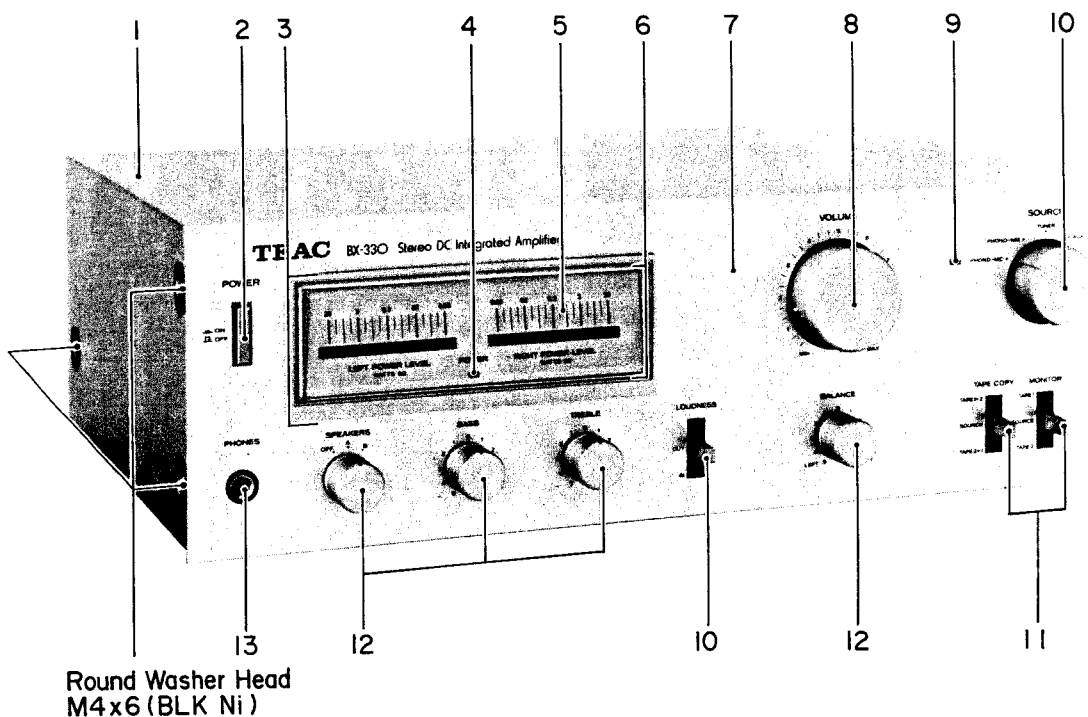
Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
7 - 1	5301202600	Switch, Rotary (Slide type)	
7 - 2	*5300512300	Switch, Lever; 2 - 3 (NS)	Part of 7 - 5
7 - 3	*5300512100	Switch, Lever; 4 - 3 (NS)	Part of 7 - 5
7 - 4	*5300512200	Switch, Lever; 4 - 3 (S)	Part of 7 - 5
7 - 5	*5200017600	PCB-150 Assy, SW	[GE, E, UK, A]
	*5200017610	PCB-150 Assy, SW	[US, C]
7 - 6	*5200017000	PCB-123 Assy, VR	[GE, E, UK, A]
	*5200017010	PCB-123 Assy, VR	[US, C]
7 - 7	*5282009302	Var, Res., 300kΩ (B)	Part of 7 - 5
7 - 8	*5300511800	Switch, Lever; 2 - 2 (S)	Part of 7 - 5
7 - 9	*5150243000	Var, Res., 50kΩ (B) x 2	Part of 7 - 11
7 - 10	*5300511700	Switch, Lever; 2 - 2 (NS)	Part of 7 - 11
7 - 11	*5200016400	PCB-105 Assy, TONE CON AMPL	[GE, E, UK, A]
	*5200016410	PCB-105 Assy, TONE CON AMPL	[US, C]
7 - 12	*5200017400	PCB-111 Assy, METER AMPL	[GE, E, UK, A]
	*5200017410	PCB-111 Assy, METER AMPL	[US, C]
7 - 13	*5122222000	Connector Socket, 3P (BLK)	
7 - 14	*5122281000	Connector Socket, 3P (RED)	
7 - 15	*5122170000	Connector Socket, 8P (WHT)	
7 - 16	*5122165000	Connector Socket, 3P (WHT)	
7 - 17	*5122171000	Connector Socket, 9P (WHT)	
7 - 18	*5720026000	Seal, Fuse Capacity; 5A 250V	[US, C, GE]
	*5720026100	Seal, Fuse Capacity; T2.5A 250V	[E, UK, A]

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
 [A]: AUSTRALIA [L]: LIMITED AREA

## 7 PARTS LOCATION AND PARTS LIST (BX-330)

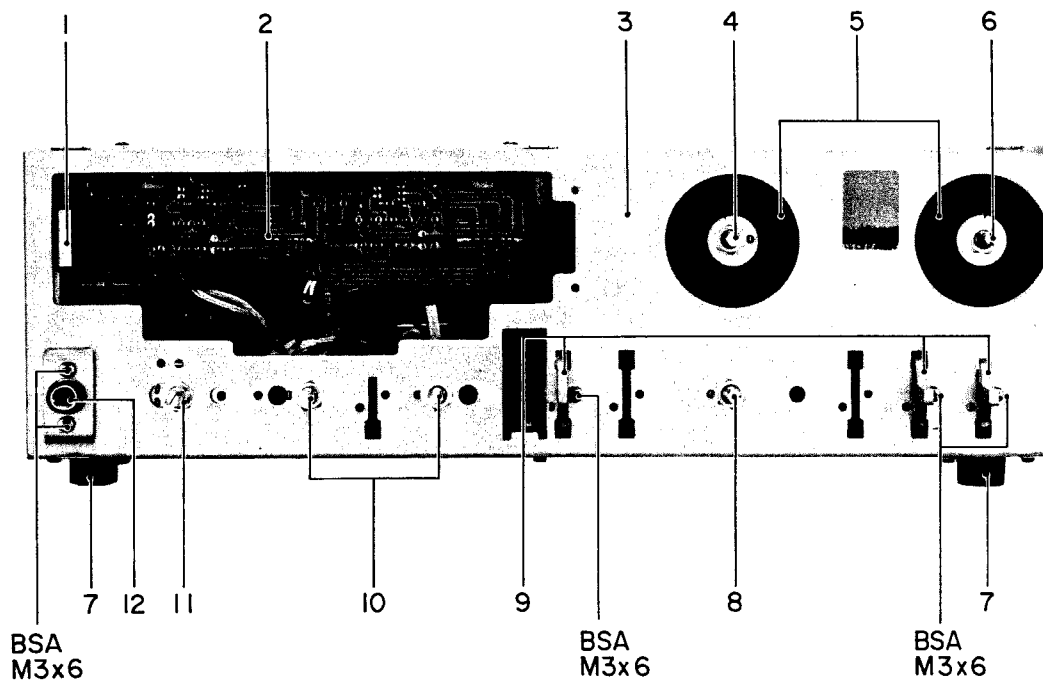
### PARTS LOCATION-1



Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1 - 1	*5800009900	Cover, Top	BX-330
	*5552438000	Cover, Top	BX-330B
1 - 2	*5534730000	Button, Push; A	BX-330
	*5800017700	Button, Push; A	BX-330B
1 - 3	*5800087500	Escutcheon Assy, Meter; A	BX-330
	*5800087600	Escutcheon Assy, Meter; AB	BX-330B
1 - 4	*5800074800	Lens, LED	Part of 1 - 3
1 - 5	*5800075400	Panel, Meter	Part of 1 - 3
1 - 6	*5800078700	Cover, Meter	Part of 1 - 3
1 - 7	5800087100	Panel Assy, Front; A	BX-330
	5800087200	Panel Assy, Front; AB	BX-330B
1 - 8	5800078900	Knob, VR	BX-330
	5800079000	Knob, VR; B	BX-330B
1 - 9	*5800074800	Lens, LED	BX-330
1 - 10	5800074500	Knob, Selector	BX-330
	5800074600	Knob, Selector; (B)	BX-330B
1 - 11	5800009600	Knob, Lever SW	BX-330
	5800018300	Knob, Lever SW	BX-330B
1 - 12	5800074300	Knob, VR; S	BX-330
	5800074400	Knob, VR; S(B)	BX-330B
1 - 13	*5124022000	Jack, PHONES	

## PARTS LOCATION-2

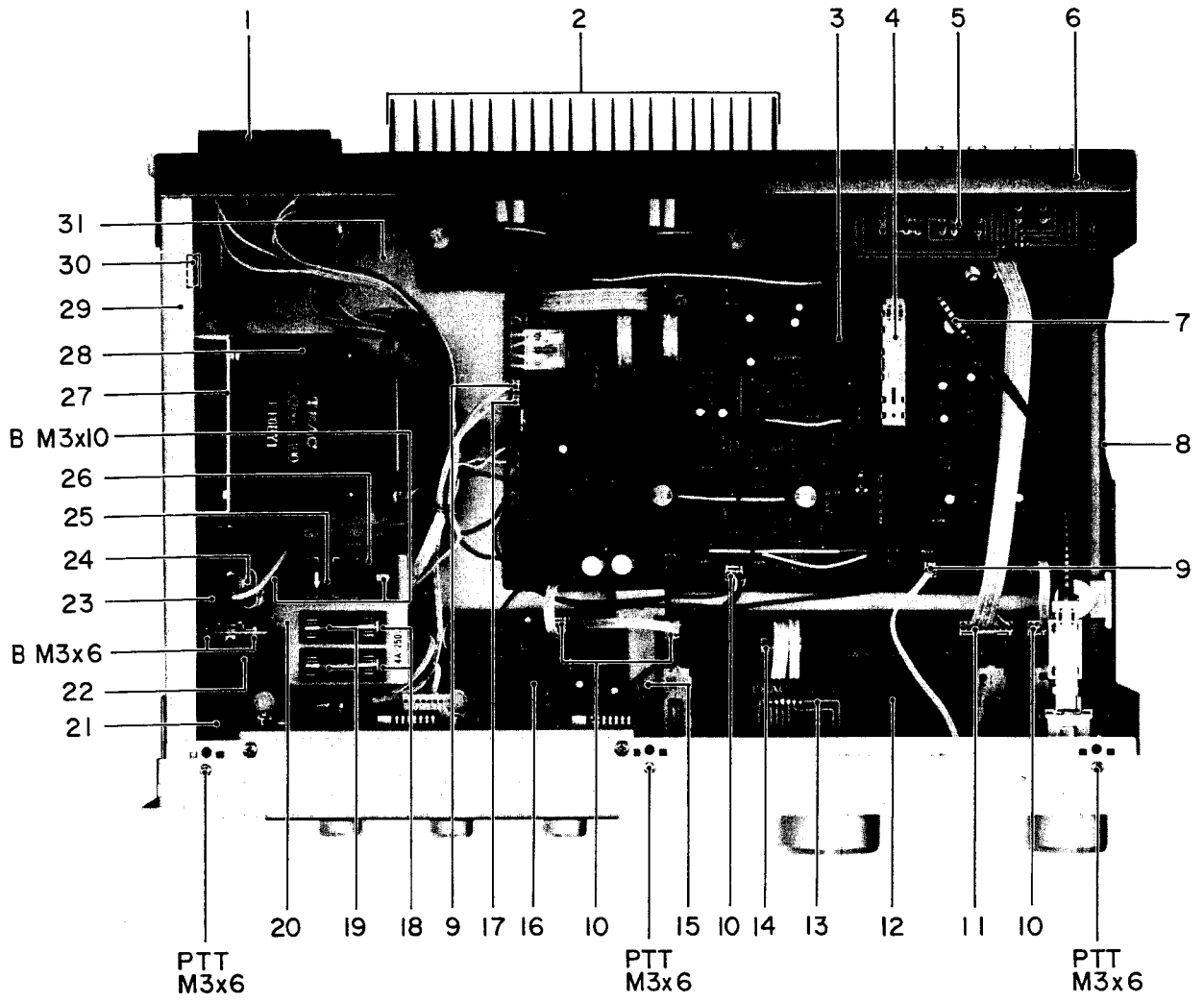


Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2 - 1	*5534730000	Button, Push; A	BX-330 BX-330B [GE, E, UK, A] [US, C]
	*5800017700	Button, Push; A	
2 - 2	*5200015800	PCB-131 Assy, LED	
	*5200015810	PCB-131 Assy, LED	
2 - 3	*5800078300	Chassis, Front	
2 - 4	*5282406402	Var. Res., 100kΩ(B) x 2	Part of 3 - 14
2 - 5	*5800082000	Mask, Var. Res.	
2 - 6	5301202600	Switch, Rotary (Slide type)	
2 - 7	*5534432000	Foot	
2 - 8	5282009302	Var. Res., 300kΩ(B)	Part of 3 - 13
2 - 9	5800009600	Knob, Lever SW	BX-330 BX-330B
	5800018300	Knob, Lever SW	
2 - 10	*5150243000	Var. Res., 50kΩ(B) x 2	Part of 3 - 17
2 - 11	*5301202700	Switch, Rotary	Part of 3 - 17
2 - 12	*5124022000	Jack, PHONES	

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
[A]: AUSTRALIA [L]: LIMITED AREA

