TA-AX44

US Model
Canadian Model
AEP Model
UK Model
E Model



INTEGRATED STEREO AMPLIFIER

SPECIFICATIONS

GENERAL

System: Preamplifie

Preamplifier section: low-noise IC equalizer amp.; ASP tone control

Power amplifier section: purecomplementary SEPP OCL power amplifier with all stages direct coupled

Power Requirements: US, Canadian model: 120 V ac, 60 Hz

AEP model: 220 V ac (240 V ac adjustable by authorized Sony personnel), 50/60 Hz UK model: 240 V ac (220 V ac adjustable by authorized Sony personnel), 50/60 Hz E model: 120, 220 or 240 V ac adjustable,

50/60 Hz

Power Consumption:

US, AEP model: 100 watts Canadian model: 155 watts UK model: 270 watts

E model: 100 watts

AC Outlets:

AEP, UK model: 3 switched, total 100 watts

max.

US, Canadian model:

Two switched (total 100 watts)
One unswitched (100 watts)

E model: 2 switched, total 100 watts max. 1 unswitched, 100 watts max.

Dimensions:

Approx. 430 \times 80 x 290 mm (w/h/d) (17 \times 31/ $_4$ \times 11 1/ $_4$ inches) including projecting parts and controls

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET UNE MARQUE A SUR LES DIAGRAMMES SCHÉMATIQUES, LES VUES ÉCLATÉES ET LA LISTE DES PIÉCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Weight:

Approx. 5.6 kg (12 lbs 6 oz) net

Approx. 6 kg (13 lbs 4 oz) in shipping carton

AMPLIFIER SECTION

POWER OUTPUT AND TOTAL HARMONIC DISTORTION: (US, Canadian model)

With 8 ohm loads, both channels driven, from 20 - 20,000 Hz; rated 40 watts per channel minimum RMS power, with no more than 0.008% total harmonic distortion from 250 milliwatts to rated output.

Continued on page 2 —

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK

ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.





Continuous RMS **Power Output** (Lea than 0.688% THD, both channels driven simultaneous-

(AEP, UK, E model):

At 20 Hz - 20 kHz 40 + 40 watts (8 ohms)

At 1 kHz

44 + 44 watts (8 ohms) According to DIN 45500 40 + 40 watts (8 ohms)

Power Bandwidth

(IHF):

5 Hz - 45 kHz

1.8 dB ('78 IHF) Dynamic Headroom: Less than 0.008% at rated output Harmonic Distortion:

Intermodulation (IM)

Distortion

(60 Hz: 7 kHz = 4: 1):

Less than 0.008% at rated output

Frequency Response: PHONO: RIAA equalization curve ±0.5 dB

TUNER

10 Hz - 120 kHz +0 dB DAD/AUX **TAPE 1.2**

Residual Noise: Less than $35\mu V$ (8 ohms, network A)

Damping Factor: 50 (8 ohms, 1 kHz)

Inputs:

	Sensitivity	Impedance	Maximum input capability (1kH2)	SIN (weighting network, input level
PHONO	2,5 mV	50 kΩ	150 mV	76 dB 80 dB* (A, 2.5 mV)
TUNER DAD/AUX TAPE 1, 2	150 mV	50 kΩ	_	102 dB 90 dB* (A, 150 mV)

* '78 IHF

outputs:

REC OUT 1, 2 Voltage 150 mV Impedance 4.7 k ohms

SPEAKER A, B

Accepts speakers of 8 - 16 ohms.

HEADPHONES

Accepts low and high impedance head-

phones.

Tone Controls:

Subsonic Filter:

BASS ±10 dB at 100 Hz (turnover freq. 500 Hz)

TREBLE

±10 dB at 10 kHz (turnover freq. 2 kHz) 6 dB/octave attenuation below 15 Hz

High Filter: 6 dB/octave attenuation above 9 kHz

Muting: -20dB

0 dB = 0.775 V

FEATURES

The TA-AX44 integrated stereo amplifier incorporates a number of technical breakthroughs in circuit design. On its attractive front panel most of the controls and switches are "touch pad" switches and the tone, filter and volume settings are shown by fluorescent displays.

HIGHLIGHTS OF THE TA-AX44'S CIRCUIT

ASP (Audio Signal Processor) IC in the preamplifier stage

Sony has developed a new audio device, called the Audio Signal Processor IC, which can digitally control the tone, filter and volume settings. The ASP IC also permits electronic program source selection. Mechanical controls and switches have been practically eliminated from the front panel. In combination with a microcomputer and a non-volatile memory IC, the ASP IC offers greater flexibility - an Acoustic Function, an ability to store and recall two sets of tonal adjustments.

Legato linear power amplifier stage

The operation of the power amplifier stage is stable without any observable distortion up through the higher frequencies. We call this power amp "Legato Linear" because its switching distortion is very low and its output waveform smooth.

Simple, straight signal path layout

A heat-pipe cooling system and the ASP IC layout near the input and output terminals minimize wiring losses and allow low distortion operation.

Wireless remote control operation

Using the optional RM-44 system remote controller, various opera. tions - power on/off, program selection, acoustic setting selection, muting on/off and volume adjustment - can be remotely controlled.

OPERATING VOLTAGE

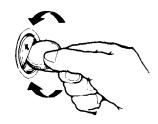
Before connecting the unit to the power source, check that the operating voltage of your unit is the same as the local power line voltage.

The Continental European model (AEP model) operates on 220 V ac (or 240 V ac adjustable by authorized Sony personnel).

The United Kingdom model (UK model) operates on 240 V ac (or 220 V ac adjustable by authorized Sony personnel).

The model for other countries (E model) operates on either 120, 220 or 240 V ac. The voltage selector is located on the rear panel. If the selector must be reset, disconnect the ac power cord and turn the selector with a coin so that the arrow mark of the selector points to the proper voltage figure.

The US, Canadian model operates on 120 V ac.



PRECAUTIONS

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply.
- Should any liquid or solid object fall into the cabinet, unplug the
 unit and have it checked by qualified personnel before operating it
 any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.

On installation

- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Good air circula ion is essential to prevent internal heat build-up in the unit. Place the unit in the location with adequate air circulation. Do not place the unit on a soft surface, such as a rug that would block the venilation holes on the bottom.
- DO not place anything on top of the cabinet. The top ventilation holes must be unobstructed for the proper opera ion of the unit and to prolong the life of its components.

On operation

- Before making program source connections, be sure to turn the power switch off and unplug the unit.
- Do not attempt to test the protection circuits by blocking the ventilation holes or connec ing improper loads.
- When the unit is not used, turn the power off, to conserve energy and to extend the useful life of your unit.

On cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine

On repacking

Do not throw away the carton and the packing material. It makes an ideal container to transport the unit in. When shipping the unit for repair work or to another location, repack it as illustrated on the carton box.

MODEL IDENTIFICATION

Specification Label —

[AFP model 1

SONY®	MODEL NO. TA-AX44
INTEGRATED STEREO AC 220V ~ 50/60Hz 100	
SERIAL NO. MADE IN JAPAN	

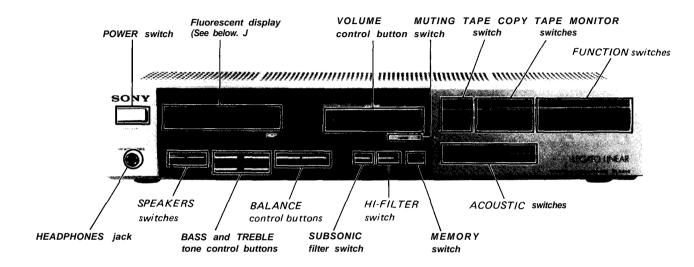
[UK model]

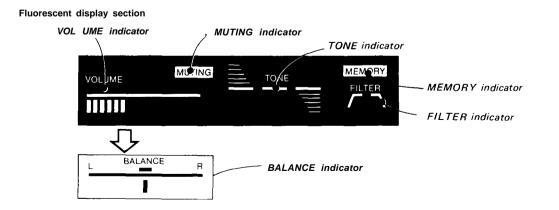
SONY®	MODEL NO. TA-AX44
INTEGRATED STE AC: 240V ~ 50/60Hz	
c ^{cl} l	
SERIAL NO, MADE IN JAPAN	

[US, Canadian model]

SONY® M	DEL NO. TA-AX44
INTEGRATED STEREO AC:120V~ 60Hz 100W	AMPLIFIER
$_{\mathbf{c}}\square_{\mathbf{l}}$	
SERIAL NO.	
MADE IN JAPAN	

LOCATION AND FUNCTION OF CONTROLS





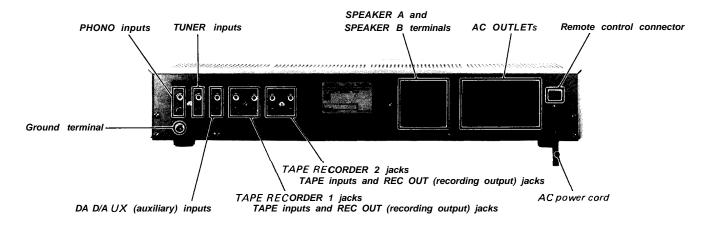


Photo: AEP, UK model

AC outlets

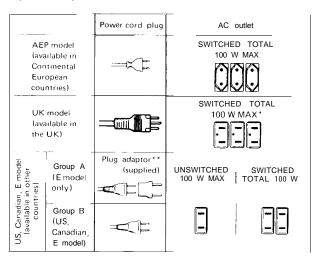
These are used to power other audio components whose power consumption is less than the wattage indicated below the accounted

The SWITCHED outlet is controlled by the front panel POWER switch.

The UNSWITCHED outlet (only on the E model) is not controlled by the POWER switch.

Do not connect any electrical home appliance such as an electric iron, fan, TV or other high-wattage equipment to these ac outlets.

The four groups of ac power cord plugs and ac outlets on your amplifier rear panel are illustrated below



* The ac outlet on the amplifier can supply ac power to the following components:

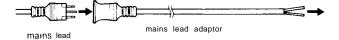
Tuner ST-JX44L. ST-JX-22L Turntable PS-LX33, PS-LX5 Tape deck TC-FX500R, TC-FX44

**Use the plug adaptor to connect the amplifier to an ac outlet In the house However, when making power connections among the Sony components, this adaptor IS not needed

For the Customers in the United Kingdom

The mains lead plug of your apparatus is a 3-pin type especially designed to be connected only to the Sony RM-44 system remote controller. The remote controller has a receptacle on the rear to receive this plug to supply mains power to other components of your audio system.