**PARTS LOCATION-3**

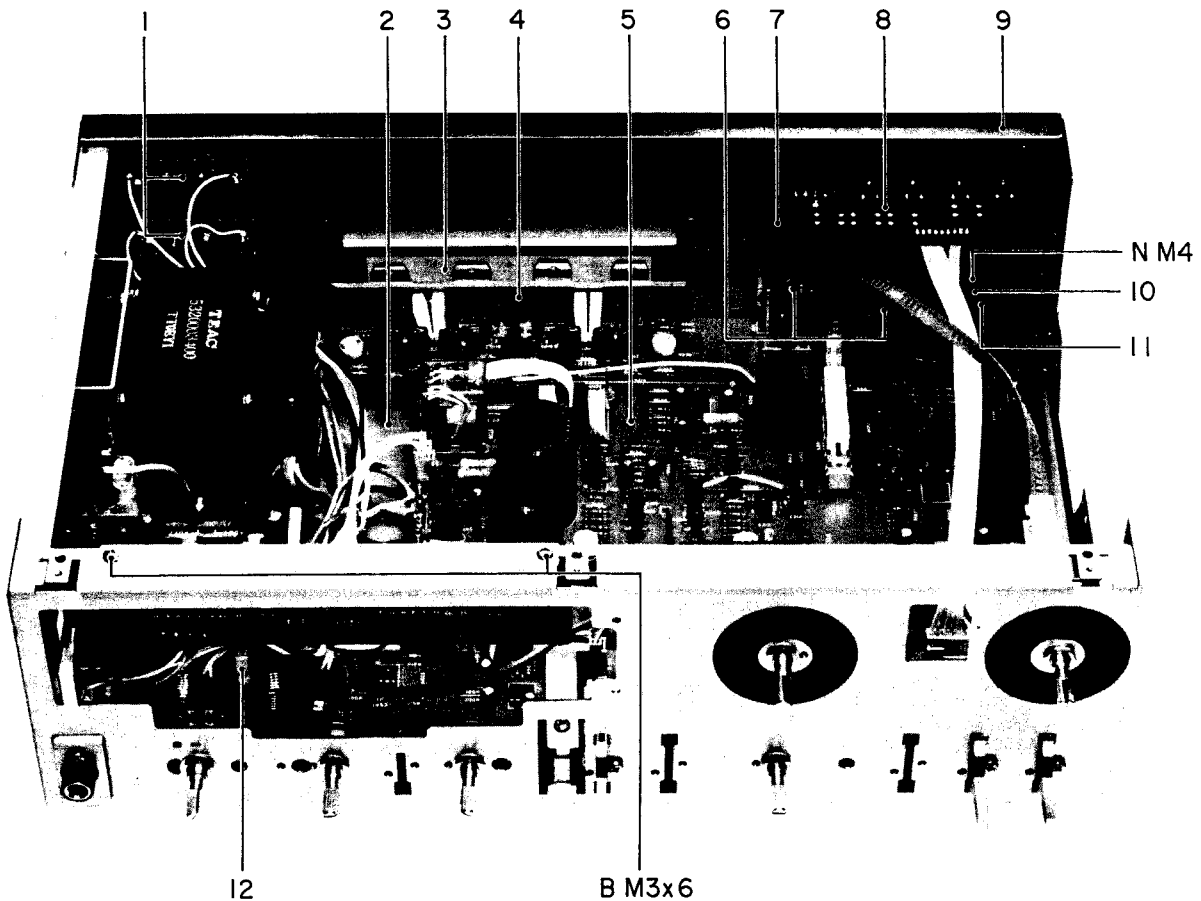


Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
3 - 1	*5122399000	Terminal, Push; 4P	
3 - 2	*5553330000	Heatsink, A1	
3 - 3	*5200014400	PCB-103 Assy, MAIN	[GE, E, UK, A]
	*5200014410	PCB-103 Assy, MAIN	[US, C]
3 - 4	*5300907600	Switch, Slide; 6 - 4	Part of 3 - 3
3 - 5	*5200015400	PCB-118 Assy, IN/OUTPUT	[GE, E, UK, A]
	*5200015410	PCB-118 Assy, IN/OUTPUT	[US, C]
3 - 6	*5800089700	Panel, Rear	[US, C, GE]
	*5800089800	Panel, Rear	[E, UK, A]
3 - 7	*5302100300	Wire, Flexible	
3 - 8	*5553329000	Chassis, C; R	
3 - 9	*5122164000	Connector Socket, 2P (WHT)	
3 - 10	*5122165000	Connector Socket, 3P (WHT)	
3 - 11	*5122171000	Connector Socket, 9P (WHT)	
3 - 12	*5200015600	PCB-149 Assy, SW	[GE, E, UK, A]
	*5200015610	PCB-149 Assy, SW	[US, C]
3 - 13	*5200015200	PCB-122 Assy, VR	[GE, E, UK, A]
	*5200015210	PCB-122 Assy, VR	[US, C]
3 - 14	*5122169000	Connector Socket, 7P (WHT)	
3 - 15	*5555786000	Support, PCB; A	
3 - 16	*5200014600	PCB-104 Assy, TONE CON AMPL	[GE, E, UK, C]
	*5200014610	PCB-104 Assy, TONE CON AMPL	[US, C]
3 - 17	*5122221000	Connector Socket, 2P (BLK)	
3 - 18	*5041234000	Holder, Fuse	[US, C, GE]
	*5142096000	Holder, Fuse	[E, UK, A]
3 - 19	△ 5041157000	Fuse, 4A 250V	[US, C]
	△ 5142190000	Fuse, T2.5A 250V	[E, UK, A]
	△ 5142212000	Fuse, 4A 250V	[GE]
3 - 20	*5800078400	Bracket, Voltage Selector	
3 - 21	*5800074700	Bar, Joint; Power Switch	
3 - 22	*5786360500	R-pin, φ5	
3 - 23	△ 5134112000	Switch, Push; Power	[US, C]
	△ 5134111000	Switch, Push; Power	[GE]
	△ 5300019400	Switch, Push; Power	[E, UK, A]
3 - 24	△ *5052910000	Spark Killer, 0.033μF +120Ω/125V	[US]
	△ *5052911000	Spark Killer, 0.033μF +120Ω/250V	[C]
	△ *5292002500	Spark Killer, 0.01μF +300Ω	[GE]
	△ *5267702500	Spark Killer, 0.0047μF/250V	[E, UK, A]
3 - 25	*5133014000	Plug, Voltage Selector	[GE]
3 - 26	*5133015000	Socket, Voltage Selector	[GE]
3 - 27	*5553332000	Bracket, Power Transformer	
3 - 28	△ 5320003300	Transformer, Power	[US, C]
	△ 5320003400	Transformer, Power	[GE]
	△ 5320003500	Transformer, Power	[E, UK, A]
3 - 29	*5552446000	Chassis, L; Transformer Support	
3 - 30	5145087000	Transistor, 2SD313E (Q001)	
3 - 31	*5552447000	Chassis, Bottom	

[US]: U.S.A.    [C]: CANADA    [GE]: GENERAL EXPORT    [E]: EUROPE    [UK]: U.K.  
 [A]: AUSTRALIA    [L]: LIMITED AREA

## PARTS LOCATION-4

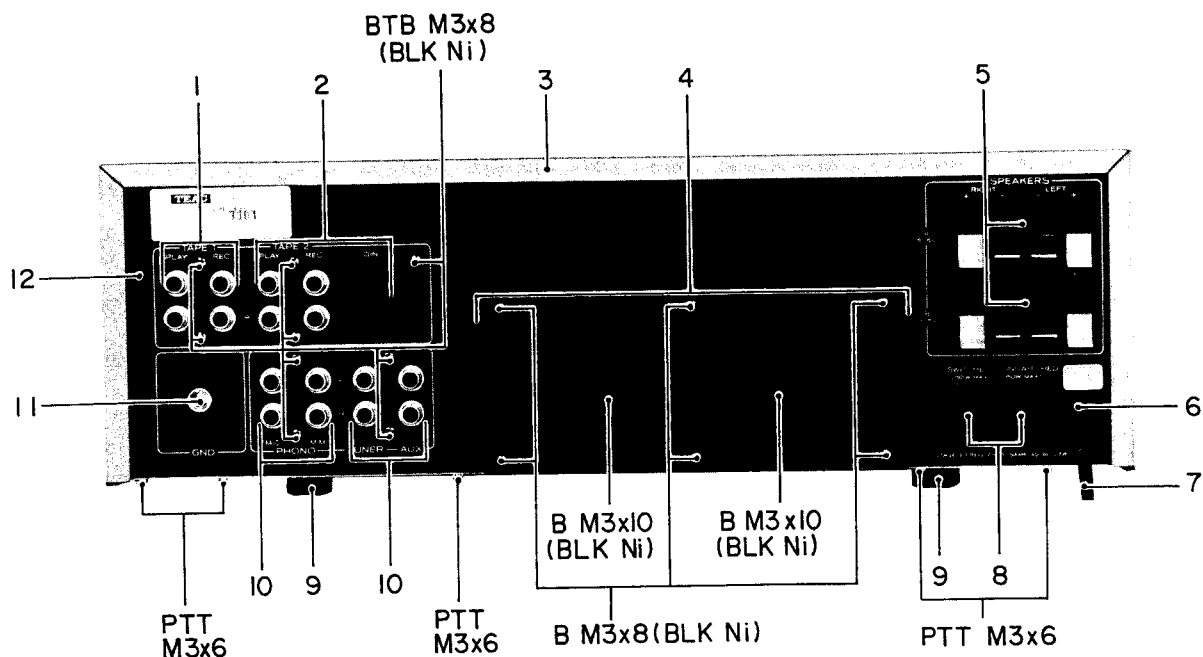


Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
4 - 1	*5122399000	Terminal, Push; 4P	
4 - 2	*5552447000	Chassis, Bottom	
4 - 3	*5555846000	Sheet, Insulating	
4 - 4	*5553334000	Support, Transistor	
4 - 5	*5200014400	PCB-103 Assy, MAIN	[GE, E, UK, A]
	*5200014410	PCB-103 Assy, MAIN	[US, C]
4 - 6	*5128103000	Jack, Pin; 4P	Part of 4 - 5
4 - 7	*5128102000	Jack Assy, Pin; 4P (w/DIN)	Part of 4 - 8
4 - 8	*5200015400	PCB-118 Assy, IN/OUTPUT	[GE, E, UK, A]
	*5200015410	PCB-118 Assy, IN/OUTPUT	[US, C]
4 - 9	*5800089700	Panel, Rear	[US, C, GE]
	*5800089800	Panel, Rear	[E, UK, A]
4 - 10	*5045407100	Terminal, GND	
4 - 11	*5786700600	Lug, GND	
4 - 12	*5122164000	Connector Socket, 2P (WHT)	

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
 [A]: AUSTRALIA [L]: LIMITED AREA

## PARTS LOCATION-5

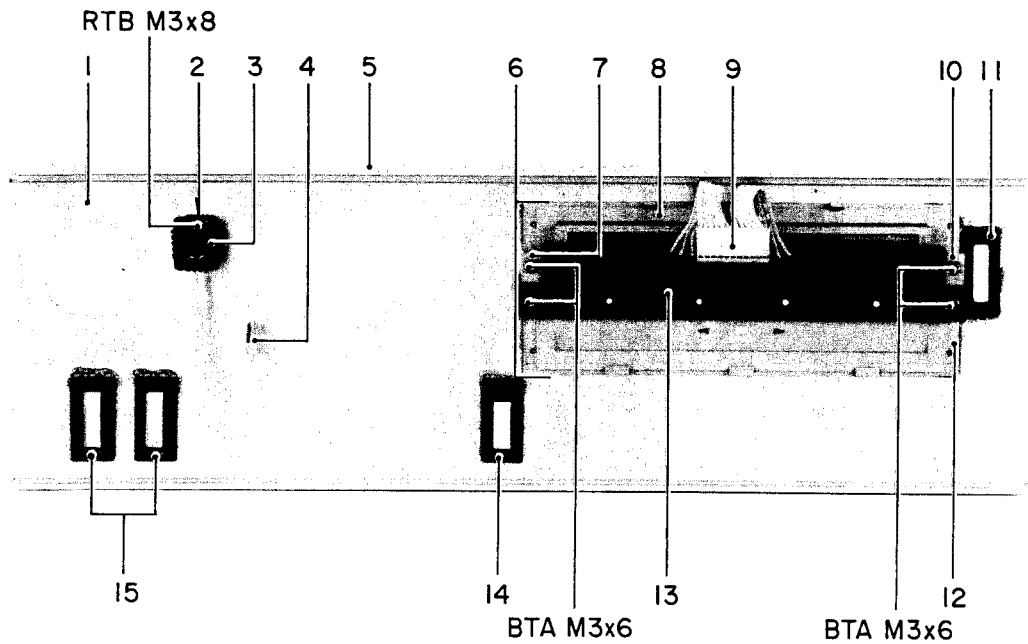


Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
5 - 1	*5128103000	Jack, Pin; 4P	Part of 4 - 8
5 - 2	*5128102000	Jack Assy, Pin; 4P (w/DIN)	Part of 4 - 8
5 - 3	*5800009900	Cover, Top	BX-330
	*5552438000	Cover, Top	BX-330B
5 - 4	*5553330000	Heatsink, A1	
5 - 5	*5122399000	Terminal, Push; 4P	[All except UK]
5 - 6	*5534660000	Strain Relief, AC Power Cord	[UK]
	*5534661000	Strain Relief, AC Power Cord	[UK]
5 - 7	△*5128047000	Cord, AC Power	[US, C, GE]
	△ 5128075000	Cord, AC Power	[E]
	△*5128094000	Cord, AC Power	[A]
	△*5350008300	Cord, AC Power	
5 - 8	△*5332010600	Socket, AC Power	[US, C, GE]
5 - 9	*5534432000	Foot	
5 - 10	*5128103000	Jack, Pin; 4P	Part of 4 - 5
5 - 11	*5045507100	Terminal, GND	
5 - 12	*5800089700	Panel, Rear	[US, C, GE]
	*5800089800	Panel, Rear	[E, UK, A]

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
 [A]: AUSTRALIA [L]: LIMITED AREA

## PARTS LOCATION-6



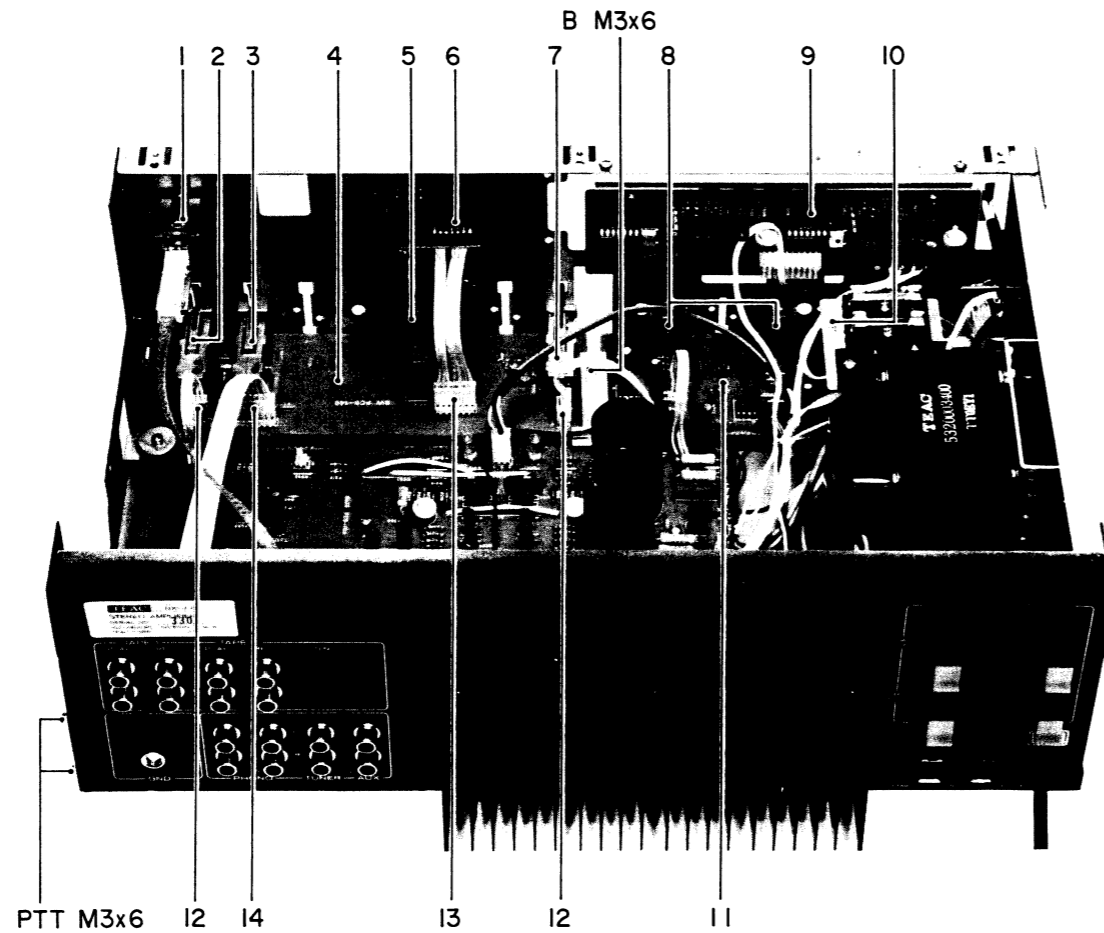
Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
6 - 1	*5800077400	Panel, Front; A	BX-330 Part of 1 - 7 BX-330B Part of 1 - 7
6 - 2	*5800077500	Panel, Front; A(B)	
6 - 3	*5800074800	Lens, LED	
6 - 3	*5200014800	PCB-129 Assy, LED	Part of 1 - 7 [GE, E, UK, A]
6 - 3	*5200014900	PCB-129 Assy, LED	
6 - 4	*5122164000	Connector Socket, 2P (WHT)	BX-330 BX-330B
6 - 5	*5555570000	Cushion, Top Cover; B	
6 - 6	*5800087500	Escutcheon Assy, Meter; A	Part of 6 - 6
6 - 6	*5800087600	Escutcheon Assy, Meter; AB	
6 - 7	*5800082200	Bracket, LED Meter; R	
6 - 8	*5800076300	Escutcheon, B	Part of 6 - 6
6 - 9	*5122173000	Connector Socket, 11P (WHT)	
6 - 10	*5800082100	Bracket, LED Meter; L	BX-330 Part of 1 - 7 BX-330B Part of 1 - 7
6 - 11	*5800008200	Escutcheon, PW	
6 - 11	*5800018000	Escutcheon, PW	
6 - 12	*5800077200	Escutcheon, A	BX-330 Part of 6 - 6 BX-330B Part of 6 - 6
6 - 12	*5800077300	Escutcheon, A(B)	
6 - 13	*5620017000	Meter Assy, LED	BX-330 Part of 1 - 7 BX-330B Part of 1 - 7
6 - 14	*5800074900	Escutcheon, SW (2PG)	
6 - 14	*5800075000	Escutcheon, SW (2PB)	
6 - 15	*5800075100	Escutcheon, SW (3PG)	BX-330 Part of 1 - 7 BX-330B Part of 1 - 7
6 - 15	*5800075200	Escutcheon, SW (3PB)	

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
[A]: AUSTRALIA [L]: LIMITED AREA



**PARTS LOCATION-7**



Parts marked with \*require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
7 - 1	5301202600	Switch, Rotary (Slide type)	
7 - 2	*5300512300	Switch, Lever; 2 - 3 (NS)	Part of 7 - 4
7 - 3	*5300512100	Switch, Lever; 4 - 3 (NS)	Part of 7 - 4
7 - 4	*5200015600	PCB-149 Assy, SW	[GE, E, UK, A]
	*5200015610	PCB-149 Assy, SW	[US, C]
7 - 5	*5282009302	Var. Res., 300kΩ(B)	Part of 7 - 4
7 - 6	*5200015200	PCB-122 Assy, VR	[GE, E, UK, A]
	*5200015210	PCB-122 Assy, VR	[US, C]
7 - 7	*5300511800	Switch, Lever; 2 - 2 (S)	Part of 7 - 4
7 - 8	*5150243000	Var. Res., 50kΩ(B) x 2	Part of 7 - 11
7 - 9	*5200015800	PCB-131 Assy, LED	[GE, E, UK, A]
	*5200015810	PCB-131 Assy, LED	[US, C]
7 - 10	*5720025200	Seal, Fuse Capacity; 4A 250V	[US, C, GE]
	*5720026100	Seal, Fuse Capacity; T2.5A 250V	[E, UK, A]
7 - 11	*5200014600	PCB-104 Assy, TONE CON AMPL	[GE, E, UK, A]
	*5200014610	PCB-104 Assy, TONE CON AMPL	[US, C]
7 - 12	*5122165000	Connector Socket, 3P (WHT)	
7 - 13	*5122169000	Connector Socket, 7P (WHT)	
7 - 14	*5122171000	Connector Socket, 9P (WHT)	

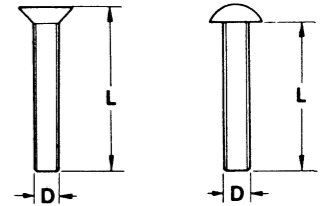
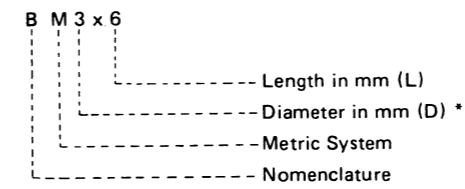
[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
[A]: AUSTRALIA [L]: LIMITED AREA

**ASSEMBLING HARDWARE CODING LIST**

All screws conform to ISO standards, and have crossrecessed heads, unless otherwise noted. ISO screws have the head inscribed with a point as in the figure to the right.



FOR EXAMPLE:



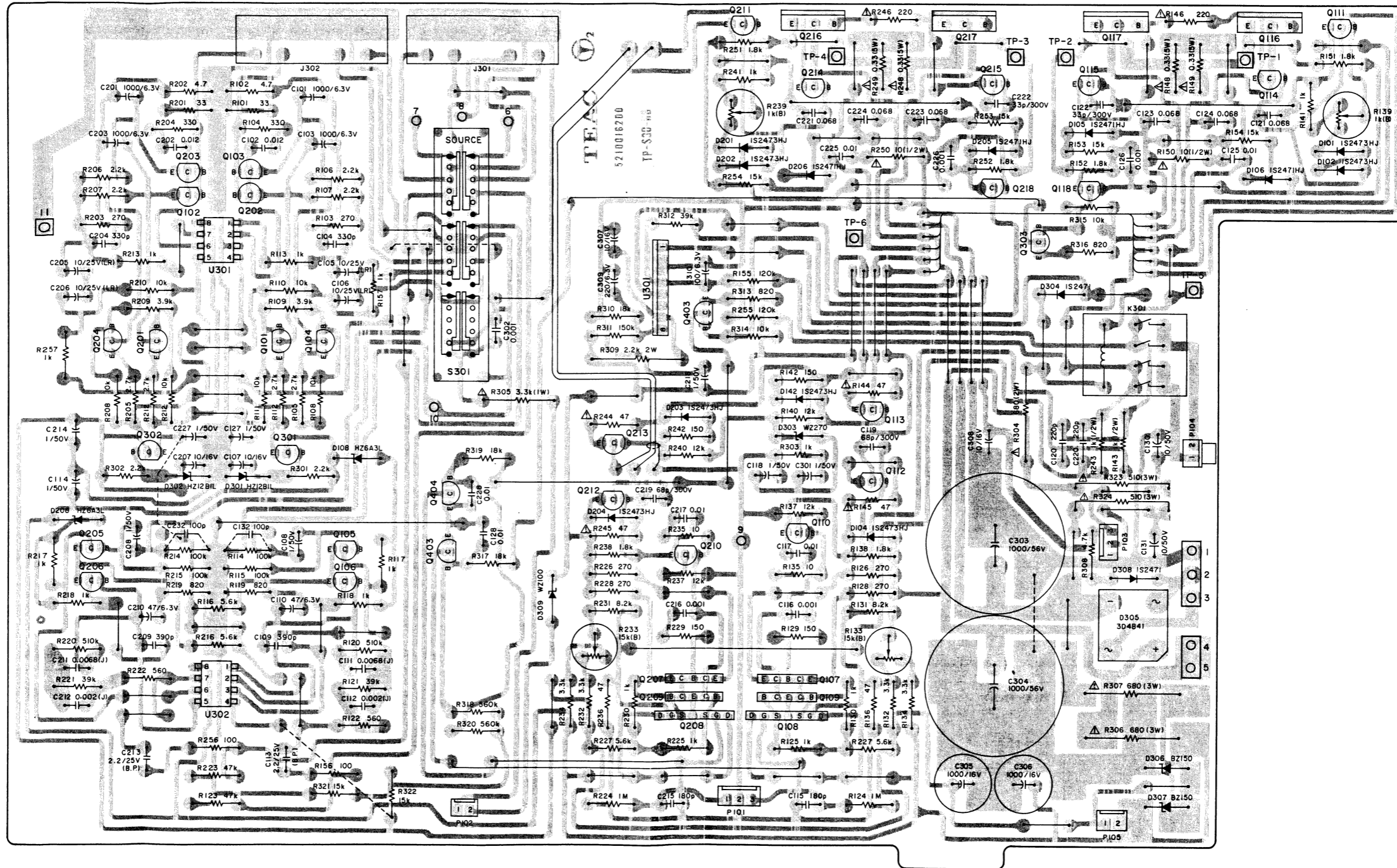
\* Inner dia. for washers and nuts

	Code	Name	Type		Code	Name	Type	
MACHINE SCREW	R	Round Head Screw		TAPPING SCREW	BTA	Binding Head Tapping Screw(A Type)		
	P	Pan Head Screw			BTB	Binding Head Tapping Screw(B Type)		
	T	Stove Head Screw (Truss)			RTA	Round Head Tapping Screw(A Type)		
	B	Binding Head Screw			RTB	Round Head Tapping Screw(B Type)		
	F	Flat Countersunk Head Screw			SETSCREW	SF	Hex Socket Setscrew(Flat Point)	
	O	Oval Countersunk Head Screw				SC	Hex Socket Setscrew(Cup Point)	
WOOD SCREW	RW	Round Head Wood Screw			SS	Slotted Socket Setscrew(Flat Point)		
TAPTITE SCREW	PTT	Pan Head Taptite Screw		WASHER	E	E-Ring (Retaining Washer)		
	WTT	Washer Head Taptite Screw			W	Flat Washer (Plain)		
SEMS SCREW	BSA	Binding Head SEMS Screw(A Type)			SW	Lock Washer (Spring)		
	BSB	Binding Head SEMS Screw(B Type)			LWI	Lock Washer (Internal Teeth)		
	BSF	Binding Head SEMS Screw(F Type)			LWE	Lock Washer (External Teeth)		
	PSA	Pan Head SEMS Screw(A Type)			TW	Trim Washer (Countersunk)		
	PSB	Pan Head SEMS Screw(B Type)		NUT	N	Hex Nut		

# 8 PC BOARDS AND PARTS LIST (BX-550)

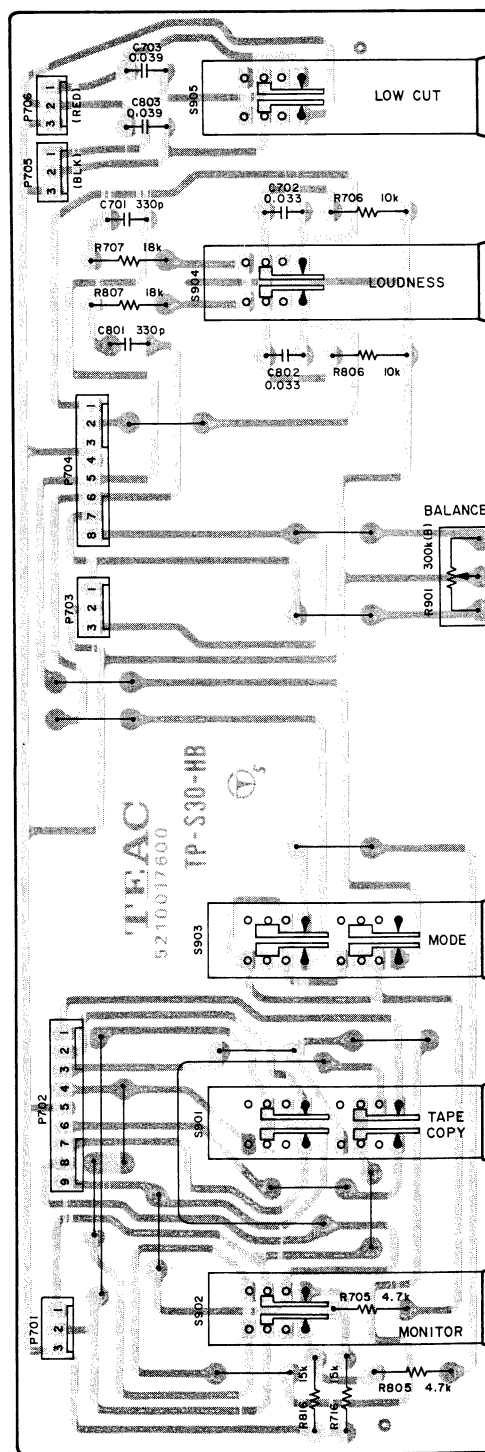
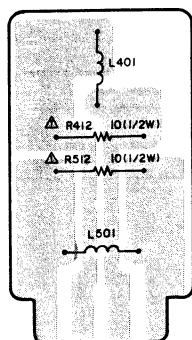
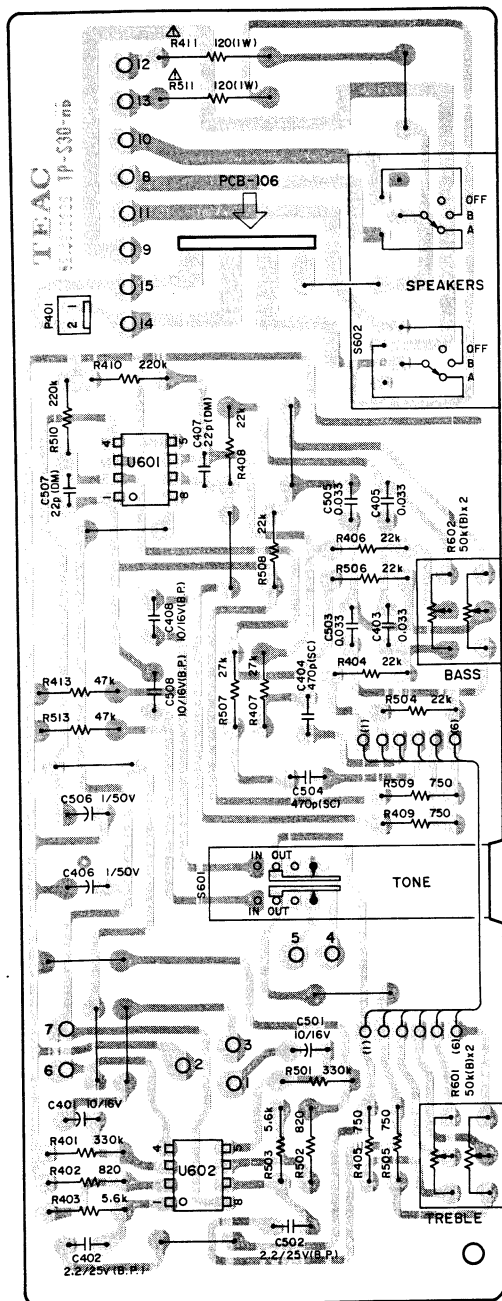
PC Boards shown viewed from foil side.