To connect the apparatus directly to a mains power point in your house, firmly insert the 3-pin plug into the supplied mains lead adaptor.



-CAUTION

Connect the 3-pin plug only to the mains outlet on the component mentioned above or to the supplied mains lead adaptor.

-Important

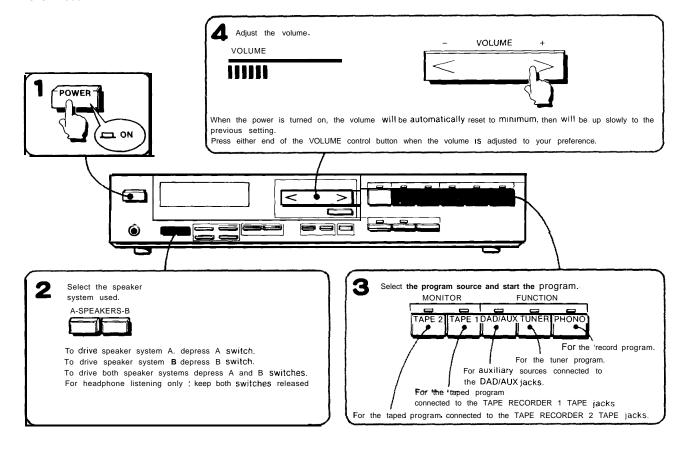
The wires in this mains lead adaptor are coloured in accordance with the following code.

Blue Neutral Brown Live

As the colours of the wires in the mains lead adaptor of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

OPERATION

TO GET SOUND



-Important points to remember -

- The MONITOR switches have priority over the FUNCTION switches (PHONO, TUNER and DADIAUX) when they are engaged at the same time.
- To disengage he MONITOR switch, press the same switch again.
- The TAPE COPY switch is a push-on/push-off switch, and does not affect any other FUNCTION or MONITOR switch.

SOUND ADJUSTMENTS

Stereo balance

The feeling of direction and depth that stereophonic sound produces is greatly diminished if the volume levels of the two channels are not balanced to produce a well-defined stereo image.

Adjust the BALANCE control buttons as necessary. Proper setting of the BALANCE control will vary with different program sources because of differences in recording levels. Stereo balance is also affected by the acoustics of the listening room, which itself is dependent on the shape and size of the room, the location of the room's furniture, and the carpet and wall coverings.

Tone

Use the tone control buttons to adjust the tone to suit the characteristics of the listening roomand the program source When listening to a program source with high-frequency noise, press the HI-FILTER switch.

If the woofer cones of the speaker system move a lot when a warped record is played, press the SUBSONIC filter switch to reduce the very low-frequency distortion caused by record warp.

The manipulation of the tone control section does not interrupt the signal path in the amplifier. However, its overuse may adversely affect amplifier tone quality.

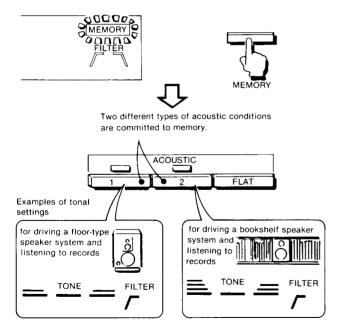
TO SET THE ACOUSTIC SETTINGS

-Acoustic Function-

The TA-AX44 can store and recall the acoustic settings—tone control (BASS and TREBLE), and filters (SUBSONIC and HI-FILTER) used, thus instantly providing a choice of two different acoustic settings. These settings may be based upon the preferences of two individual users of the system, or the speaker system in use, or the type of music being listened to, etc.

- Adjust the tonal quality to your preference.
- Press the MEMORY switch. The MEMORY indicator will come on, during which time you should press either the ACOUSTIC 1 or 2 switch.

Now one of the two acoustic settings is committed to memory.



Q. How can I check the acoustic setting?

A. Once the setting is set, press the FLAT switch. All the acoustic settings are disengaged and a flat frequency response results. Then press the ACOUSTIC switch which you committed to memory, so that the original settings will be recalled. Now compare the effect of the settings with the flat frequency response.

Q. How can I change temporarily a part of the acoustic settings?

A. Simply change the part of the acoustic setting you want. You can recall the original settings later by pressing the ACOUSTIC switch.

Q. How can I change all the acoustic settings?

A. Simply set the new acoustic settings as you like and memorize them as described before.

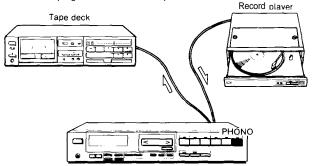
Q. If I turn the amplifier off, are the acoustic settings cancelled?

A. No. The TA-AX44, with its non-volatile IC in the memory circuit, retains the contents of the memory even when the power is off, and recalls them whenever you want.

TAPE RECORDING AND TAPE COPY

TO RECORD

Select the program to be recorded with the FUNCTION switches.
 Start the program and set the tape recorder in the record mode.



The filters, and tone and volume settings have no effect on recording.

Monitoring of a 3-head tape recorder

If your tape recorder has separate record and playback heads, you can monitor the recording results.

When the tape recorder used for recording is connected to the TAPE RECORDER 1 REC OUT jacks, press the TAPE 1 switch and you can monitor the recording results. Press the TAPE 1 switch again to disengage, and the source sound will be heard. Be sure to keep the monitor switch of the tape recorder in the TAPE position.

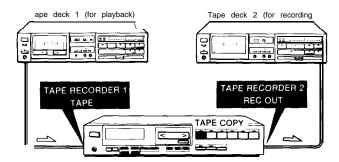
TO COPY

If you have two tape recorders, you can copy a taped program from tape recorder 1 (connected to TAPE RECORDER 1 TAPE inputs) to tape recorder 2 (connected to TAPE RECORDER 2 REC OUT outputs). Tape copy from tape recorder 2 to tape recorder 1 cannot be made.

You can copy a tape while listening to a record or a broadcast.

- Insert the recorded tape into the tape recorder 1 and a blank tape into the tape recorder 2.
- 2 Press the TAPE COPY switch.
- Adjust the recording level of tape recorder 2.

Start the playback of tape recorder 1 and the recording of tape recorder 2. Copying will begin.



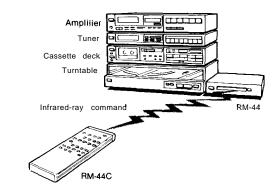
To listen to a program while the tape is being copied:

For the playback sound of tape recorder 1 : press the TAPE 1 switch

For a program source connected to the PHONO, TUNER or DAD/AUX inputs: press the appropriate FUNCTION switch.

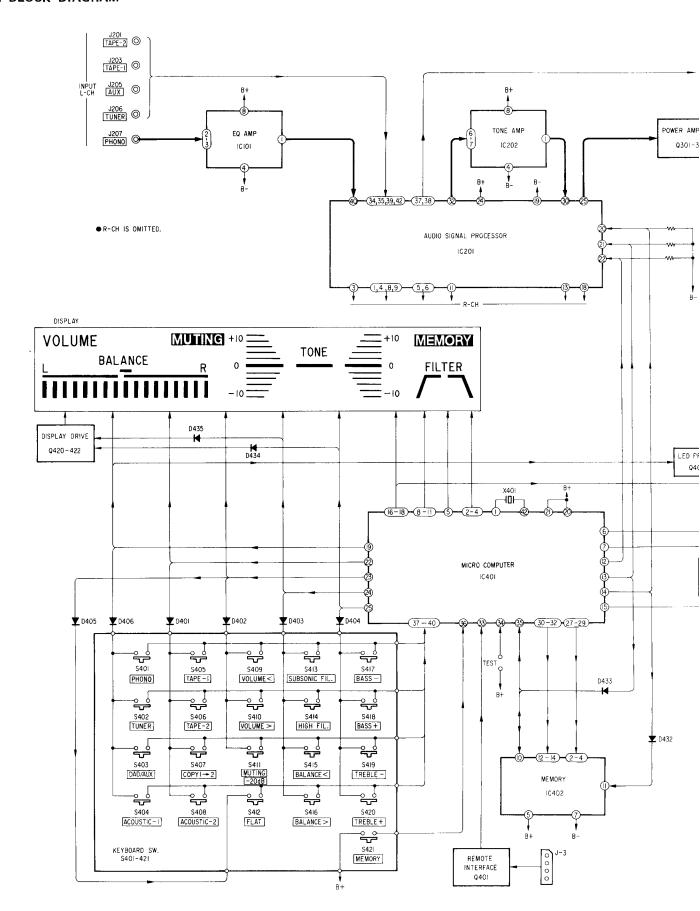
REMOTE CONTROL OPERATION WITH AN OPTIONAL REMOTE CONTROLLER

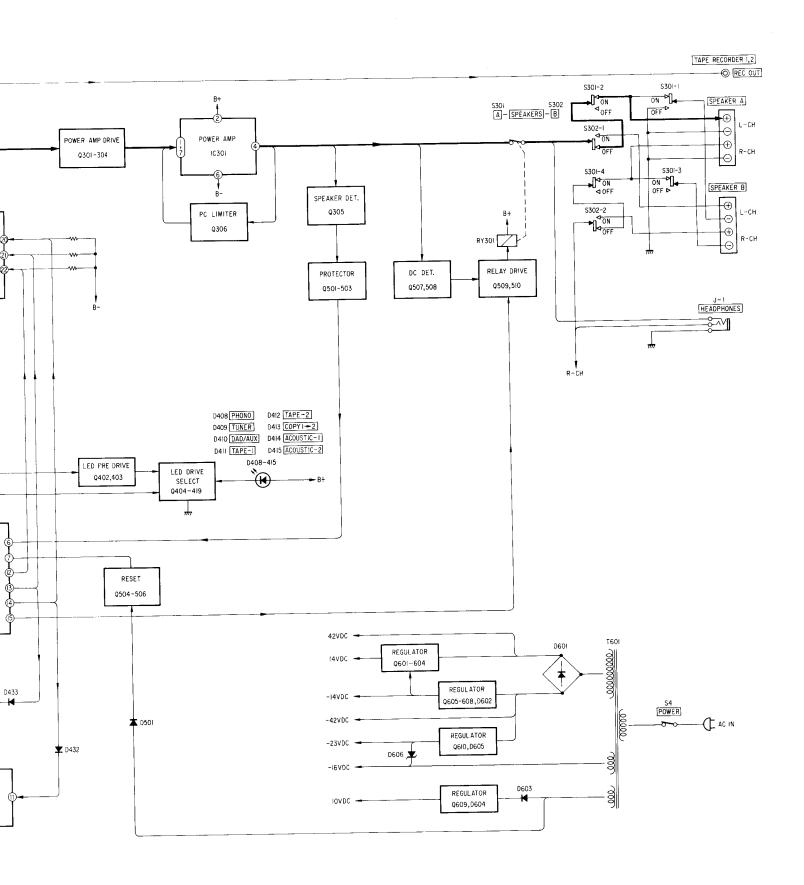
The optional RM-44 system remote controller controls he following functions of the amplifier: power on/off, program selection, acoustic setting selection, muting on/off, and volume adjustment. This remote controller, with its infrared ray sensor, can control connected components by an infrared ray transmitted from he RM-44C remote commander supplied with the system remote controller. For connections and opera ions, refer to the system remote controller's instruction manual.



SECTION 1 OUTLINE

1-1. BLOCK DIAGRAM

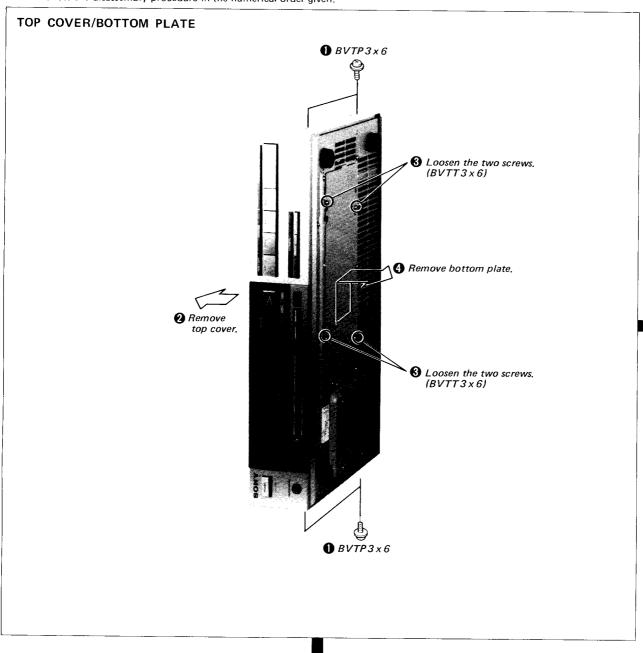




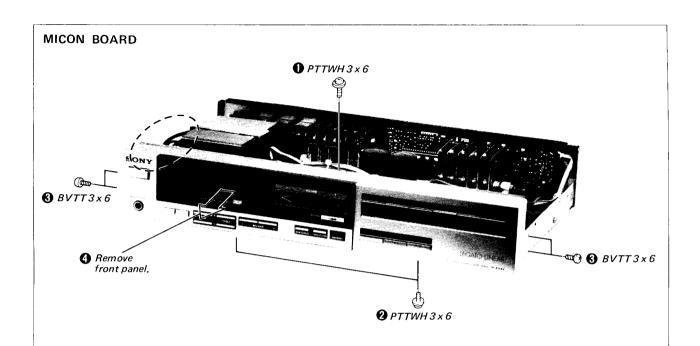
SECTION 2 DISASSEMBLY

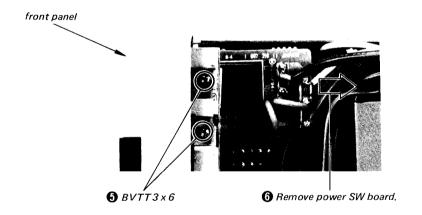
2-1. DISASSEMBLY

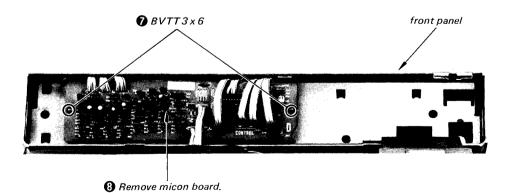
Note: Follow the disassembly procedure in the numerical order given.



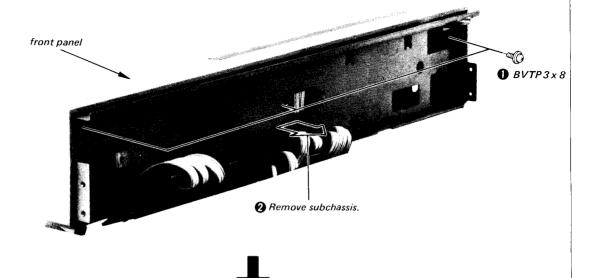
The conductor side of the audio circuit board can be checked in this condition.

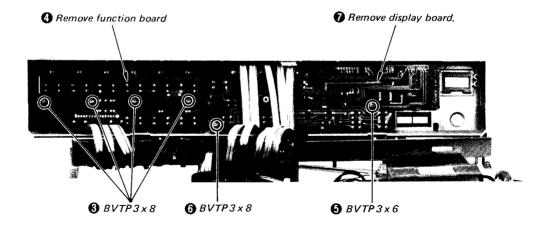






FUNCTION BOARD/DISPLAY BOARD



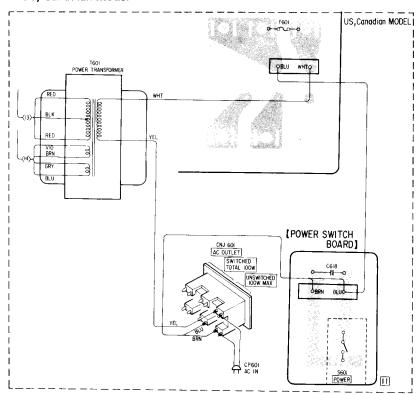


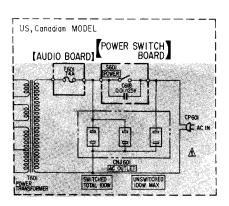
SECTION 3 DIAGRAMS

3-1. SCHEMATIC AND MOUNTING DIAGRAMS • See pages 17, 24 for the notes.

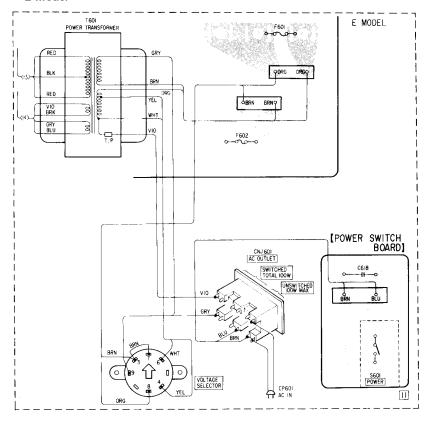
Power Supply Section for US, Canadian, E models. (See pages 15 – 24 for other sections.)

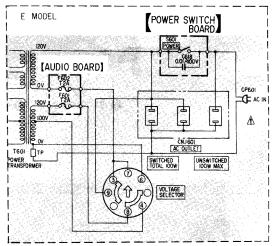
- US, Canadian Model -





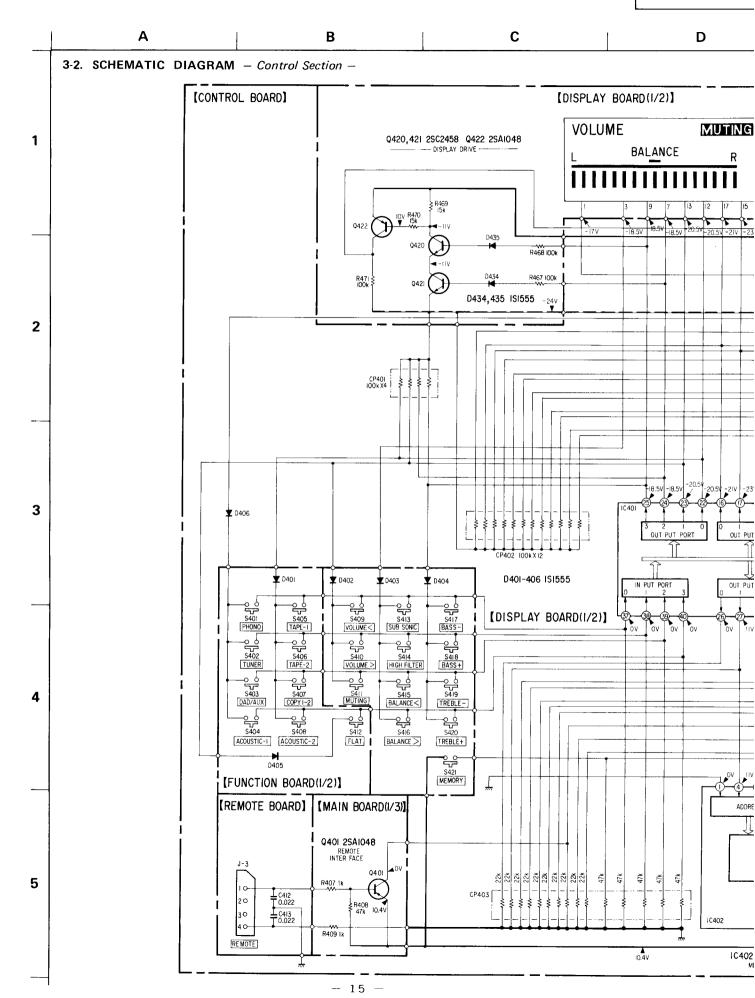
- E model -





Note: The components identified by shading and mark $\underline{\Lambda}$ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque A sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