## MAIN PCB-104 ASSY

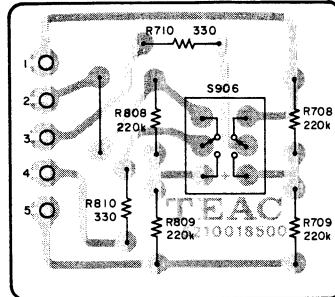


**TONE CON AMPL PCB-105 ASSY**  
**TONE CON AMPL PCB-106 ASSY**

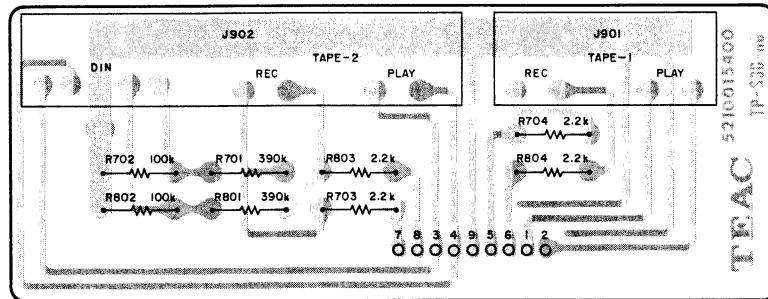
**SW PCB-150 ASSY**



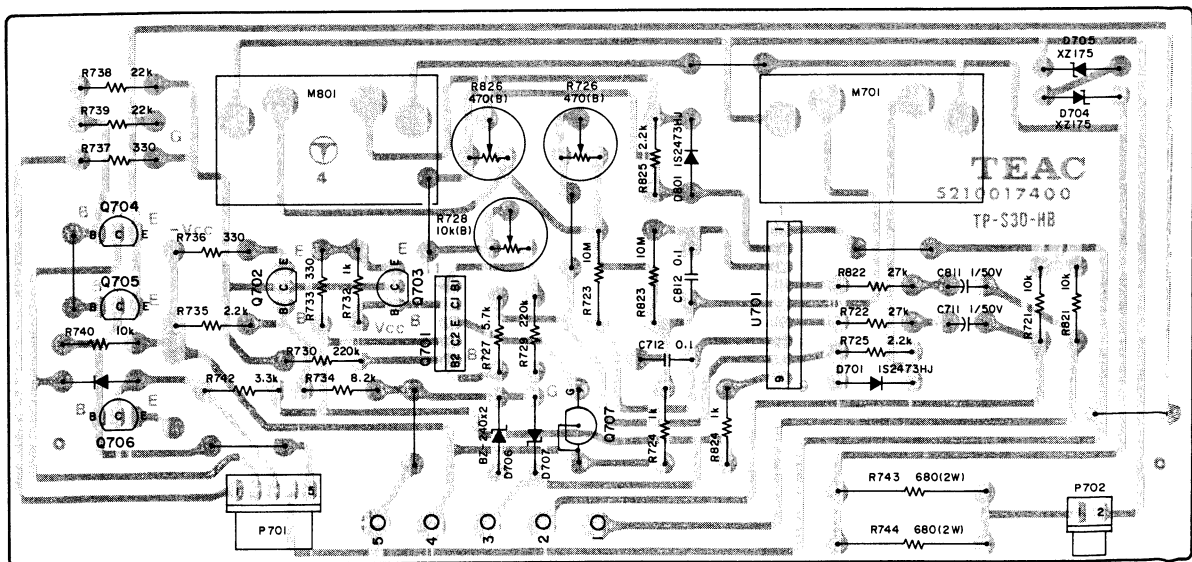
**MUTING SW PCB ASSY**



**IN/OUTPUT PCB-118 ASSY**



**METER AMPL PCB-111 ASSY**



## MAIN PCB-104 ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200016200	PCB-104 Assy [GE, E, UK, A]
	5200016210	PCB-104 Assy [US, C]
	52100016200	PCB-104 [GE, E, UK, A]
	52100016300	PCB-104 [US, C]
<b>IC's</b>		
U301, U302	5147064000	NJM4559DD
U303	5147065000	HA12002
<b>TRANSISTORS</b>		
Q101, Q201	5145150000	2SA1015GR
Q102, Q202	5145163000	2SB737S
Q103, Q203	5145164000	2SD786S
Q104, Q204	5145151000	2SC1815GR
Q105, Q205	5145153000	2SC2240GR
Q106, Q206	5145153000	2SC2240GR
Q107, Q207	5145155000	2SA995F
Q108, Q208	5145156000	FET, 2SK109C
Q109, Q209	5145154000	2SC2259F
Q110, Q210	5145149000	2SA970GR
Q111, Q211	5145151000	2SC1815GR
Q112, Q212	5145166000	2SA949Y
Q113, Q213	5145167000	2SC2229Y
Q114, Q214	5145169000	2SC2235Y
Q115, Q215	5145168000	2SA965Y
Q116, Q216	5145171000	2SD718O
Q117, Q217	5145170000	2SB688O
Q118, Q218	5145153000	2SC2240GR
Q301	5145151000	2SC1815GR
Q302	5145150000	2SA1015GR
Q303, Q403	5145150000	2SA1015GR
Q304, Q404	5231755800	2SD889R
<b>DIODES</b>		
D101, D201	5143118000	1S2473HJ
D102, D202	5143118000	1S2473HJ
D103, D203	5143118000	1S2473HJ
D104, D204	5143148000	1S2471HJ
D105, D205	5143148000	1S2471HJ
D106, D206	5143148000	1S2471HJ
D107, D207	5143148000	1S2471HJ
D108, D208	5143144000	Zener, HZ6A3L
D301	5143110000	Zener, HZ12B1L
D302	5143110000	Zener, HZ12B1L
D303	5143300000	Zener, WZ270
D304	5143148000	1S2471HJ
D305	5143309000	3D4B41
D306	5143312000	Zener, BZ150
D307	5143285000	Zener, WZ150
D308	5143148000	1S2471HJ
D309	5143278000	Zener, WZ100
D310	5224523500	Zener, BZ240FR
D311	5224523500	Zener, BZ240FR
<b>RESISTORS</b>		
All resistors are rated $\pm 5\%$ tolerance, $\frac{1}{4}$ watt and are carbon type unless otherwise noted.		
R101, R201	5183046000	33 $\Omega$
R102, R202	5183026000	4.7 $\Omega$
R103, R203	5183068000	270 $\Omega$
R104, R204	5183070000	330 $\Omega$
R105, R205	5183092000	2.7k $\Omega$
R106, R206	5183090000	2.2k $\Omega$

REF. NO.	PARTS NO.	DESCRIPTION
R107, R207	5183090000	2.2k $\Omega$
R108, R208	5183106000	10k $\Omega$
R109, R209	5183096000	3.9k $\Omega$
R110, R210	5183106000	10k $\Omega$
R111, R211	5183106000	10k $\Omega$
R112, R212	5183092000	2.7k $\Omega$
R113, R213	5183082000	1k $\Omega$
R114, R214	5183130000	100k $\Omega$
R115, R215	5183130000	100k $\Omega$
R116, R216	5183100000	5.6k $\Omega$
R117, R217	5183082000	1k $\Omega$
R118, R218	5183082000	1k $\Omega$
R119, R219	5183080000	820 $\Omega$
R120, R220	5183147000	510k $\Omega$
R121, R221	5183120000	39k $\Omega$
R122, R222	5183076000	560 $\Omega$
R123, R223	5183122000	47k $\Omega$
R124, R224	5183154000	1M $\Omega$
R125, R225	5183082000	1k $\Omega$
R126, R226	5183068000	270 $\Omega$
R127, R227	5183100000	5.6k $\Omega$
R128, R228	5183068000	270 $\Omega$
R129, R229	5183062000	150 $\Omega$
R130, R230	5183082000	1k $\Omega$
R131, R231	5183104000	8.2k $\Omega$
R132, R232	5183094000	3.3k $\Omega$
R134, R234	5183094000	3.3k $\Omega$
R135, R235	5183034000	10 $\Omega$
R136, R236	5183050000	47 $\Omega$
R137, R237	5183108000	12k $\Omega$
R138, R238	5183088000	1.8k $\Omega$
R140, R240	5183108000	12k $\Omega$
R141, R241	5183082000	1k $\Omega$
R142, R242	5183062000	150 $\Omega$
R143, R243	5185352000	1k $\Omega$ 1/2W Metal Film
R144, R244	$\Delta$ 5184241000	47 $\Omega$ Nonflammable
R145, R245	$\Delta$ 5184241000	47 $\Omega$ Nonflammable
R146, R246	$\Delta$ 5184257000	220 $\Omega$ Nonflammable
R148, R248	$\Delta$ 5185201000	0.33 $\Omega$ 5W Metal Plate
R149, R249	$\Delta$ 5185201000	0.33 $\Omega$ 5W Metal Plate
R150, R250	$\Delta$ 5185664000	10 $\Omega$ 1/2W Nonflammable
R151, R251	5183088000	1.8k $\Omega$
R152, R252	5183088000	1.8k $\Omega$
R153, R253	5183110000	15k $\Omega$
R154, R254	5183110000	15k $\Omega$
R155, R255	5183132000	120k $\Omega$
R156, R256	5183058000	100 $\Omega$
R157, R257	5183082000	1k $\Omega$
R301	5183090000	2.2k $\Omega$
R302	5183090000	2.2k $\Omega$
R303	5183082000	1k $\Omega$
R304	$\Delta$ 5184811000	680 $\Omega$ 2W Metal Film Nonflammable
R305	$\Delta$ 5185802000	3.3k $\Omega$ 1W Metal Film Nonflammable
R306	$\Delta$ 5184847000	680 $\Omega$ 3W Metal Film Nonflammable
R307	$\Delta$ 5184847000	680 $\Omega$ 3W Metal Film Nonflammable
R308	5183098000	4.7k $\Omega$
R309	$\Delta$ 5185616000	2.2k $\Omega$ 2W Metal Film Nonflammable
R310	5183112000	18k $\Omega$

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 [A]: AUSTRALIA [L]: LIMITED AREA

REF. NO.	PARTS NO.	DESCRIPTION
R311	5183134000	150k $\Omega$
R312	5183120000	39k $\Omega$
R313	5183080000	820 $\Omega$
R314	5183106000	10k $\Omega$
R315	5183106000	10k $\Omega$
R316	5183080000	820 $\Omega$
R317	5183112000	18k $\Omega$
R318	5183148000	560k $\Omega$
R319	5183112000	18k $\Omega$
R320	5183148000	560k $\Omega$
R321	5183110000	15k $\Omega$
R322	5183110000	15k $\Omega$
R323, R324	△5184844000	510 $\Omega$ 3W Metal Film Nonflammable
<b>CAPACITORS</b>		
C101, C201	5173079000	Elec. 1000 $\mu$ F 6.3V
C102, C202	5170497000	Mylar 0.012 $\mu$ F 100V 10%
C103, C203	5173079000	Elec. 1000 $\mu$ F 6.3V
C104, C204	5172492000	Polyst. 330pF 50V 10% Heatproof
C105, C205	5171566000	Elec. 10 $\mu$ F 25V (LR)
C106, C206	5171566000	Elec. 10 $\mu$ F 25V (LR)
C107, C207	5173010000	Elec. 10 $\mu$ F 16V
C108, C208	5172992000	Elec. 1 $\mu$ F 50V
C109, C209	5172494000	Polyst. 390pF 50V 10% Heatproof
C110, C210	5173034000	Elec. 47 $\mu$ F 6.3V 5%
C111, C211	5170421000	Mylar 0.0068 $\mu$ F 100V 5%
C112, C212	5170408000	Mylar 0.002 $\mu$ F 100V 5%
C113, C213	5055933000	Elec. 2.2 $\mu$ F 25V B.P.
C114, C214	5172992000	Elec. 1 $\mu$ F 50V
C115, C215	5172486000	Polyst. 180pF 50V 10% Heatproof
C116, C216	5170471000	Mylar 0.001 $\mu$ F 100V 10%
C117, C217	5170495000	Mylar 0.01 $\mu$ F 100V 10%
C118, C218	5172992000	Elec. 1 $\mu$ F 50V
C119, C219	5173223000	Dip. Mica 68pF 300V 5%
C120, C220	5054745000	Dip. Mica 220pF 50V 10%
C121, C221	5170515000	Mylar 0.068 $\mu$ F 100V 10%
C122, C222	5173219000	Dip. Mica 33pF 300V 5%
C123, C223	5170515000	Mylar 0.068 $\mu$ F 100V 10%
C124, C224	5170515000	Mylar 0.068 $\mu$ F 100V 10%
C125, C225	5170495000	Mylar 0.01 $\mu$ F 100V 10%
C126, C226	5170471000	Mylar 0.001 $\mu$ F 100V 10%
C127, C227	5172992000	Elec. 1 $\mu$ F 50V
C128, C228	5170495000	Mylar 0.01 $\mu$ F 100V 10%
C129, C229	5170495000	Mylar 0.01 $\mu$ F 100V 10%
C130, C131	5173013000	Elec. 10 $\mu$ F 50V
C132, C232	5054744000	Dip. Mica 100pF 50V
C301	5172992000	Elec. 1 $\mu$ F 50V
C302	5170471000	Mylar 0.001 $\mu$ F 100V 10%
C303, C304	5262000700	Elec. 1000 $\mu$ F 56V
C305, C306	5173081000	Elec. 1000 $\mu$ F 16V
C307, C308	5173010000	Elec. 10 $\mu$ F 16V
C309	5173052000	Elec. 220 $\mu$ F 6.3V
C310	5173043000	Elec. 100 $\mu$ F 6.3V
<b>VARIABLE RESISTORS</b>		
R133, R233	5280061801	Semi-fixed 15k $\Omega$ (B)
R139, R239	5280061101	Semi-fixed 1k $\Omega$ (B)

REF. NO.	PARTS NO.	DESCRIPTION
<b>MISCELLANEOUS</b>		
K301	5061151000	Realy, MY4-02
J301, J302	5128103000	Pin Jack, 4P
S301	5300907600	Switch, Slide; 6-4
P101	5122127000	Connector Plug. 3P (WHT)
P102	5122126000	Connector Plug. 2P (WHT)
P103	5122127000	Connector Plug. 3P (WHT)
P104, P105	5122126000	Connector Plug. 2P (WHT)
	5122474000	Lapping Terminal, 2P
	5122475000	Lapping Terminal, 3P
	5122485000	Lapping Terminal, 7P

### TONE CON AMPL PCB-105/106 ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200016400	PCB-105 Assy [GE, E, UK, A]
	5200016410	PCB-105 Assy [US, C]
	5210016400	PCB-105 [GE, E, UK, A]
	5210016500	PCB-105 [US, C]
<b>IC's</b>		
U601, U602	5147064000	NJM4559DD
<b>RESISTORS</b>		
All resistors are rated $\pm 5\%$ tolerance, $\frac{1}{4}$ watt and are carbon type unless otherwise noted.		
R401, R501	5183142000	330k $\Omega$
R402, R502	5183080000	820 $\Omega$
R403, R503	5183100000	5.6k $\Omega$
R404, R504	5183114000	22k $\Omega$
R405, R505	5183079000	750 $\Omega$
R406, R506	5183114000	22k $\Omega$
R407, R507	5183116000	27k $\Omega$
R408, R508	5183114000	22k $\Omega$
R409, R509	5183079000	750 $\Omega$
R410, R510	5183138000	220k $\Omega$
R411, R511	△5184757000	120 $\Omega$ 1W Metal Film Nonflammable
R412, R512	△5185664000	10 $\Omega$ 1/2W Nonflammable (Part of PCB-105 Assy)
R413, R513	5183098000	4.7k $\Omega$
<b>CAPACITORS</b>		
C401, C501	5173010000	Elec. 10 $\mu$ F 16V
C402, C502	5055933000	Elec. 2.2 $\mu$ F 25V B.P.
C403, C503	5170507000	Mylar 0.033 $\mu$ F 100V 10%
C404, C504	5172496000	Polyst. 470pF 50V 10% Heatproof
C405, C505	5170507000	Mylar 0.033 $\mu$ F 100V 10%
C406, C506	5172992000	Elec. 1 $\mu$ F 50V
C407, C507	5054382000	Dip. Mica 22pF 50V 10%
C408, C508	5055904000	Elec. 10 $\mu$ F 16V B.P.
<b>VARIABLE RESISTORS</b>		
R601, R602	5150243000	50k $\Omega$ (B) x 2
<b>MISCELLANEOUS</b>		
S601	5300511700	Switch, Lever; 2-2

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
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REF. NO.	PARTS NO.	DESCRIPTION
S602 P401	5301202700	Switch, Rotary
	5122126000	Connector Plug, 2P (WHT)
	5200016600	PCB-106 Assy, TONE CON AMPL [GE, E, UK, A]
	5200016610	PCB-106 Assy, TONE CON AMPL [US, C]
	5210016600	PCB-106 [GE, E, UK, A]
	5210016700	PCB-106 [US, C]
L401, L501	5160050000	Coil, 2 $\mu$ H

### SW PCB-150 ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200017600	PCB-150 Assy [GE, E, UK, A]
	5200017610	PCB-150 Assy [US, C]
	5210017600	PCB-150 [GE, E, UK, A]
	5210017700	PCB-150 [US, C]
<b>CARBON RESISTORS</b>		
All resistors are roated $\pm 5\%$ tolerance and $\frac{1}{4}$ watt.		
R705, R805	5183098000	4.7k $\Omega$
R706, R806	5183106000	10k $\Omega$
R707, R807	5183112000	18K $\Omega$
R708, R808	5183106000	10k $\Omega$
R716, R816	5183110000	15k $\Omega$
<b>CAPACITORS</b>		
C701, C801	5172492000	Polyst. 330pF 50V 10%
C702, C802	5170507000	Mylar 0.033 $\mu$ F 100V 10%
C703, C803	5170509000	Mylar 0.039 $\mu$ F 100V 10%
<b>VARIABLE RESISTOR</b>		
R901	5282009302	300k $\Omega$ (B)
<b>MISCELLANEOUS</b>		
S901	5300512100	Switch, Lever ; 4-3
S902	5300512300	Switch, Lever ; 2-3
S903	5300512200	Switch, Lever ; 4-3
S904	5300511800	Switch, Lever ; 2-2
S905	5300511800	Switch, Lever ; 2-2
P701	5122127000	Connector Plug, 3P (WHT)
P702	5122133000	Connector Plug, 9P (WHT)
P703	5122127000	Connector Plug, 3P (WHT)
P704	5122132000	Connector Plug, 8P (WHT)
P705	5122184000	Connector Plug, 3P (BLK)
P706	5122300000	Connector Plug, 3P (RED)