Ε F G Н [FUNCTION BOARD(I/ Q402 2SCI364 Q403 2SAI048 TING +10 = **MEMORY** TONE D409 🗷 D408 FILTER PHONO 0.104/D408-0N1 0.18V (0408-0N1) -461 \$ 0.08V (0408-0FF) 180 -10 0.65V(D408 ON) R430 OV (D408 (OFF) -437 2.2k R414-421 R446 453 47k D4I6 -423 D407 ISI555 Q4I6-43I ISI555 Q404-411 2SAI048 Q4I2-4I9 2SCI364 - LED DRIVE SELECT 10.4V ▶ See page 20 7406 18k R405 18k [INPUT BOARD(I/2)] R404 I8k -23V) ❸ 10.5V v -23v V -23V -22.5V -23V -22.5V -22.5V 1IV See page 19 lacksquareRESET INT 2 I 1/0 PORT 2 I OUT PUT PORT OUT PUT PORT I/O PORT Û (3) 0 OUT PUT PORT OUT PUT PORT -See page 20 IN PUT PORT CLOCK GENERATOR ROM RAM • P_{IIV} Ov . , , , , , -24V R401 4.7k 4.7k 4.7k 4.7k 4.7k 84.7k ≰R403 4.7k See page 19 IC40I µPD553C-200 10.4∨ ▶ **▼** D432 MICRO COMPUTER D432,433 ISI555 TEST See page 20 D433 ₹ R463 **▶**10.4V MODE DECODER ADDRESS CLOCK ▲10.4V LAST CHANNEL MEMORY 1 C411 T 100p MEMORY -24V **▼** - See page 19 IC402 CX-76IA MEMORY I0.4V [MAIN BOARD(1/3)]

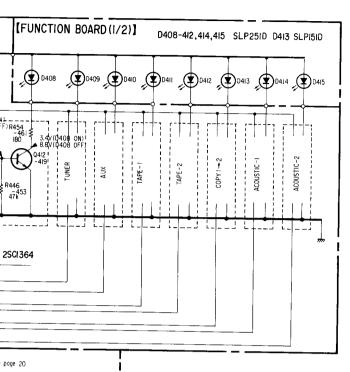
1

2

3

5

BOARD(1/2))



• CIRCUITS IN ARE THE SAME AS PHONO FUNCTION CIRCUIT.

Note:

- Components for right channel have same values as for left channel.
- All capacitors are in μF unless otherwise noted, pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4 W unless otherwise noted. $k\Omega$: 1000 Ω , $M\Omega$: 1000 $k\Omega$

K12 . 1000 12, W122 . 1000 K22

- : nonflammable resistor.
 - ______: panel designation.
- ===: B+ bus.
- ---: B- bus.
- Voltages are dc with respect to ground unless otherwise noted.
- \bullet Readings are taken under no-signal conditions with a VOM (50 k Ω/V).
- Voltage variations may be noted due to normal production tolerances.
- . W. GERMANY MODEL
- : signal path
- Switches

Ref. No.	Switch	Position
S301	SPEAKERS A	ON
S302	SPEAKERS B	OFF
S401	PHONO	OFF
S402	TUNER	OFF
S403	DAD/AUX	OFF
S404	ACOUSTIC-1	OFF
\$405	TAPE-1	OFF
S406	TAPE-2	OFF
S407	COPY 1-2	OFF
S408	ACOUSTIC-2	OFF
S409	VOLUME <	OFF
S410	VOLUME >	OFF
S411	MUTING	OFF
S412	FLAT	OFF
S413	SUBSONIC	OFF
S414	HIGH FILTER	OFF
S415	BALANCE <	OFF
S416	BALANCE >	OFF
S417	BASS -	OFF
S418	BASS +	OFF
S419	TREBLE -	OFF
S420	TREBLE +	OFF
S421	MEMORY	OFF
S601	POWER	OFF

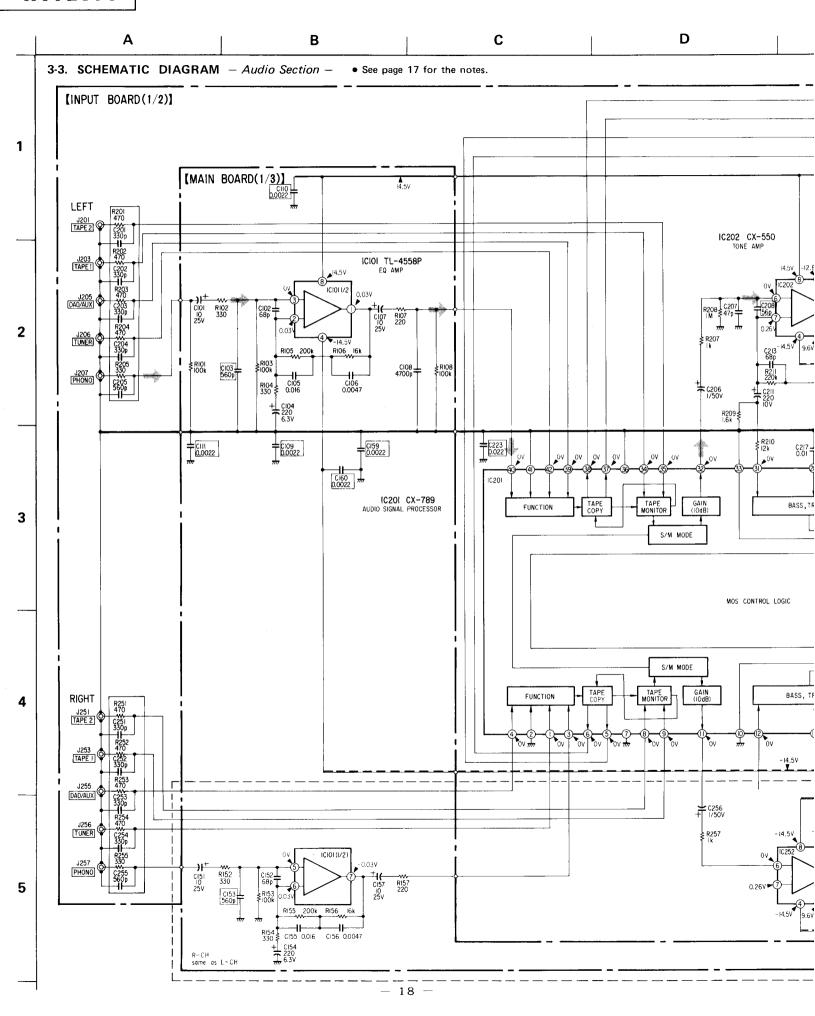
Note: Voltages are measured with a VOM (50k Ω /V).

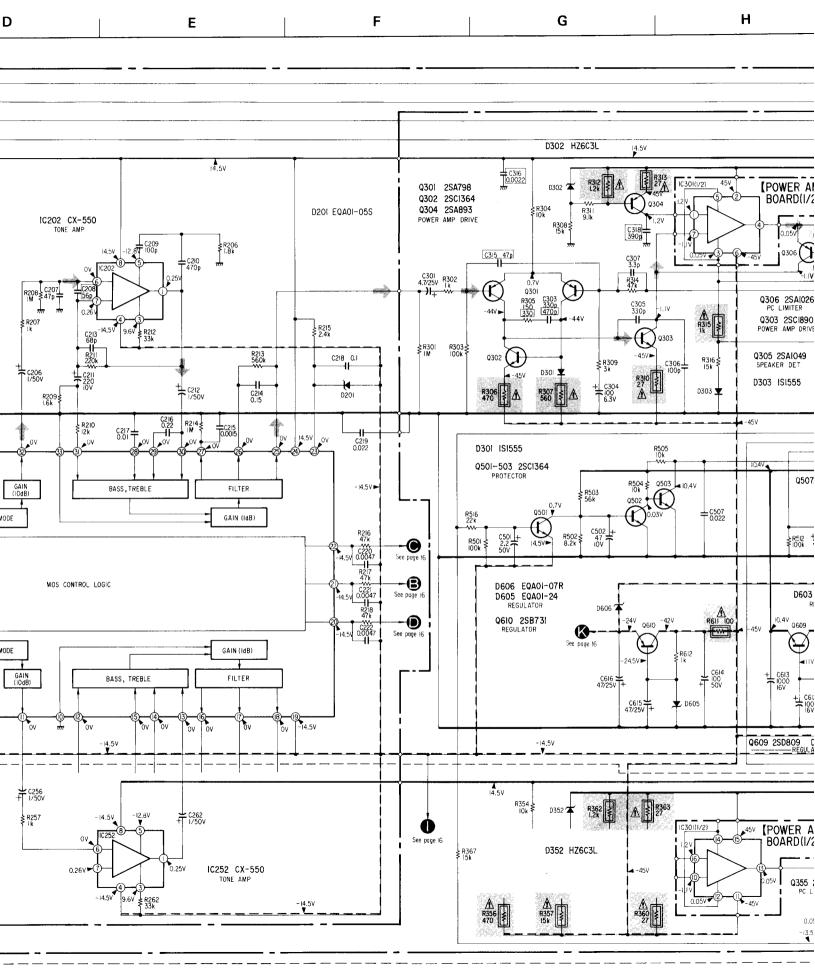
Note: The components identified by shading and mark

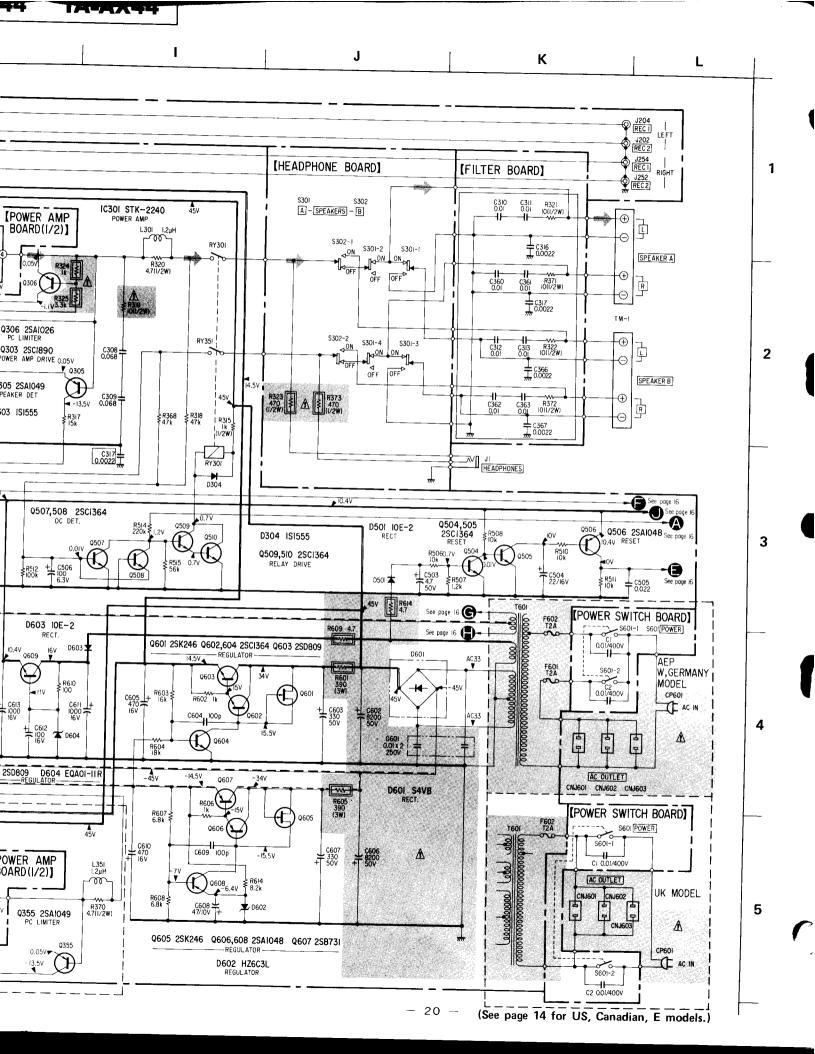
A are critical for safety. Replace only with part number specified.

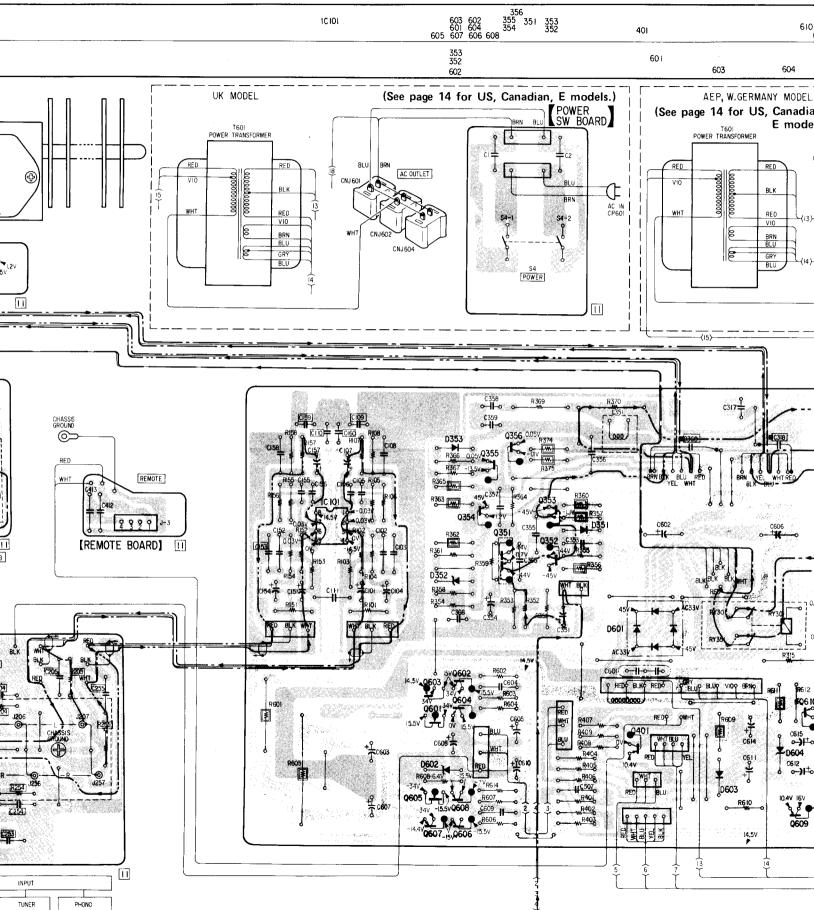
Note: Les composants identifiés par une trame et une marque A sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

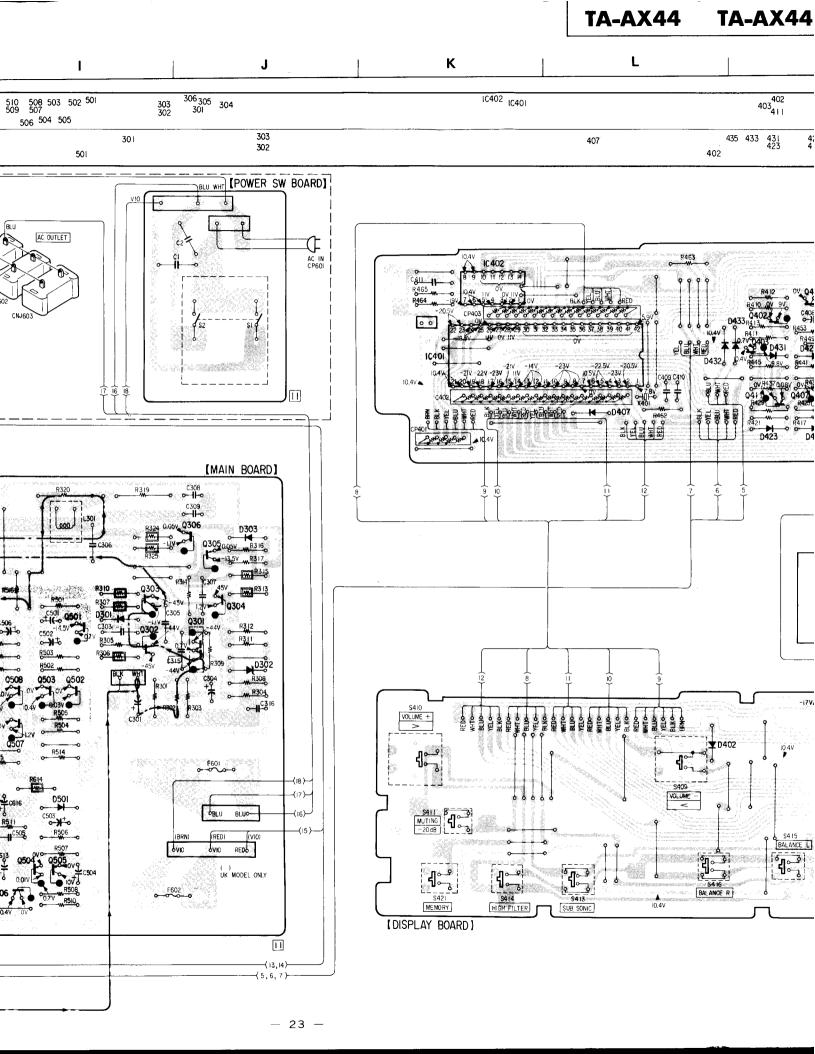
[MAIN BOARD(1/3)]







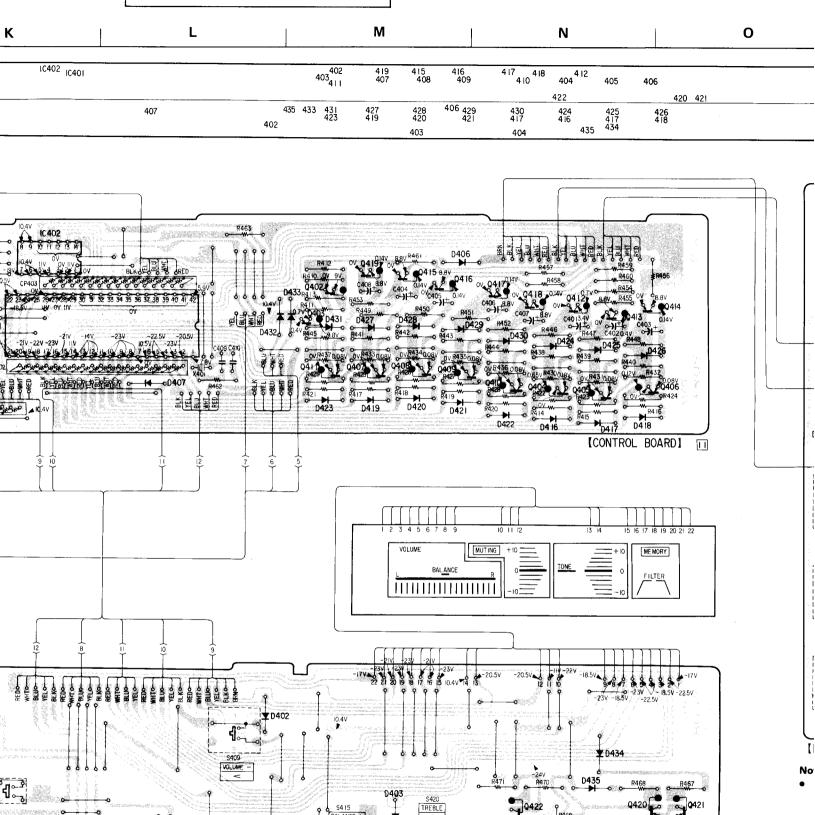




TA-AX44 TA-AX44

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DARD)