### MUTING SW PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200018500	PCB Assy [GE, E, UK, A]
	5200018510	PCB Assy [US, C]
	5210018500	PCB [GE, E, UK, A]
	5210018600	PCB [US, C]
R708, R808	5183138000	Carbon Res. 220k $\Omega$ $\frac{1}{4}$ W 5%
R709, R808	5183114000	Carbon Res. 22k $\Omega$ $\frac{1}{4}$ W 5%
R710, R810	5183070000	Carbon Res. 330 $\Omega$ $\frac{1}{4}$ W 5%
S906	5134113000	Switch, Push ; 2-2

### IN/OUTPUT PCB-118 ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200015400	PCB-118 Assy [GE, E, UK, A]
	5200015410	PCB-118 Assy [US, C]
	5210015400	PCB-118 [GE, E, UK, A]
	5210015500	PCB-118 [US, C]
<b>CARBON RESISTORS</b>		
All resistors are rated $\pm 5\%$ tolerance and $\frac{1}{4}$ watt.		
R701, R801	5183144000	390k $\Omega$
R702, R802	5183130000	100k $\Omega$
R703, R803	5183090000	2.2k $\Omega$
R704, R804	5183090000	2.2k $\Omega$
<b>MISCELLANEOUS</b>		
J901	5128103000	Pin Jack, 4P
J902	5128102000	Terminal Assy, 4P (w/DIN)

### METER AMPL PCB-111 ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200017400	PCB-111 Assy [GE, E, UK, A]
	5200017410	PCB-111 Assy [US, C]
	5210017400	PCB-111 [GE, E, UK, A]
	5210017500	PCB-111 [US, C]
<b>IC</b>		
U701	5220405400	TA7318P
<b>TRANSISTORS</b>		
Q701	5145154000	2SC2259E
Q702	5145151000	2SC1815GR
Q703	5145150000	2SA1015GR
Q704	5145151000	2SC1815GR
Q705	5145150000	2SA1015GR
Q706	5145151000	2SC1815GR
Q707	5145181000	FET, 2SK105H
<b>DIODES</b>		
D701, D801	5143118000	1S2473HJ
D702	5143118000	1S2473HJ
D704, D705	5042526000	Zener, XZ175
D706, D707	5143285000	Zener, WZ150
<b>RESISTORS</b>		
All resistors are rated $\pm 5\%$ tolerance, $\frac{1}{4}$ watt and are carbon type unless otherwise noted.		
R721, R821	5183106000	10k $\Omega$
R722, R822	5183116000	27k $\Omega$
R723, R823	5180558000	10M $\Omega$ $\frac{1}{2}$ W
R724, R824	5183082000	1k $\Omega$
R725, R825	5183090000	2.2k $\Omega$
R727	5183100000	5.6k $\Omega$
R729, R730	5183138000	220k $\Omega$
R732	5183082000	1k $\Omega$
R733	5183070000	330 $\Omega$
R734	5183104000	8.2k $\Omega$
R735	5183090000	2.2k $\Omega$
R736	5183070000	330 $\Omega$
R737	5183070000	330 $\Omega$
R738	5183114000	22k $\Omega$
R739	5183114000	22k $\Omega$
R740	5183106000	10k $\Omega$
R741	5183094000	3.3k $\Omega$

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REF. NO.	PARTS NO.	DESCRIPTION
R742 R743, R744	5183094000 △5052739000	3.3kΩ 680kΩ 2W Metal film Nonflammable
<b>CAPACITORS</b>		
C711, C811 C712, C812	5172992000 5170519000	Elec. 1μF 50V Mylar 0.1μF 100V 10%
<b>VARIABLE RESISTORS</b>		
R726, R826 R728	5280060901 5280061701	Semi-fixed, 470Ω(B) Semi-fixed, 10kΩ(B)
<b>MISCELLANEOUS</b>		
P701 P702	5122148000 5122145000 5296001300	Connector Plug, 5P (WHT) Connector Plug, 2P (WHT) Meter, Wattage

### LED PCB-129 ASSY (PC Board Omitted.)

REF. NO.	PARTS NO.	DESCRIPTION
	5200014800 5200014810	PCB-129 Assy [GE, E, UK, A] PCB-129 Assy [US, C]
	5210014800 5210014900	PCB-129 [GE, E, UK, A] PCB-129 [US, C]
D902	5225005600	LED, LN31GP-HL

### LED PCB-133 ASSY (PC Board omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200017800 5200017810	PCB-133 Assy [GE, E, UK, A] PCB-133 Assy [US, C]
	5210017800 5210017900	PCB-133 [GE, E, UK, A] PCB-133 [US, C]
D901~D903	5225005100	LED, SR623D

### VR PCB-123 ASSY (PC Board omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200017000 5200017010	PCB-123 Assy [GE, E, UK, A] PCB-123 Assy [US, C]
	5210017000 5210017100	PCB-123 [GE, E, UK, A] PCB-123 [US, C]
R902	5282406402	Var. Res., 100kΩ (B) x 2

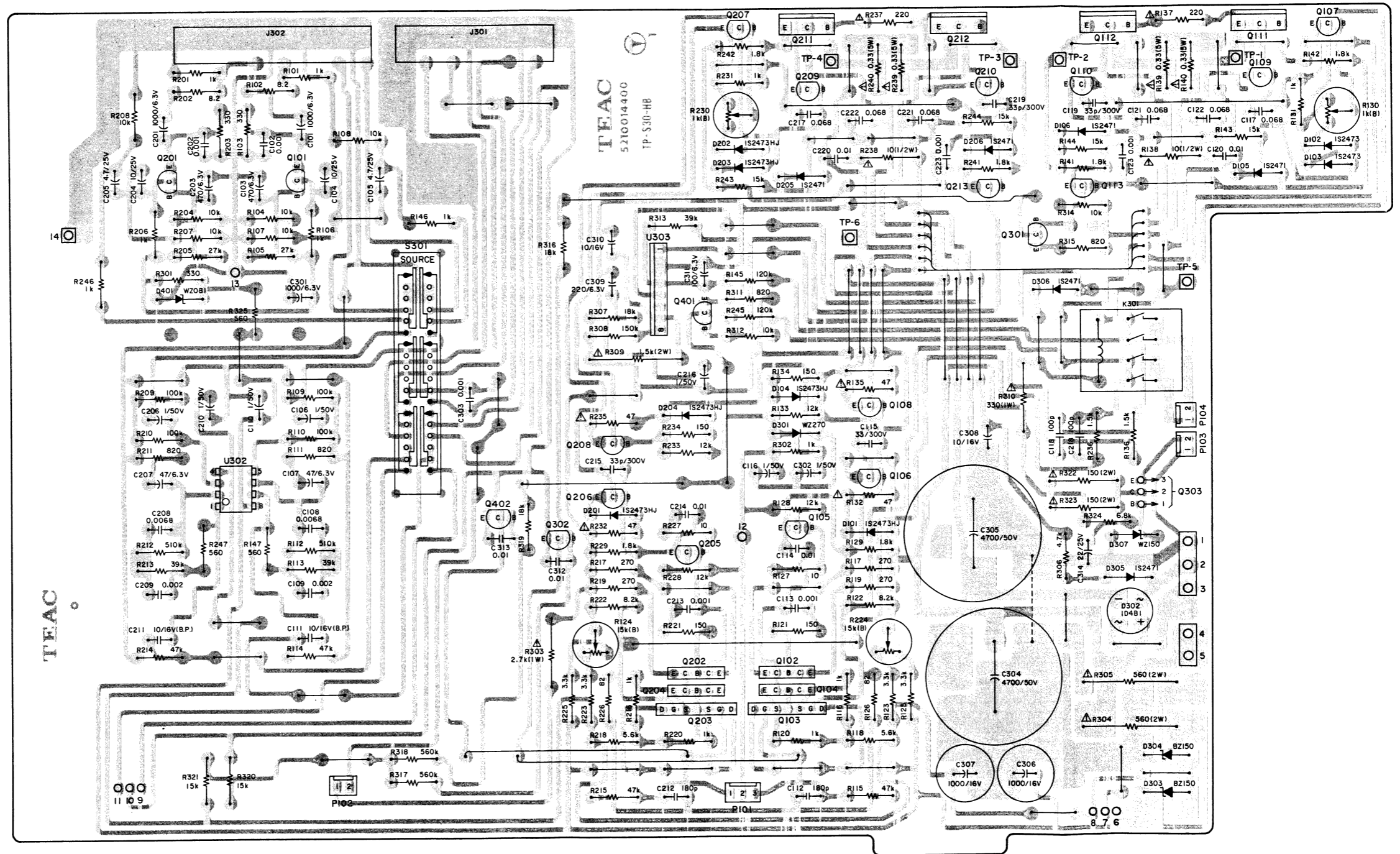
[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
[A]: AUSTRALIA [L]: LIMITED AREA



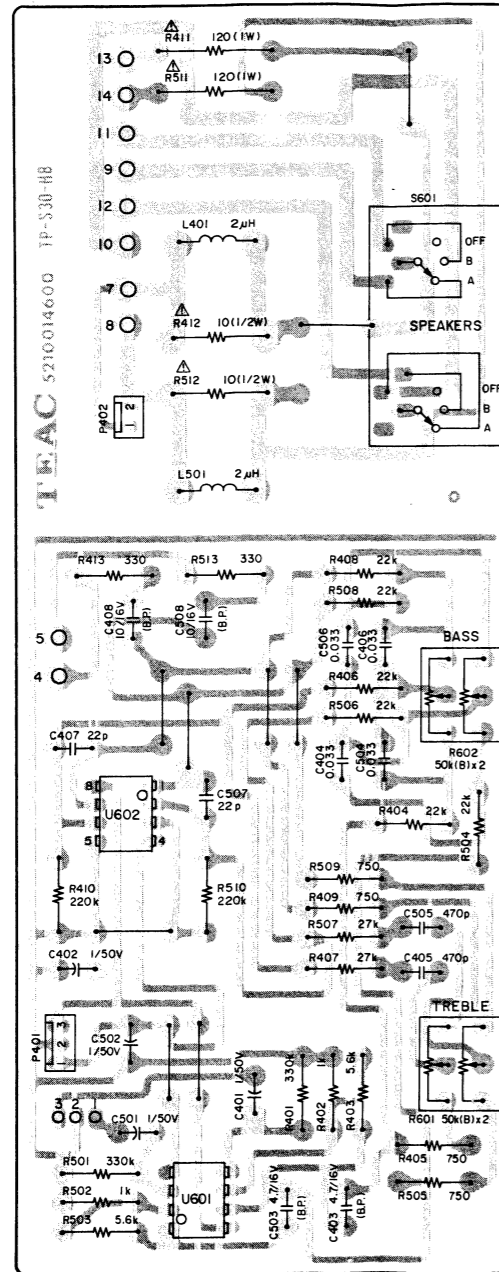
# 9 PC BOARDS AND PARTS LIST (BX-330)

PC Boards shown viewed from foil side.

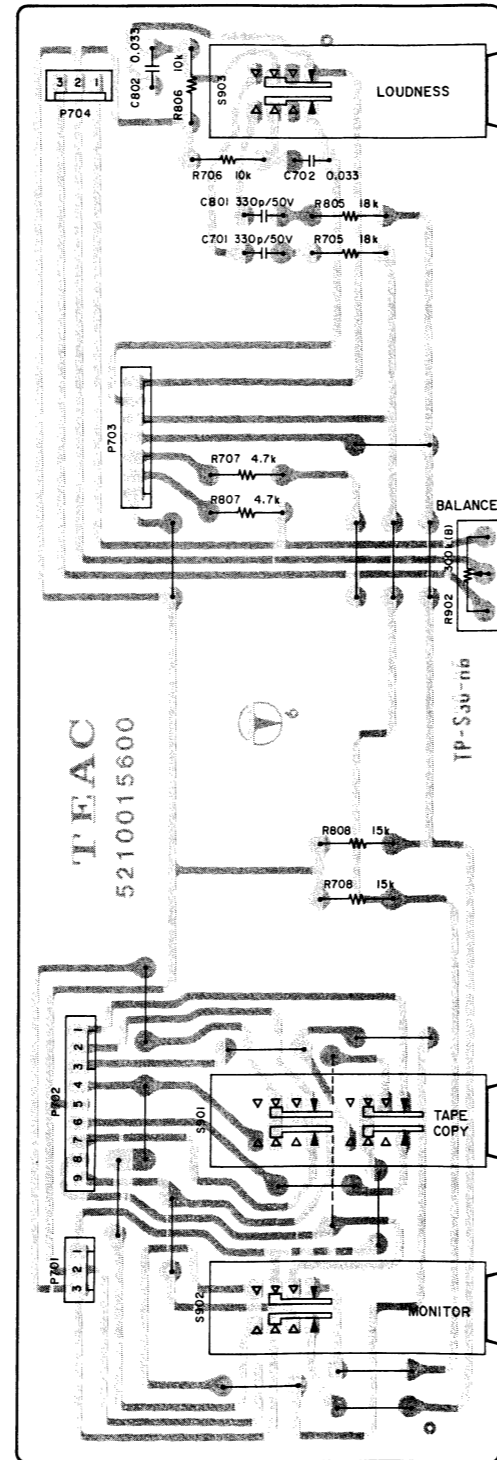
## MAIN PCB-103 ASSY



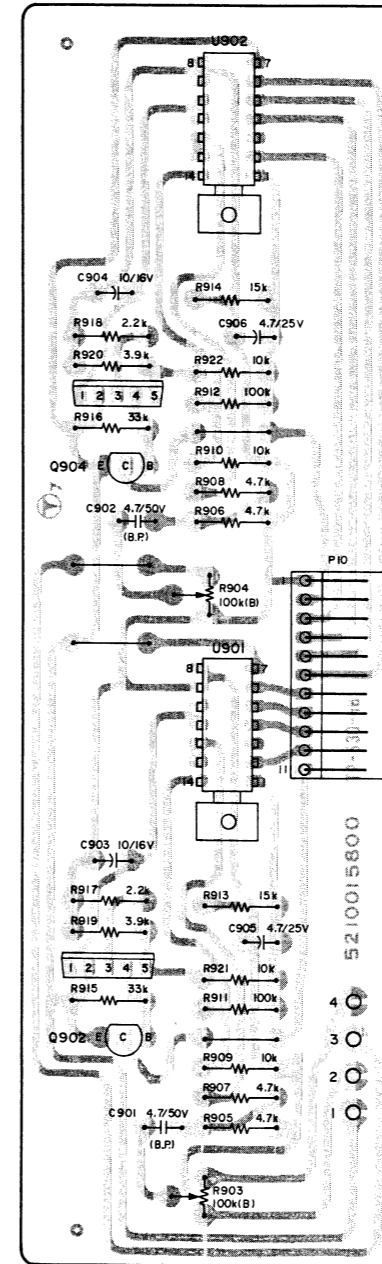
**TONE CON AMPL PCB-104 ASSY**



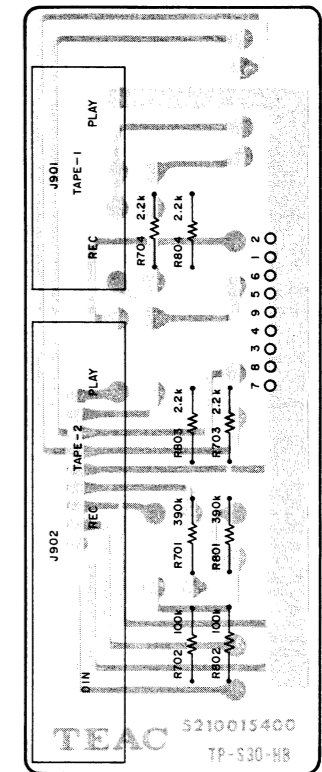
**SW PCB-149 ASSY**



**LED PCB-131 ASSY**



**IN/OUTPUT PCB-118 ASSY**



## MAIN PCB-103 ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200014400	PCB-103 Assy [GE, E, UK, A]
	5200014410	PCB-103 Assy [US, C]
	5210014400	PCB-103 [GE, E, UK, A]
	5210014500	PCB-103 [US, C]
<b>IC's</b>		
U302	5147064000	NJM4559DD
U303	5147065000	HA12002
<b>TRANSISTORS</b>		
Q101, Q201	5145164000	2SD786S
Q102, Q202	5145155000	2SA995F
Q103, Q203	5145156000	FET, 2SK109C
Q104, Q204	5145154000	2SC2259F
Q105, Q205	5145149000	2SA970GR
Q106, Q206	5145175000	2SB646AC
Q107, Q207	5145151000	2SC1815GR
Q108, Q208	5145176000	2SD666AC
Q109, Q209	5145174000	2SD667AC
Q110, Q210	5145173000	2SB647AC
Q111, Q211	5145165000	2SD7160
Q112, Q212	5145172000	2SB6860
Q113, Q213	5145153000	2SC2240GR
Q301, Q401	5145150000	2SA1015GR
Q302, Q402	5231755800	2SD889R
<b>DIODES</b>		
D101, D201	5143118000	1S2473HJ
D102, D202	5143118000	1S2473HJ
D103, D203	5143118000	1S2473HJ
D104, D204	5143118000	1S2473HJ
D105, D205	5143148000	1S2471HJ
D106, D206	5143148000	1S2471HJ
D301	5143300000	Zener, WZ270
D302	5143310000	1D4B1
D303, D304	5143312000	Zener, BZ150
D305	5143148000	1S2471HJ
D306	5143148000	1S2471HJ
D307	5143285000	Zener, WZ150
D401	5143270000	Zener, WZ081
<b>RESISTORS</b>		
All resistors are rated $\pm 5\%$ tolerance, $\frac{1}{4}$ watt and are carbon type unless otherwise noted.		
R101, R201	5183082000	1k $\Omega$
R102, R202	5183032000	8.2k $\Omega$
R103, R203	5183070000	330 $\Omega$
R104, R204	5183106000	10k $\Omega$
R105, R205	5183116000	27k $\Omega$
R106, R206	5183082000	1k $\Omega$
R107, R207	5183106000	10k $\Omega$
R108, R208	5183106000	10k $\Omega$
R109, R209	5183130000	100k $\Omega$
R110, R210	5183130000	100k $\Omega$
R111, R211	5183080000	820 $\Omega$
R112, R212	5183147000	510k $\Omega$
R113, R213	5183120000	39k $\Omega$
R114, R214	5183122000	47k $\Omega$
R115, R215	5183122000	47k $\Omega$
R116, R216	5183082000	1k $\Omega$
R117, R217	5183068000	270 $\Omega$
R118, R218	5183100000	5.6k $\Omega$
R119, R219	5183068000	270k $\Omega$

REF. NO.	PARTS NO.	DESCRIPTION
R120, R220	5183082000	1k $\Omega$
R121, R221	5183062000	150 $\Omega$
R122, R222	5183104000	8.2k $\Omega$
R123, R223	5183094000	3.3k $\Omega$
R125, R225	5183094000	3.3k $\Omega$
R126, R226	5183056000	82 $\Omega$
R127, R227	5183034000	10 $\Omega$
R128, R228	5183108000	12k $\Omega$
R129, R229	5183088000	1.8k $\Omega$
R131, R231	5183082000	1k $\Omega$
R132, R232	$\Delta$ 5184241000	47 $\Omega$ Nonflammable
R133, R233	5183108000	12k $\Omega$
R134, R234	5183062000	150 $\Omega$
R135, R235	$\Delta$ 5184241000	47 $\Omega$ Nonflammable
R136, R236	5185526000	1.5k $\Omega$ 2% Metal Film
R137, R237	$\Delta$ 5184257000	220 $\Omega$ Nonflammable
R138, R238	$\Delta$ 5185664000	10 $\Omega$ 1/2W Nonflammable
R139, R239	$\Delta$ 5185201000	0.33 $\Omega$ 5W Metal Plate
R140, R240	$\Delta$ 5185201000	0.33 $\Omega$ 5W Metal Plate
R141, R241	5183088000	1.8k $\Omega$
R142, R242	5183088000	1.8k $\Omega$
R143, R243	5183110000	15k $\Omega$
R144, R244	5183110000	15k $\Omega$
R145, R245	5183132000	120k $\Omega$
R146, R246	5183082000	1k $\Omega$
R147, R247	5183076000	560 $\Omega$
R301	5183070000	330 $\Omega$
R302	5183082000	1k $\Omega$
R303	$\Delta$ 5185800000	2.7k $\Omega$ 1W Metal Film Nonflammable
R304	$\Delta$ 5184808000	510 $\Omega$ 2W Metal Film Nonflammable
R305	$\Delta$ 5184809000	560 $\Omega$ 2W Metal Film Nonflammable
R306	5183098000	4.7k $\Omega$
R307	5183112000	18k $\Omega$
R308	5183134000	150k $\Omega$
R309	$\Delta$ 5185612000	1.5k $\Omega$ 2W Metal Film Nonflammable
R310	$\Delta$ 5184767000	330 $\Omega$ 1W Metal Film Nonflammable
R311	5183080000	820 $\Omega$
R312	5183106000	10k $\Omega$
R313	5183120000	39k $\Omega$
R314	5183080000	820 $\Omega$
R315	5183106000	10k $\Omega$
R316	5183112000	18k $\Omega$
R317	5183148000	560k $\Omega$
R318	5183148000	560k $\Omega$
R319	5183112000	18k $\Omega$
R320	5183110000	15k $\Omega$
R321	5183110000	15k $\Omega$
R322	$\Delta$ 5184795000	150 $\Omega$ 2W Metal Film Nonflammable
R323	$\Delta$ 5184795000	150 $\Omega$ 2W Metal Film Nonflammable
R324	5183102000	6.8k $\Omega$
R325	5183076000	560 $\Omega$
<b>CAPACITORS</b>		
C101, C201	5173079000	Elec. 1000 $\mu$ F 6.3V
C102, C202	5170471000	Mylar 0.001 $\mu$ F 100V 10%
C103, C203	5173070000	Elec. 470 $\mu$ F 6.3V
C104, C204	5173011000	Elec. 10 $\mu$ F 25V

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
 [A]: AUSTRALIA [L]: LIMITED AREA

REF. NO.	PARTS NO.	DESCRIPTION
C105, C205	5173004000	Elec. 4.7 $\mu$ F 25V
C106, C206	5172992000	Elec. 1 $\mu$ F 50V
C107, C207	5173034000	Elec. 47 $\mu$ F 6.3V
C108, C208	5170421000	Mylar 0.0068 $\mu$ F 100V 5%
C109, C209	5170408000	Mylar 0.002 $\mu$ F 100V 5%
C110, C210	5172992000	Elec. 1 $\mu$ F 50V
C111, C211	5055904000	Elec. 10 $\mu$ F 16V B.P.
C112, C212	5172486000	Polyst. 180pF 50V 10%
C113, C213	5170471000	Mylar 0.001 $\mu$ F 100V 10% Heatproof
C114, C214	5170495000	Mylar 0.01 $\mu$ F 100V 10%
C115, C215	5173219000	Dip. Mica 33pF 300V 5%
C116, C216	5172992000	Elec. 1 $\mu$ F 50V
C117, C217	5170515000	Mylar 0.068 $\mu$ F 100V 10%
C118, C218	5054744000	Dip. Mica 100pF 50V 10%
C119, C219	5173219000	Dip. Mica 33pF 300V 5%
C120, C220	5170495000	Mylar 0.01 $\mu$ F 100V 10%
C121, C221	5170515000	Mylar 0.068 $\mu$ F 100V 10%
C122, C222	5170515000	Mylar 0.068 $\mu$ F 100V 10%
C123, C223	5170471000	Mylar 0.001 $\mu$ F 100V 10%
C301	5173079000	Elec. 1000 $\mu$ F 6.3V
C302	5172992000	Elec. 1 $\mu$ F 50V
C303	5170471000	Mylar 0.001 $\mu$ F 100V 10%
C304, C305	5171464000	Elec. 4700 $\mu$ F 50V
C306, C307	5173081000	Elec. 1000 $\mu$ F 16V
C308	5173010000	Elec. 10 $\mu$ F 16V
C309	5173052000	Elec. 220 $\mu$ F 6.3V
C310	5173010000	Elec. 10 $\mu$ F 16V
C311	5173043000	Elec. 100 $\mu$ F 6.3V
C312, C313	5170495000	Mylar 0.01 $\mu$ F 100V 10%
<b>VARIABLE RESISTORS</b>		
R124, R224	5280061801	Semi-fixed, 15k $\Omega$ (B)
R130, R230	5280061101	Semi-fixed, 1k $\Omega$ (B)
<b>MISCELLANEOUS</b>		
K301	5061151000	Relay, MY4-02
J301, J302	5128103000	Pin Jack, 4P
S301	5300907600	Switch, Slide i 6-4
P101	5122127000	Connector Plug, 3P (WHT)
P102	5122126000	Connector Plug, 2P (WHT)
P103	5122183000	Connector Plug, 2P (BLK)
P104	5122126000	Connector Plug, 2P (WHT)

### STONE CON AMPL PCB-104 ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200014600	PCB-104 Assy [GE, E, UK, A]
	5200014610	PCB-104 Assy [US, C]
	5210014600	PCB-104 [GE, E, UK, A]
	5210014700	PCB-104 [US, C]
<b>IC's</b>		
U601, U602	5147064000	NJM4559DD
<b>RESISTORS</b>		
All resistors are rated $\pm$ 5% tolerance, 1/4 watt and are carbon type unless otherwise noted.		
R401, R501	5183142000	330k $\Omega$
R402, R502	5183082000	1k $\Omega$
R403, R503	5183100000	5.6k $\Omega$

REF. NO.	PARTS NO.	DESCRIPTION
R404, R504	5183114000	22k $\Omega$
R405, R505	5183079000	750 $\Omega$
R406, R506	5183114000	22k $\Omega$
R407, R507	5183116000	27k $\Omega$
R408, R508	5183114000	22k $\Omega$
R490, R509	5183079000	750 $\Omega$
R410, R510	5183138000	220k $\Omega$
R411, R511	$\Delta$ 5184757000	120 $\Omega$ 1W Metal Film Nonflammable
R412, R512	$\Delta$ 5185664000	10 $\Omega$ 1/2W Nonflammable
R413, R513	5183070000	330 $\Omega$
<b>CAPACITORS</b>		
C401, C501	5172992000	Elec. 1 $\mu$ F 50V
C402, C502	5172992000	Elec. 1 $\mu$ F 50V
C403, C503	5055926000	Elec. 4.7 $\mu$ F 16V B.P.
C404, C504	5170507000	Mylar 0.033 $\mu$ F 100V 10%
C405, C505	5172496000	Polyst. 470pF 50V 10% Heatproof
C406, C506	5170507000	Mylar 0.033 $\mu$ F 100V 10%
C407, C507	5054382000	Dip. Mica 22pF 50V 10%
C408, C508	5055904000	Elec. 10 $\mu$ F 16V B.P.
<b>VARIABLE RESISTORS</b>		
R514, R515	5150243000	50k $\Omega$ (B) x 2
<b>COILS</b>		
L401, L501	5160050000	Coil, 2 $\mu$ H
<b>MISCELLANEOUS</b>		
S601	5301202700	Switch, Rotary
P401	5122127000	Connector Plug, 3P (WHT)
P402	5122126000	Connector Plug, 2P (WHT)

### SW PCB-149 ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200015600	PCB-149 Assy [GE, E, UK, A]
	5200015610	PCB-149 Assy [US, C]
	5210015600	PCB-149 [GE, E, UK, A]
	5210015700	PCB-149 [US, C]
<b>CARBON RESISTORS</b>		
All resistors are rated $\pm$ 5% tolerance and 1/4 watt.		
R705, R805	5183112000	18k $\Omega$
R706, R806	5183106000	10k $\Omega$
R707, R807	5183098000	4.7k $\Omega$
R708, R808	5183110000	15k $\Omega$
<b>CAPACITORS</b>		
C701, C801	5172492000	Polyst. 330pF 50V 10% Heatproof
C702, C802	5054824000	Mylar 0.033 $\mu$ F 100V 10%
<b>MISCELLANEOUS</b>		
R902	5282009302	Var. Res. 300k $\Omega$ (B)
S901	5300512100	Switch, Lever; 4-3
S902	5300512300	Switch, Lever; 2-3

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
[A]: AUSTRALIA [L]: LIMITED AREA

REF. NO.	PARTS NO.	DESCRIPTION
S903	5300511800	Switch, Lever; 2-2
S701	5122127000	Connector Plug, 3P (WHT)
P702	5122133000	Connector Plug, 9P (WHT)
P703	5122131000	Connector Plug, 7P (WHT)
P704	5122127000	Connector Plug, 3P (WHT)

REF. NO.	PARTS NO.	DESCRIPTION
C905, C906	5173004000	Elec. 4.7 $\mu$ F 25V
<b>CONNECTOR</b>		
P10	5122154000	Plug, 11p (WHT)

### IN/OUTPUT PCB-118 ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200015400	PCB-118 Assy [GE, E, UK, A]
	5200015410	PCB-118 Assy [US, C]
	5210015400	PCB-118 [GE, E, UK, A]
	5210015500	PCB-118 [US, C]
<b>CARBON RESISTORS</b>		
All resistors are rated $\pm$ 5% tolerance and 1/4 watt.		
R701, R801	5183144000	390k $\Omega$
R702, R802	5183130000	100k $\Omega$
R703, R803	5183090000	2.2k $\Omega$
R704, R804	5183090000	2.2k $\Omega$
<b>MISCELLANEOUS</b>		
J901	5128103000	Pin Jack, 4P
J902	5128102000	Terminal Assy, 4P (w/DIN)

### LED PCB-129 ASSY (PC Board omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200014800	PCB-129 Assy [EG, E, UK, A]
	5200014810	PCB-129 Assy [US, C]
	5210014800	PCB-129 [GE, E, UK, A]
	5210014900	PCB-129 [US, C]
D902	5225005600	LED, LN31GP-HL

### LED PCB-130 ASSY (PC Board omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200015000	PCB-130 Assy [GE, E, UK, A]
	5200015010	PCB-130 Assy [US, C]
	5210015000	PCB-130 [GE, E, UK, A]
	5210015100	PCB-130 [US, C]
R603	5180080000	Carbon Res. 820 $\Omega$ 1/2W 5%
D703	5143148000	Diode, 1S2471HJ
D901	5225005600	LED, LN31GP-HL