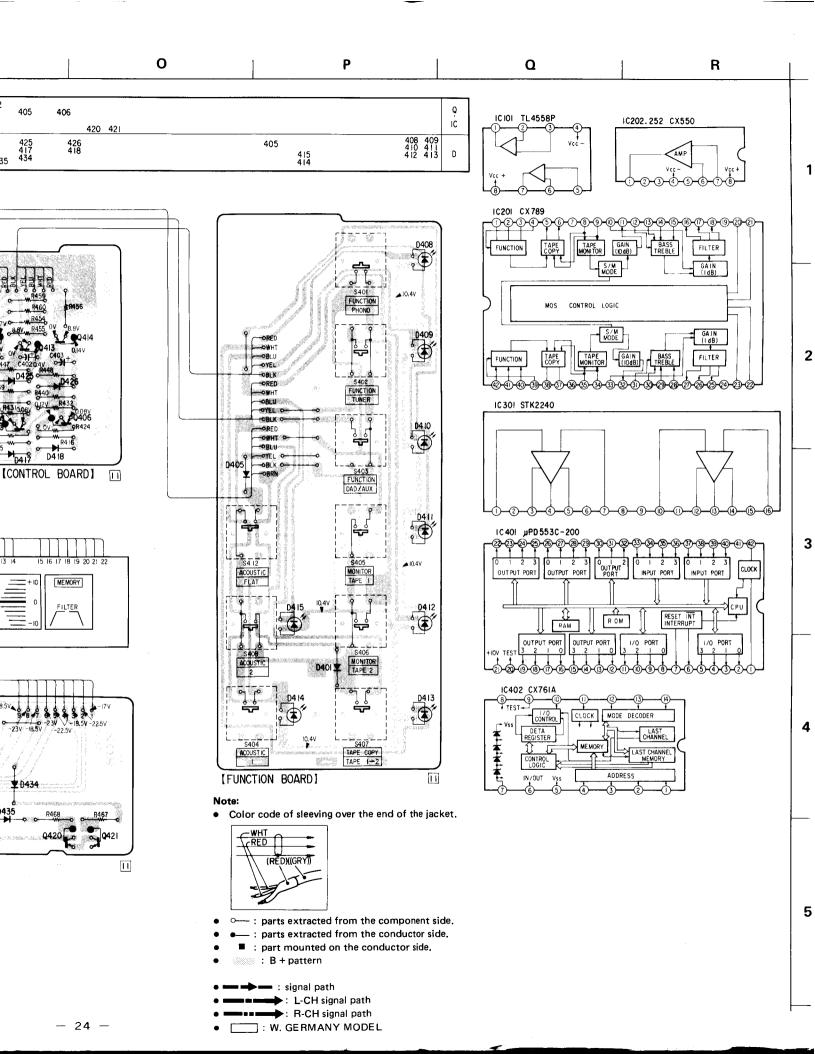


S419 TREBLE

.**▲** 10.4V

SUB SONIC

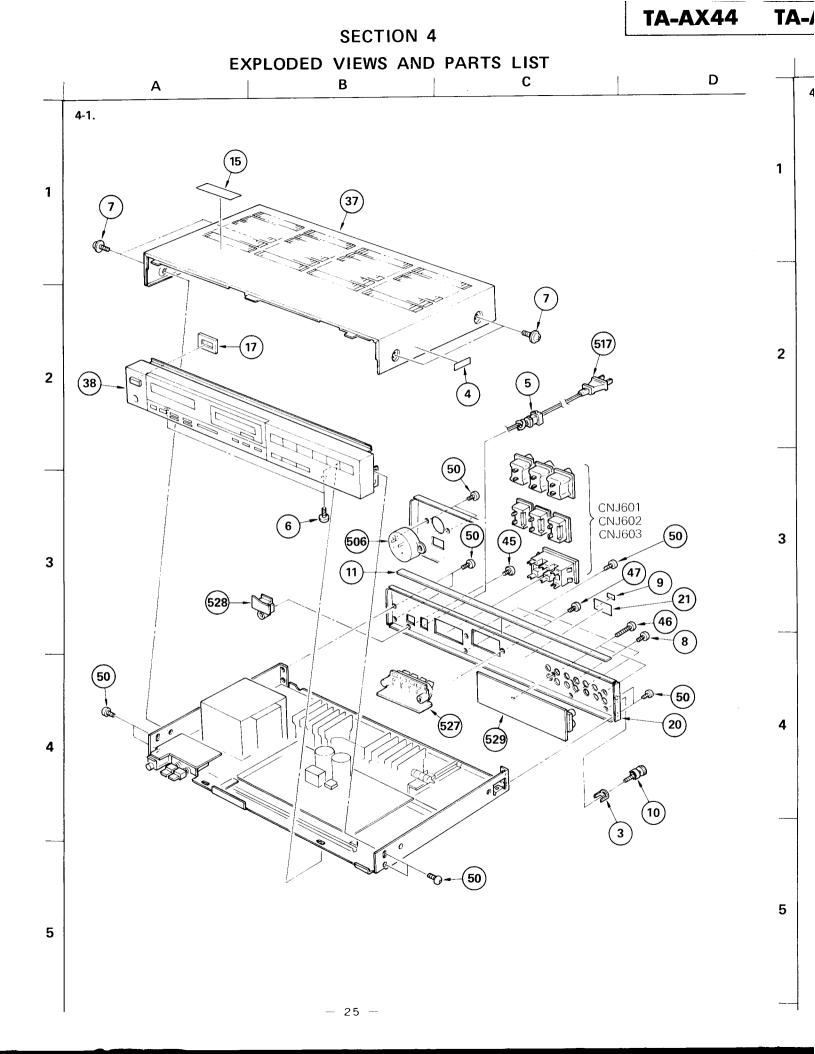
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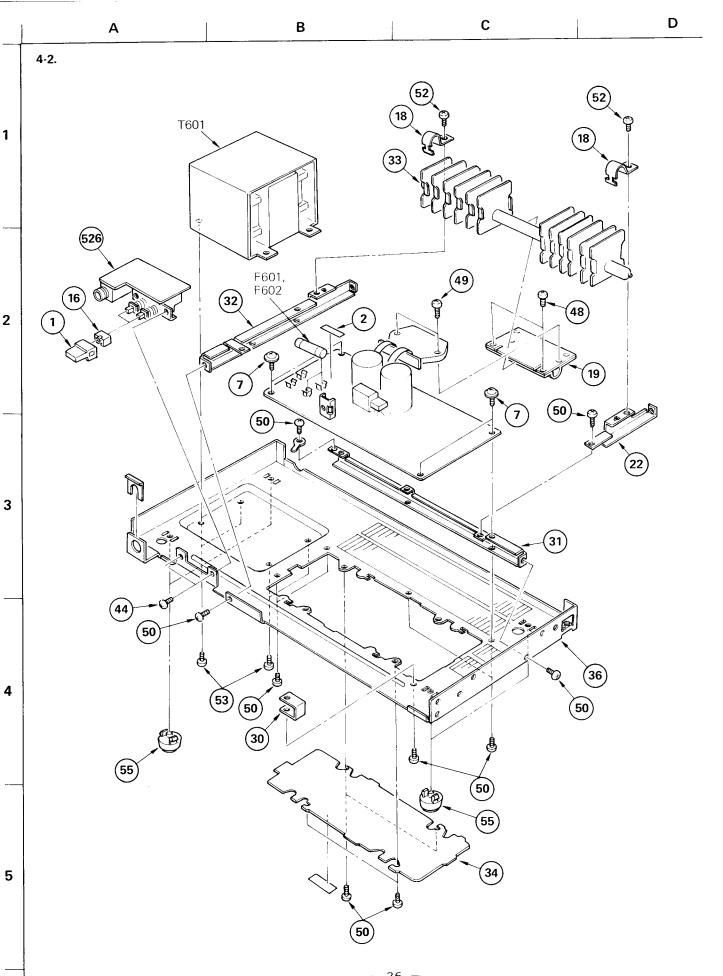


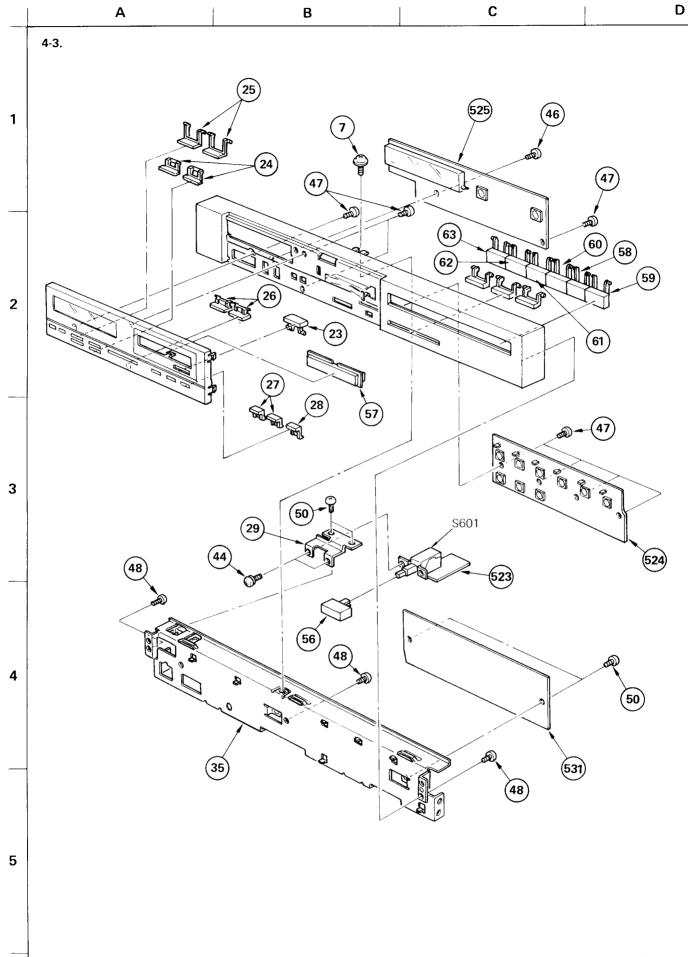
Semiconductor Lead Layout

Semiconductor Lead Layo	outs
10E2 EQA01-05R HZ6C3L HZ7A1L HZ24-1L IS1555	2SA798
EQB01-1L	2SA1027R
cathode	€ C B
S4VB40	2SA1048 2SA1049 2SC2458
WHAT I	letter side
CX-550	2SB731 2SD809
O O STANDARD O STANDARD O STANDARD O STANDARD O STANDARD O STANDARD O STANDARD O STANDARD O STANDARD O STANDARD O STANDARD O	letter side
CX-761A	2SC1364 2SC1890-F
1 2 3 4 5 9 8 7 6 (Top view)	€ C B
CX-789	2SK246
(Top view)	5 6 0
TL-4558PK	STK2240
8765 1234	mark Tipe I IIII
(Top view)	(Marking Ficto wow)

(Marking side view)