### LED PCB-131 ASSY

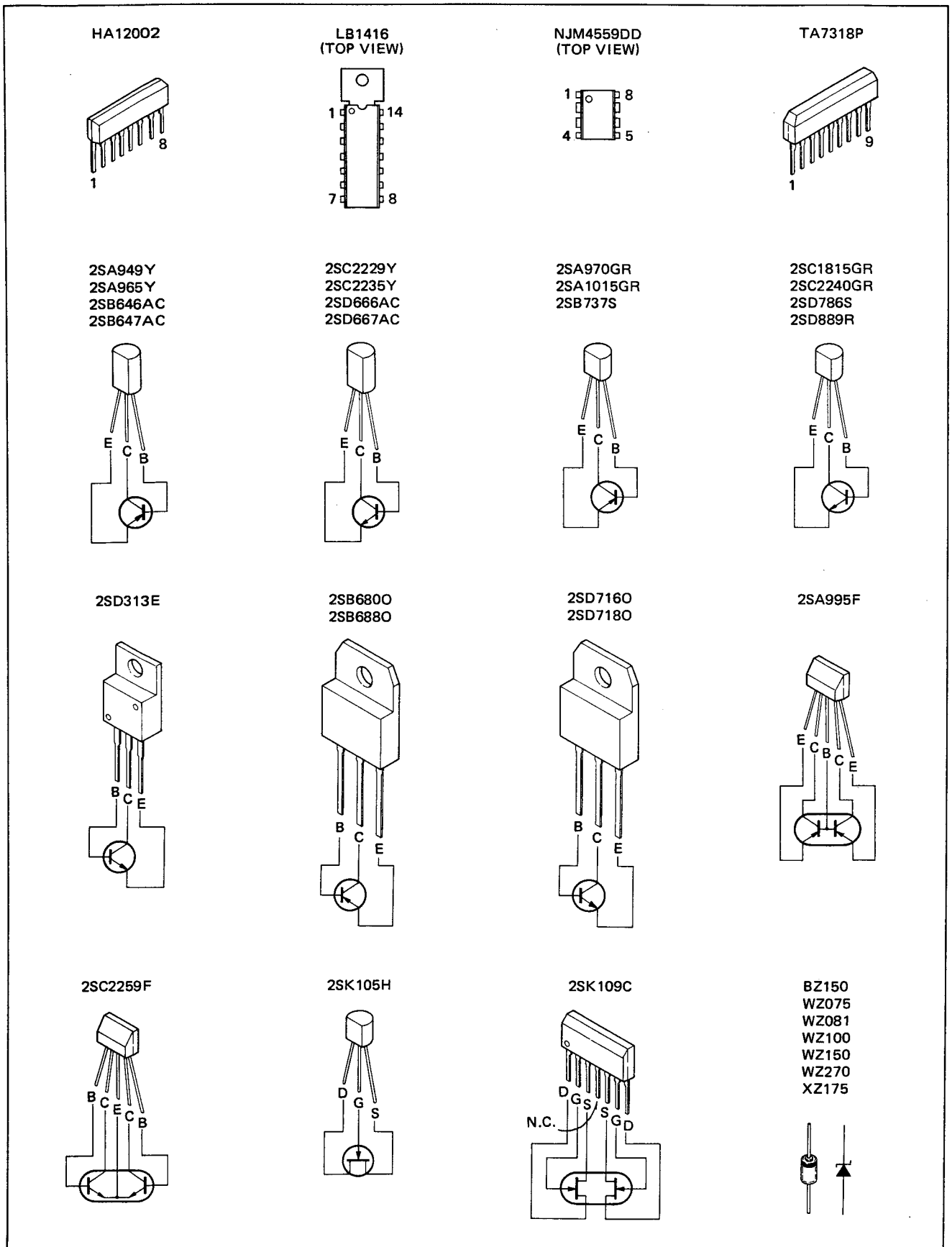
REF. NO.	PARTS NO.	DESCRIPTION
	5200015800	PCB-131 Assy [GE, E, UK, A]
	5200015810	PCB-131 Assy [US, C]
	5210015800	PCB-131 [GE, E, UK, A]
	5210015900	PCB-131 [US, C]
<b>IC's</b>		
U901, U902	5220405800	LB1416
<b>TRANSISTORS</b>		
Q901, Q903	5145154000	2SC2259F
Q902, Q904	5145150000	2SA1015GR
<b>CARBON RESISTORS</b>		
All resistors are rated $\pm$ 5% tolerance and 1/4 watt.		
R905, R906	5183098000	4.7k $\Omega$
R907, R908	5183098000	4.7k $\Omega$
R909, R910	5183106000	10k $\Omega$
R911, R912	5183130000	100k $\Omega$
R913, R914	5183110000	15k $\Omega$
R915, R916	5183118000	33k $\Omega$
R917, R918	5183090000	2.2k $\Omega$
R919, R920	5183096000	3.9k $\Omega$
R921, R922	5183106000	10k $\Omega$
<b>CAPACITORS</b>		
C901, C902	5055909000	Elec. 4.7 $\mu$ F 25V B.P.
C903, C904	5173010000	Elec. 10 $\mu$ F 16V

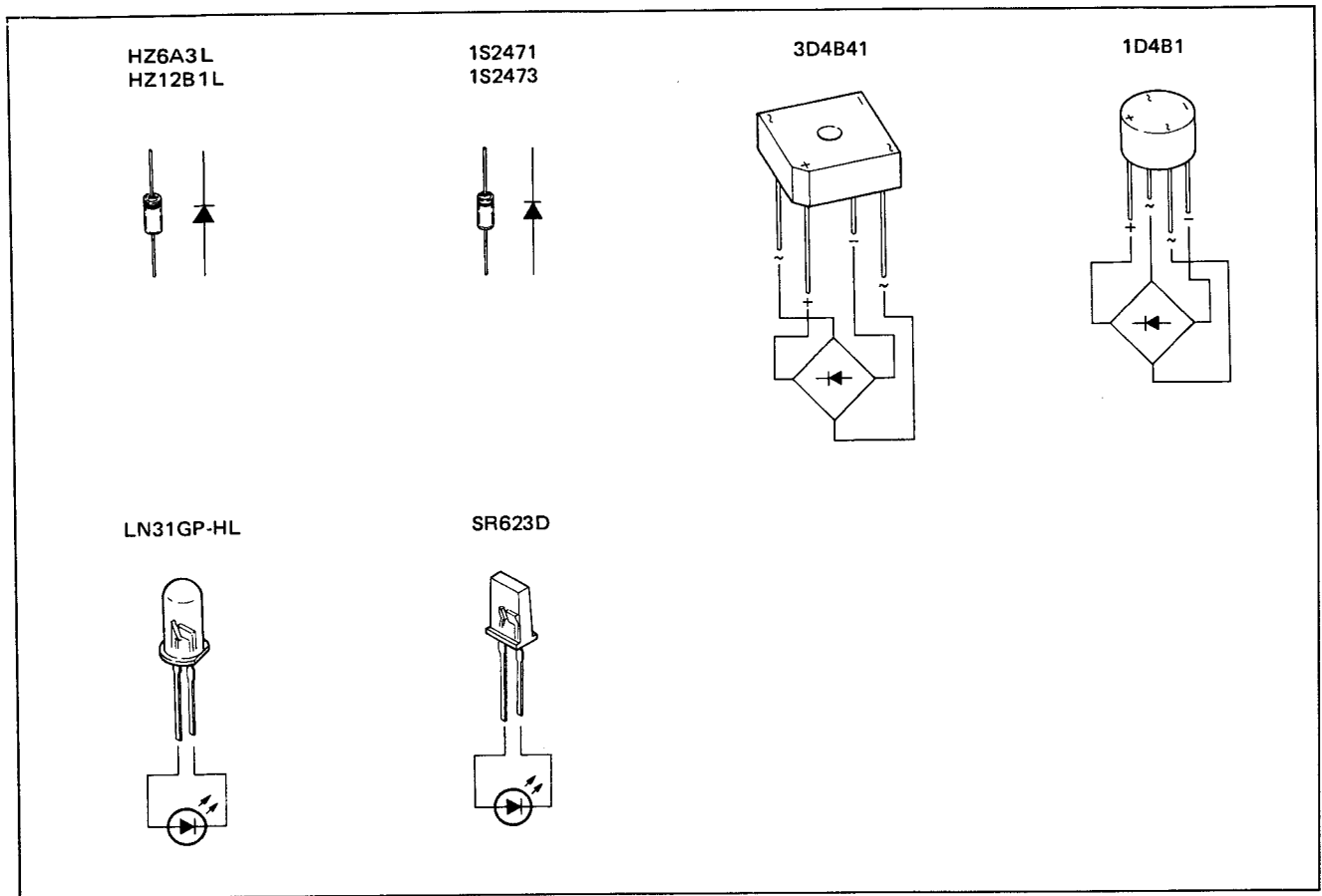
### VR PCB-122 ASSY (PC Board omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200015200	PCB-122 Assy [GE, E, UK, A]
	5200015210	PCB-122 Assy [US, C]
	5210015200	PCB-122 [GE, E, UK, A]
	5210015300	PCB-122 [US, C]
R901	5282406402	Var. Res. 100k $\Omega$ (B) x 2

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.  
 [A]: AUSTRALIA [L]: LIMITED AREA

**10 SEMICONDUCTOR ELECTRODES**





**11 INCLUDED ACCESORIES**

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	5124047000	Plug, Short Pin	
	5700008500	BX-550/BX-550B Owner's Manual	
	5700008600	BX-330/BX-330B Owner's Manual	

# **BX-550/BX-330**

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# **TEAC®**

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**TEAC CORPORATION**

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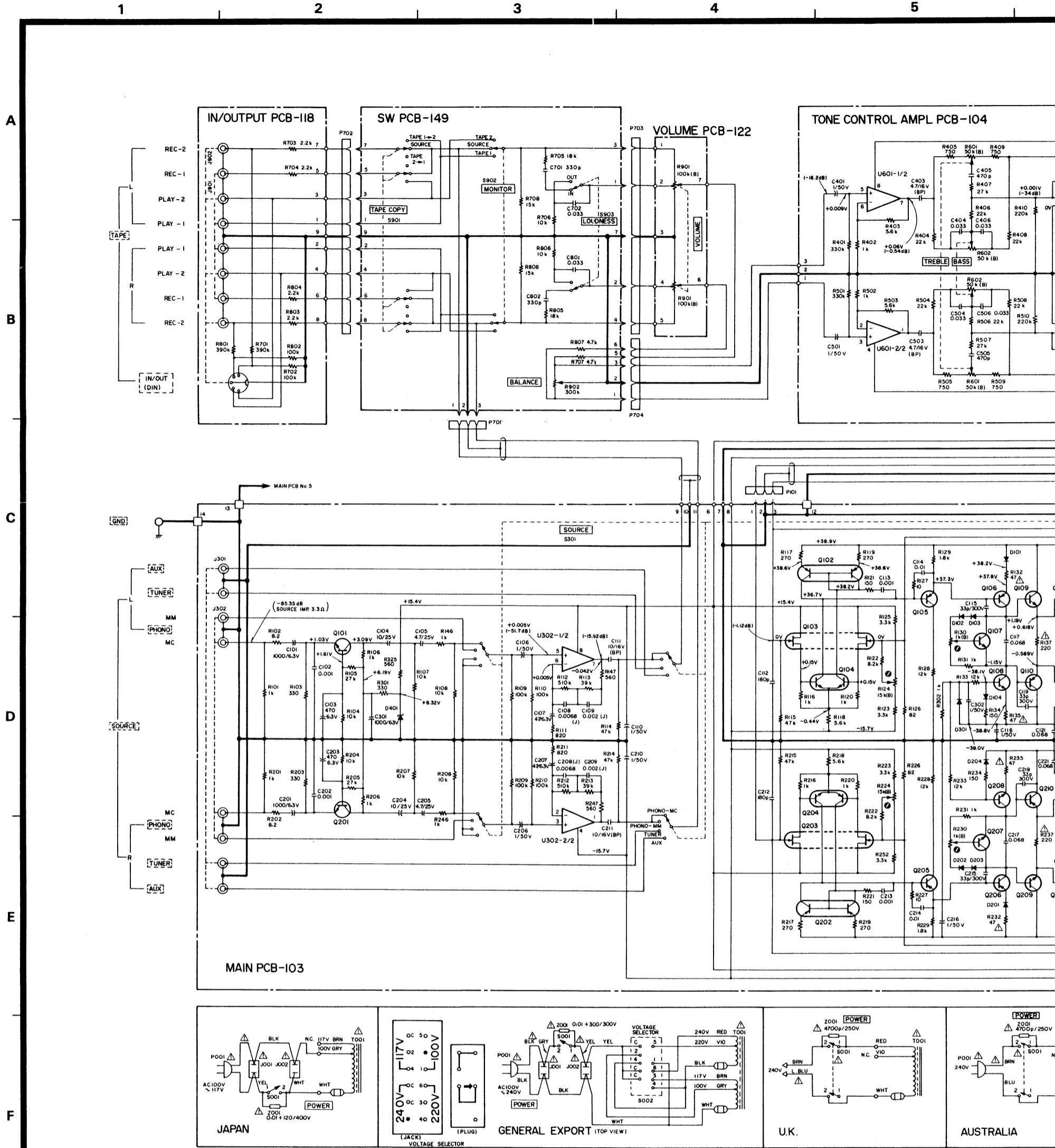
TEAC AUSTRALIA PTY., LTD.

165-167 GLADSTONE STREET SOUTH MELBOURNE VICTORIA 3205 PHONE 699-6000

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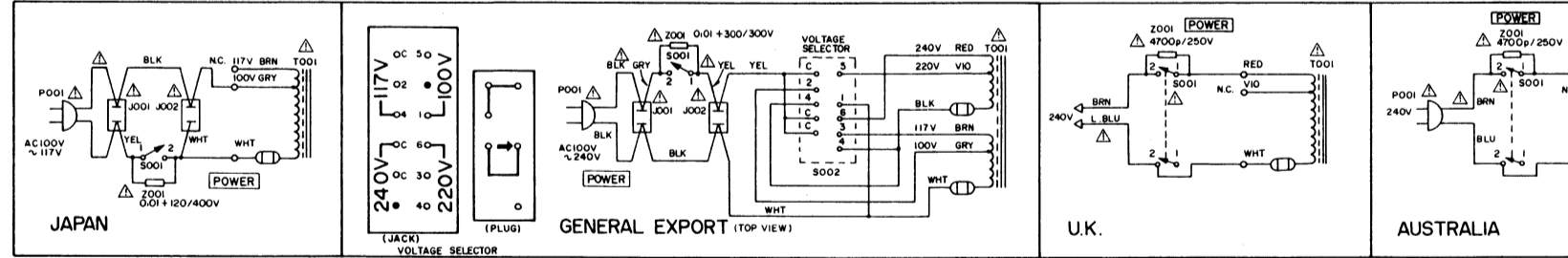


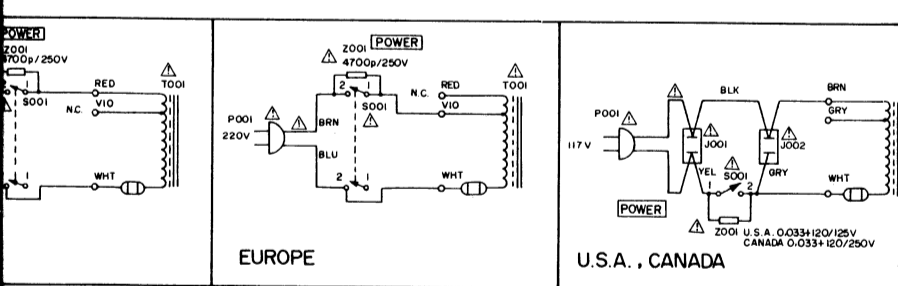
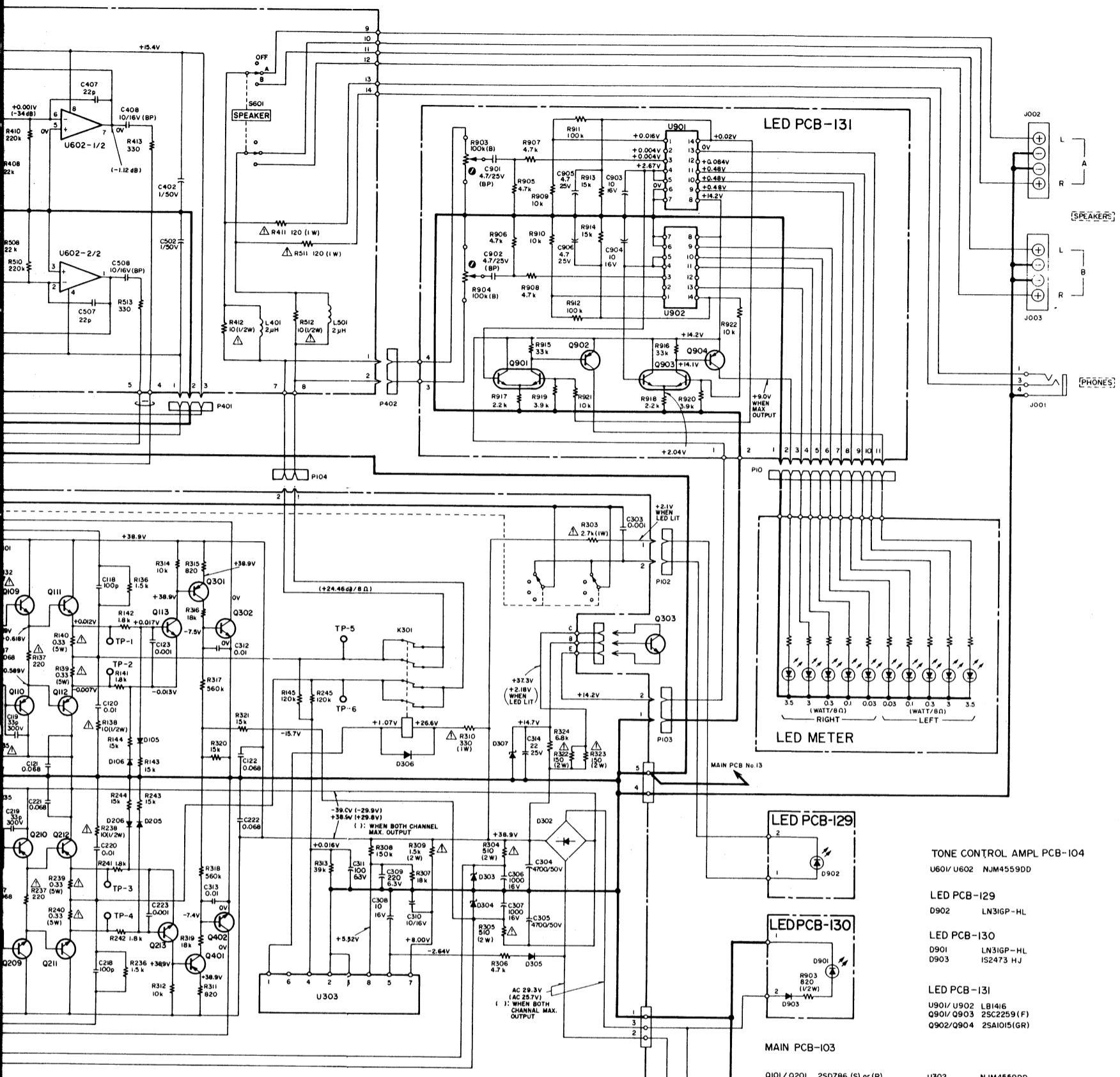
# TEAC SCHEMATIC DIAGRAM BX-330