GENERAL SECTION

	GENERAL	L SECTION
No.	Part No.	Description
1 2 3	3-701-948-1	7 (AFP GAFP F) LARFI FUSE
5	♣ ;3-703-044-26 ⚠ •3-703-244-00 3-703-249-01) BUSHING, CORD
7 8 9	3-703-354-11 3-703-473-00 3-703-540-02	SCREW, TERMINAL
10 11 12	3-706-165-00 4-015-736-00	SCREW CUSHION, CHASSIS
13 14	4-848-642-00 ♦ ;4-861-002-11	CUSHION, VIBRATION HEAT SINK
15 15	4-861-045-00 4-861-045-01	(AEP,GAEP,UK)LABEL, CAUTION (US,Canadian,E)LABEL, CAUTION
17 18	4-864-307-00 4-871-324-00 •;4-875-157-00 •;4-875-170-00	RING ESCUTCHEON, POWER KNOB HOLDER, PIPE BLOCK, POWER
20 20	•;4-882-002-00 •;4-882-003-00 •;4-882-004-00 •;4-882-005-00	(US,Canadian)PLATE, JACK (AEP,GAEP)PLATE, JACK (UK)PLATE, JACK (E)PLATE, JACK
21 21 21	4-882-007-01 4-882-008-01 4-882-009-01	(US)LABEL, MODEL NUMBER (Canadian)LABEL, MODEL NUMBER (AEP,GAEP)LABEL, MODEL NUMBER
21 21 21 21	4-882-010-01 4-882-011-01 4-882-012-01 4-882-012-11	(UK)LABEL, MODEL NUMBER (E1)LABEL, MODEL NUMBER (E2)LABEL, MODEL NUMBER (E2)LABEL, MODEL NUMBER
22 d 23 24	4-882-013-00 4-882-014-00 4-882-018-00	RETAINER, PIPE KNOB, MUTING KNOB (A), CONTROL
25 26 27	4-882-019-00 4-882-020-00 4-882-021-01	KNOB (B), CONTROL KNOB (C), CONTROL KNOB (D), CONTROL
28 29 ∎ 30 ∎	4-882-021-11 ;4-882-023-00 ;4-882-024-00	KNOB (D), CONTROL BRACKET, SWITCH, POWER. BRACKET, PC BOARD
32 ▮	;4-882-025-00 ;4-882-026-00 ;4-882-027-00	FRAME (A), CENTER FRAME (B), CENTER PIPE, HEAT
34 • 35 •	;4-882-028-00 ;4-882-029-00	PLATE, BOTTOM CHASSIS, SUB

GENERAL SECTION

GENERAL SECTION			
No.	Part No.	Description	
38	4-882-032-00 4-882-033-00 4-882-034-00	PANEL	
40	4-882-039-00 4-882-040-00	PLATE (A), GROUND PLATE (B), GROUND	
43 44 45	7-623-508-01 7-682-647-01 7-685-133-11	SCREW +PS 3X6	
46 47 48	7-685-645-19 7-685-646-11 7-685-646-29	SCREW +BVTP 3X6 TYPE2 N-S SCREW +BVTP 3X8 TYPE2 N-S SCREW +BVTP 3X8 TYPE2 SLIT	
49 50 51	7-685-650-29 7-685-871-01	SCREW +BVTP 3X16 TYPE2 SLIT SCREW +BVTT 3X6 (S)	
52 53 54		SCREW +BVTT 3X8 (S) SCREW +BVTT 4X8 (S)	
55 56 57	X-3701-069-0 X-4875-108-0 X-4882-001-0	FOOT ASSY, M.F KNOB ASSY, POWER KNOB ASSY, CONTROL	
58 59 60	X-4882-003-0	KNOB (PHONO) ASSY, PUSH KNOB (TUNER) ASSY, PUSH KNOB (DAD/AUX) ASSY, PUSH	
	X-4882-006-0 X-4882-007-0 X-4882-008-0		

ACCESSORY & PACKING MATERIAL

1	<u>lo.</u>	Part No.	Description
-	l01 l02	3-701-630-00 3-703-390-01	BAG, POLYETHYLENE (US)INSTRUCTION
1	.03 .03 .03	3-783-959-11 3-783-959-21 3-783-959-31	(UK,E,AEP,GAEP)MANUAL, INSTRUCTION (US,Canadian)MANUAL, INSTRUCTION (Canadian)MANUAL, INSTRUCTION
ī	04 05 06	4-875-448-00 4-875-449-00 4-876-352-00	CUSHION, UPPER CUSHION, LOWER SHEET, PROTECTION
	07 08	4-882-042-00 9-911-863-XX	INDIVIDUAL CARTON (AEP,GAEP,UK)SHEET, INSTRUCTION

NOTE:

 Items with no part number and no description are not stocked because they are seldom required for routine service.

36 ★;4-882-031-00 CHASSIS, MAIN

- Items marked " " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers ($\Delta-\Delta\Delta\Delta-\Delta\Delta\Delta-XX$ or $\Delta-\Delta\Delta\Delta\Delta-\Delta\Delta\Delta-X$) may be different from those used in the set.

SEMICONDUCTORS

In each case, U : μ, for example: UA···: μA···, UPA···: μPA···, UPC···: μPC, UPD···: μPD··· CAPACITORS:

All capacitors are in μF . Common capacitors are omitted. Refer to the following lists for their part numbers. MF: μF , PF: $\mu \mu F$.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- F : nonflammable

COILS

· MMH : mH, UH : μH

The components identified by shading and mark A are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque Asont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

ELECTRICAL PARTS

	· ·						
Ref.No	Part No.	Description	Ref.No.	Part No.	Description		
502	♦ ;1-508-809-00 ♦ ;1-508-810-00	(US,Canadian,AEP,UK,E)BASE POST(14MM)2P (US,Canadian,AEP,UK,E)14MM BASE POST	C105 C155	1-108-584-00 1-108-584-00	MYLAR	0.016MF 0.016MF	5% 5%
	1-517-072-00 A-1-526-565-12	(US,Canadian)HOLDER, LAMP (E)AC PLUG ADAPTOR	C214	1-130-634-00		0.15MF 0.22MF	5% 5%
รกร	A.1-526-574-00	(US,Canadian,E)OUTLET, AC (3 GANG)	C216 C218	1-130-636-00 1-130-632-00		0.1MF	5%
505	▲.1-526-636-00 ▲.1-526-694-00	(UK)OUTLET, AC (AEP,GAEP)OUTLET, AC	C264	1-130-634-00		0.15MF	5%
	and the state of the second second		C266	1-130-636-00		0.22MF	5%
506	A.1-526-576-12 A.1-532-131-11	(E)SELECTOR, POWER VOLTAGE	C303 C307	1-161-317-00		330PF 3.3PF	10%
	∆.1-532-203-11	(UK,E,AEP,GAEP)HOLDER, FUSE (UK,E,AEP,GAEP)FUSE, TIME-LAG	C307	1-161-253-00 1-161-253-00		3.3PF	10% 10%
509	A.1-532-349-XX	(US,Canadian)FUSE	C353	1-161-317-00		330PF	10%
510	♦ ;1-535-115 - 00	TERMINAL	C357	1-161-253-00	CERAMIC	3.3PF	10%
	♦ ;1-535-116-00 ♦ ;1-535-122-00	TERMINAL OD	C601 A	.1-102-394-00	CERANTO		9541.c
312	•;1-555-122-00	TERMINAL, 9P		.1-125-292-00		8200MF	20%
513	♦ ;1 - 535 - 135 - 00	(AEP,GAEP,UK,E)	C606 ₹	. 1-125-292-00	ELECT(BLOCK)	8200MF	20%
513	• ;1-535-139-00	BASE POST 14MM (10MM PITCH) (US,Canadian,AEP,GAEP,E) BASE POST 19MM (10MM PITCH) 2P	CP403 €	;1-607-985-00	PC BOARD, MI	CRO COMPUTER	₹
513	\\$;1-535-140-00	(AEP, GAEP, UK)	0201	8-719-936-05	DIODE EQA01-	05R	
	ŕ	BASE POST 19MM (10MM PITCH) 3P	D301	8-719-815-55	DIODE 181555		
51/	\(; 1-535-149-11	WIRE (30.0MM)	D302	8-719-910-69	DIODE HZ6C3L		
515		(AEP,GAEP)TERMINAL	D303	8-719-815-55	DIODE 1S1555	i	
516	1-536-706-00	TERMÍNAL BOARD (SP)	D304	8-719-815-55	DIODE 181555	i	
51.7	∆.1-551-472-00	(E)CORD, POWER	0351	8-719-815-55	DIODE 1S1555	į	
	A.1-551-551-00	(Canadian)CORD, POWER	D352	8-719-910-69	DIODE HZ6C3L		
	A.1-551-628-00	(US)CORD, POWER	D353	8-719-815-55			
	1-551-817-00 1-551-967-00	(AEP,GAEP)CORD, POWER (UK)CORD, POWER	D401	8-719-815-55	DIODE 1S1555		
	and a continuing page of the	는 실험에 가는 사람들은 것이 되는 경험 전환을 받았다. 그런 기계를 받아 경험한 기계를 받는 것이 되었다. 그 가는 이 전에 가는 것으로 보고 함께 되었다. 그 가는 그 그 그 그 그 그 그 그 	D402	8-719-815-55	DIODE 181555		
	♦ ;1-560-039-00	PIN, CONNECTOR	D403	8-719-815-55	DIODE 181555		
	♦ ;1-560-060-00 ♦ ;1-560-602-00	PIN, CONNECTOR 2P PIN, CONNECTOR 3P	D404	8-719-815-55	DIODE 1S1555)	
	,	•	D405	8-719-815-55	DIODE 1S1555		
	♦;1-560-603-00 ♦;1-560-604-00	PIN, CONNECTOR 4P	D406 D407	8-719-815-55	DIODE 181555		
322	•;1-500-004-00	PIN, CONNECTOR 5P	D407	8-719-815-55	DIODE 181555	•	
	♦;1-607-216-00	(AEP,GAEP)PC BOARD, POWER SWITCH	D416	8-719-815-55	DIODE 181555		
	♦ ;1-607-217-00	(UK)PC BOARD, POWER SWITCH	D417	8-719-815-55	DIODE 151555		
523	♦;1-607-990-00	(US,Canadian,E)PC BOARD, AC SWITCH	D418	8-719-815-55	DIODE 181555)	
	♦ ;1-607-986-00		D419		DIODE 181555		
		PC BOARD, DISPLAY	D420	8-719-815-55			
320	•;1-00/-900-00	PC BOARD, HEADPHONE	D421	8-/19-515-55	DIODE 181555)	
527	♦;1-607-989-00	PC BOARD, OUTPUT	D422	8-719-815-55	DIODE 181555	, ,	
	♦ ;1-607-991-00	PC BOARD, REMOCON TERMINAL	D423	8-719-815-55	DIODE 151555		
529	A-4382-119-A	MOUNTED PCB, INPUT	D424	8-719-815-55	DIODE 181555)	
530		(UK)MOUNTED PCB, AUDIO	D425	8-719-815-55	DIODE 181555		
	♣;A-4388-321-A	(AEP, GAEP)MOUNTED PCB, AUDIO	D426	8-719-815-55	DIODE 181555		
	♣;A-4388-323-A♣;A-4388-324-A	(US,Canadian)MOUNTED PCB, AUDIO (E)MOUNTED PCB, AUDIO	0427	8-719-815-55	DIODE 181555	•	
	,		D428	8-719-815-55	DIODE 181555	;	
521	A.A 4400 667 A	MOUNTED DOW MICON	D/120	9 710 915 55			

NOTE:

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531 **♦**;A-4409-657-A MOUNTED PCB, MICON

- · Items marked " ♣ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- · Due to standardization, parts with part numbers (A-AAA-AAA-XX or A-AAAA-AAA-X) may be different from those used in the set.