**NOTES**

- ALL RESISTORS ARE 1/4 WATT, 5%, UNLESS MARKED OTHERWISE. RESISTOR VALUES ARE IN OHMS (k = 1,000 OHMS, M = 1,000,000 OHMS).
- ALL CAPACITOR VALUES ARE IN MICROFARADS (p = PICOFARADS).
- ▲PARTS MARKED WITH THIS SIGN ARE SAFETY CRITICAL COMPONENTS. THEY MUST ALWAYS BE REPLACED WITH IDENTICAL COMPONENTS - REFER TO THE TEAC PARTS LIST AND ENSURE EXACT REPLACEMENT.



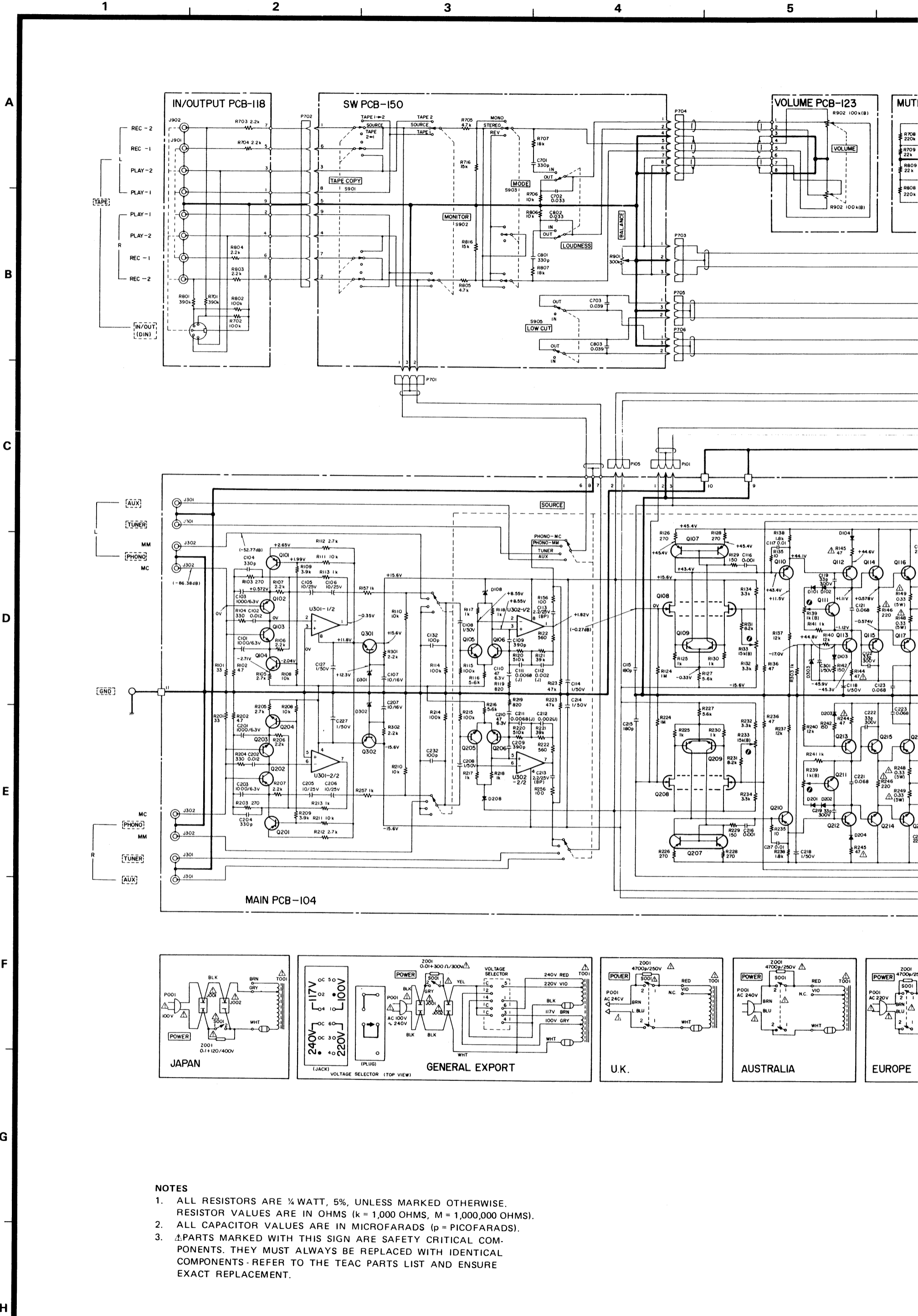


- LED PCB-104**  
U601/ U602 NJM4559DD
- LED PCB-129**  
D902 LN31GP-HL
- LED PCB-130**  
D901 LN31GP-HL  
D903 IS2473 HJ
- LED PCB-131**  
U901/ U902 LB1416  
Q901/ Q903 2SC2259 (F)  
Q902/ Q904 2SA1015 (GR)
- MAIN PCB-103**
- |             |                   |             |           |
|-------------|-------------------|-------------|-----------|
| Q101 / Q201 | 2SD786 (S) or (R) | U302        | NJM4559DD |
| Q102 / Q202 | 2SA985 (F)        | U303        | HA12002   |
| Q103 / Q203 | 2SK109 (C)        | D101 ~ D104 | IS2473    |
| Q104 / Q204 | 2SC2259 (F)       | D105, D106  | IS2471    |
| Q105 / Q205 | 2SA970 (GR)       | D201 ~ D204 | IS2473    |
|             |                   | D205, D206  | IS2471    |
| Q106 / Q206 | 2SB646A (C)       | D302        | 1D4B1     |
| Q107 / Q207 | 2SC1815 (GR)      | D303, D304  | BZ150     |
| Q108 / Q208 | 2SD666A (C)       | D305, D306  | IS2471    |
| Q109 / Q209 | 2SD667A (C)       | D307        | WZ150     |
| Q110 / Q210 | 2SB647A (C)       | D401        | WZ081     |
| Q111 / Q211 | 2SD716 (O)        |             |           |
| Q112 / Q212 | 2SB686 (O)        |             |           |
| Q113 / Q213 | 2SC2240 (GR)      |             |           |
| Q301 / Q401 | 2SA1015 (GR)      |             |           |
| Q302 / Q402 | 2SD889            |             |           |
| Q303        | 2SD313 (E)        |             |           |
- FO01, FO02  
GENERAL EXPORT, U.S.A., CANADA, 5A 250V  
EUROPE, U.K., AUSTRALIA, T25A 250V

# BX-330

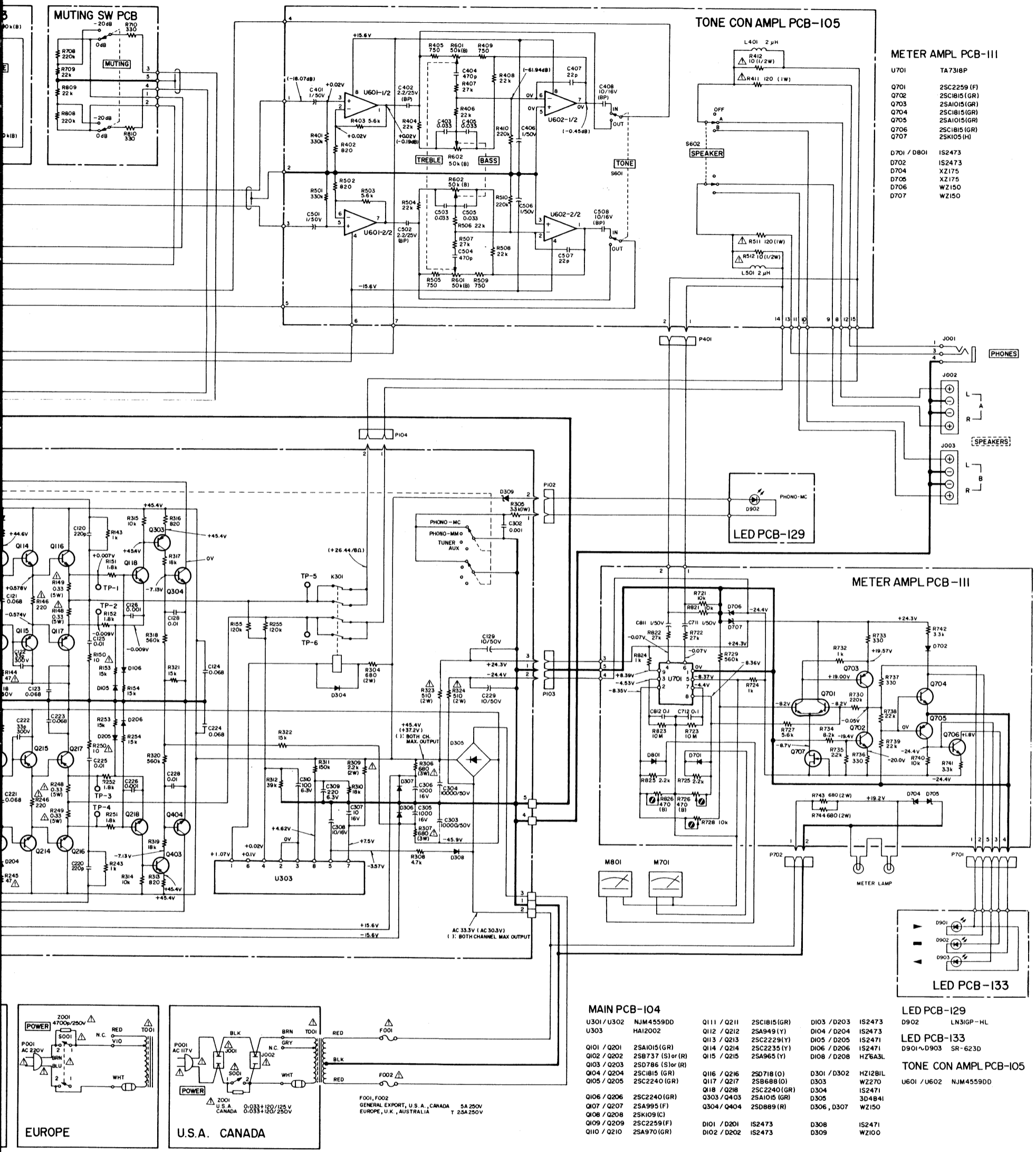
## DC Integrated Amplifier

# TEAC SCHEMATIC DIAGRAM BX-550



**NOTES**

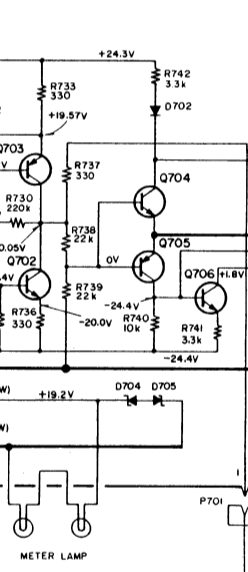
- ALL RESISTORS ARE 1/4 WATT, 5%, UNLESS MARKED OTHERWISE. RESISTOR VALUES ARE IN OHMS (k = 1,000 OHMS, M = 1,000,000 OHMS).
- ALL CAPACITOR VALUES ARE IN MICROFARADS (p = PICOFARADS).
- △PARTS MARKED WITH THIS SIGN ARE SAFETY CRITICAL COMPONENTS. THEY MUST ALWAYS BE REPLACED WITH IDENTICAL COMPONENTS - REFER TO THE TEAC PARTS LIST AND ENSURE EXACT REPLACEMENT.



METER AMPL PCB-III

- U701 TA7318P
- Q701 2SC2259 (F)
- Q702 2SC1815 (GR)
- Q703 2SA1015 (GR)
- Q704 2SC1815 (GR)
- Q705 2SA1015 (GR)
- Q706 2SC1815 (GR)
- Q707 2SK105 (H)
- D701 / D801 IS2473
- D702 IS2473
- D704 XZ175
- D705 XZ175
- D706 WZ150
- D707 WZ150

METER AMPL PCB-III



MAIN PCB-104

- |             |                   |             |              |             |         |
|-------------|-------------------|-------------|--------------|-------------|---------|
| U301 / U302 | NJM4559DD         | Q111 / Q211 | 2SC1815 (GR) | D103 / D203 | IS2473  |
| U303        | HA12002           | Q112 / Q212 | 2SA949 (Y)   | D104 / D204 | IS2473  |
| Q101 / Q201 | 2SA1015 (GR)      | Q113 / Q213 | 2SC2229 (Y)  | D105 / D205 | IS2471  |
| Q102 / Q202 | 2SB737 (S) or (R) | Q114 / Q214 | 2SC2235 (Y)  | D106 / D206 | IS2471  |
| Q103 / Q203 | 2SD786 (S) or (R) | Q115 / Q215 | 2SA965 (Y)   | D108 / D208 | HZ6A3L  |
| Q104 / Q204 | 2SC1815 (GR)      | Q116 / Q216 | 2SD718 (O)   | D301 / D302 | HZ12BIL |
| Q105 / Q205 | 2SC2240 (GR)      | Q117 / Q217 | 2SB688 (O)   | D303        | WZ270   |
| Q106 / Q206 | 2SC2240 (GR)      | Q118 / Q218 | 2SC2240 (GR) | D304        | IS2471  |
| Q107 / Q207 | 2SA995 (F)        | Q303 / Q403 | 2SA1015 (GR) | D305        | 3D4B41  |
| Q108 / Q208 | 2SK109 (C)        | Q304 / Q404 | 2SD889 (R)   | D306, D307  | WZ150   |
| Q109 / Q209 | 2SC2259 (F)       | D101 / D201 | IS2473       | D308        | IS2471  |
| Q110 / Q210 | 2SA970 (GR)       | D102 / D202 | IS2473       | D309        | WZ100   |

LED PCB-129

- D902 LN31GP-HL

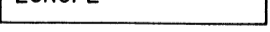
LED PCB-133

- D901 ~ D903 SR-623D

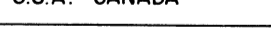
TONE CON AMPL PCB-105

- U601 / U602 NJM4559DD

EUROPE



U.S.A. CANADA



F001, F002  
GENERAL EXPORT, U.S.A., CANADA 5A 250V  
EUROPE, U.K., AUSTRALIA T 25A 250V

**BX-550**  
High Speed DC Integrated Amplifier