SEMICONDUCTORS

In each case, U : μ, for example: UA···: μA···, UPA···: μPA···, UPC···: μPC, UPD···: μPD···

CAPACITORS:

 $^{\circ}$ All capacitors are in μF . Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

D429 D430

RESISTORS

- · All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- * F : nonflammable

COILS

 $^{\circ}$ MMH : mH, UH : $_{\mu}H$

The components identified by shading and mark Λ are critical for safety. Replace only with part number specified.

8-719-815-55 DIODE 1S1555

8-719-815-55 DIODE 1S1555

ELECTRICAL PARTS

501 50V 507 500 500 50V 50V 507 500 507 507 507 250V **50V 50V**

Les composants identifiés par une trame et une marque Asont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifie.

ELECTRICAL PARTS

					
Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
D431 D432 D433	8-719-815-55 8-719-815-55 8-719-815-55	DIODE 1S1555	Q354 Q355 Q356	8-729-612-77 8-729-204-91 8-729-612-77	TRANSISTOR 2SA1027R TRANSISTOR 2SA1049 TRANSISTOR 2SA1027R
D434 D435 D601	8-719-815-55 8-719-815-55 8-719-936-05	DIODE 1S1555 DIODE 1S1555 DIODE S4VB40	Q401 Q402 Q403	8-729-204-82 8-729-663-47 8-729-204-82	TRANSISTOR 2SA1048 TRANSISTOR 2SC1364 TRANSISTOR 2SA1048
D602 D603 D604	8-719-910-69 8-719-200-02 8-719-930-11		Q404 Q405 Q406		TRANSISTOR 2SA1048 TRANSISTOR 2SA1048 TRANSISTOR 2SA1048
D605 D606	8-719-910-41 8-719-910-71	DIODE HZ24-1L DIODE HZ7A1L	Q407 Q408	8-729-204-82 8-729-204-82	TRANSISTOR 2SA1048 TRANSISTOR 2SA1048
FL401	1-519-267-00	INDICATOR TUBE, FLUORESCENT	Q409	8-729-204-82	TRANSISTOR 2SA1048
			Q410	8-729-204-82	TRANSISTOR 2SA1048
IC101	8-759-935-58	IC TL-4558PK	Q411	8-729-204-82	TRANSISTOR 2SA1048
	8-759-890-00 8-759-305-50		Q412	8-729-663-47	TRANSISTOR 2SC1364
			Q413	8-729-663-47	
IC252	8-759-305-50	IC CX-550	Q414	8-729-663-47	TRANSISTOR 2SC1364
	8-759-922 - 00 8-759-611 - 00	IC STK2240 IC CX-761A	Q415	8-729-663-47	
			Q416	8-729-663-47	TRANSISTOR 2SC1364
J-1	1-507-669-00	JACK	Q 4 17	8-729-663-47	TRANSISTOR 2SC1364
J201 J202	1-507-740-00 1-507-740-00	JACK, PIN 4P JACK, PIN 4P	Q418	8-729-663-47	TRANSISTOR 2SC1364
			Q419	8-729-663-47	TRANSISTOR 2SC1364
J203	1-507-740-00	JACK, PIN 4P	Q420	8-729-245-83	TRANSISTOR 2SC2458
J204 J205	1-507-740-00 1-507-741-21	JACK, PIN 4P JACK, PIN 6P	Q421	8-729-245-83	TRANSISTOR 2SC2458
			Q422	8-729-204-82	TRANSISTOR 2SA1048
J206	1-507-741-21	JACK, PIN 6P	Ò501	8-729-663-47	TRANSISTOR 2SC1364
J207	1-507-741-21	JACK, PIN 6P	0502	8-729-663-47	TRANSISTOR 2SC1364
J251	1-507-740-00	JACK, PIN 4P	Q502	8-729-663-47	
1252	1 507 740 00	MCV DIN AD			
J252	1-507-740-00	JACK, PIN 4P	Q504	8-729-663-47	
J253 J254	1-507-740-00 1-507-740-00	JACK, PIN 4P JACK, PIN 4P	Q505	8-729-663-47	TRANSISTOR 2SC1364
		140W DIN CD	Q506	8-729-204-82	
J255	1-507-741-21	JACK, PIN 6P	Q507	8-729-663-47	
J256 J257	1-507-741-21 1-507-741-21	JACK, PIN 6P JACK, PIN 6P	Q508	8-729-663-47	
			Q509	8-729-663-47	TRANSISTOR 2SC1364
L301 ⋅	;1-420-872-00	COIL, AIR CORE	Q510	8-729-663-47	TRANSISTOR 2SC1364
L351 ⋅	;1-420-872-00	COIL, AIR CORE	Q601	8-729-224-61	TRANSISTOR 2SK246
Q301	8-729-679-82	TRANSISTOR 2SA798	0602	8-729-663-47	TRANSISTOR 2SC1364
0302		TRANSISTOR 2SC1364	0603	8-729-180-91	
Q303	8-729-389-09	TRANSISTOR 2SC1890-F	Q604	8-729-663-47	TRANSISTOR 2SC1364
Q304	8-729-612-77	TRANSISTOR 2SA1027R	0605	8-729-224-61	TRANSISTOR 2SK246
Q304 Q305	8-729-204-91	TRANSISTOR 2SA1049		8-729-204-82	TRANSISTOR 2SA1048
		TRANSISTOR 2SA1049 TRANSISTOR 2SA1027R	Q606		
Q306	8-729-612-77		Q607	8-729-173-13	TRANSISTOR 2SB731
Q351	8-729-679-82	TRANSISTOR 2SA798	Q608	8-729-204-82	TRANSISTOR 2SA1048
Q352	8-729-663-47	TRANSISTOR 2SC1364	Q609	8-729-180-91	TRANSISTOR 2SD809
Q353	8-729-389-09	TRANSISTOR 2SC1890-F	Q610	8-729-173-13	TRANSISTOR 2SB731
•			, ,		

NOTE:

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- Items marked " " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ - $\Delta\Delta\Delta$ - $\Delta\Delta$ - Δ X) or Δ - $\Delta\Delta\Delta\Delta$ - $\Delta\Delta$ - Δ X) may be different from those used in the set.

CAPACITORS:

· All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- · F : nonflammable

SEMICONDUCTORS

ELECTRICAL PARTS

In each case, U : μ, for example: UA···: μΑ···, UPA···: μΡΑ···, UPC···: μΡC, UPD···: μΡD···

COILS

· MMH : mH, UH : ևH

FI	FC.	TR 1	CAL	PARTS	

Ref.No.	Part No.	Description				
R307 <u>A</u>	.1-247-123-00 .1-247-125-00 .1-247-093-00	CARBON CARBON CARBON	470 560 27	5% 5% 5%	1/4W 1/4W 1/4W	F F
R313 <u></u>	.1-247-133-00 .1-247-093-00 .1-247-131-00	CARBON CARBON CARBON	1.2K 27 1K	5% 5% 5%	1/4W 1/4W 1/4W	F F
R320	1-244-825-51 1-244-817-51 1-247-232-00	CARBON CARBON CARBON	10 4.7 470	5% 5%	1/2W 1/2W 1/2W	
R325 ⚠	.1-247-131-00 .1-247-143-00 .1-247-123-00	CARBON CARBON CARBON	1K 3.3K 470	5% 5% 5%	1/4W 1/4W 1/4W	F F
R360 ⚠	.1-247-125-00 .1-247-093-00 .1-247-133-00	CARBON CARBON CARBON	560 27 1.2K	5% 5% 5%	1/4W 1/4W 1/4W	F
R365 ▲	.1-247-093-00 .1-247-131-00 .1-244-825-51	CARBON CARBON CARBON	27 IK 10	5% 5% 5%	1/4W 1/4W 1/2W	F
R373 <u></u> .		CARBON CARBON CARBON	4.7 470 1K	5% 5% 5%	1/2W 1/2W 1/4W	F F
R513 ▲.	1-244-873-51	CARBON CARBON METAL	3.3K 1K 390	5% 5% 5%	1/4W 1/2W 2W	F F
R609 ▲. R611 ▲.	1-247-079-00 1-247-107-00	METAL CARBON CARBON CARBON	390 4.7 100 4.7	5% 5% 5% 5%	2W 1/4W 1/4W 1/4W	F
RY301 RY351		RELAY RELAY	- V V	CASCARGINE III N		

ELECTRICAL PARTS

Ref.No.	Part No.	Description
\$302	1-554-125-00 1-554-125-00 1-552-539-00	SWITCH, PUSH (2 KEY) SWITCH, PUSH (2 KEY) SWITCH, KEY BOARD
S402	1-552-539-00	SWITCH, KEY BOARD
S403	1-552-539-00	SWITCH, KEY BOARD
S404	1-552-539-00	SWITCH, KEY BOARD
S405	1-552-539-00	SWITCH, KEY BOARD
S406	1-552-539-00	SWITCH, KEY BOARD
S407	1-552-539-00	SWITCH, KEY BOARD
\$408	1-552-539-00	SWITCH, KEY BOARD
\$409	1-552-539-00	SWITCH, KEY BOARD
\$410	1-552-539-00	SWITCH, KEY BOARD
S411	1-553-856-00	SWITCH, KEY BOARD
S412	1-552-539-00	SWITCH, KEY BOARD
S413	1-553-856-00	SWITCH, KEY BOARD
S414	1-553-856-00	SWITCH, KEY BOARD
S415	1-553-856-00	SWITCH, KEY BOARD
S416	1-553-856-00	SWITCH, KEY BOARD
S417	1-553-856-00	SWITCH, KEY BOARD
S418	1-553-856-00	SWITCH, KEY BOARD
S419	1-553-856-00	SWITCH, KEY BOARD
\$420 \$421	1-553-856-00	SWITCH, KEY BOARD SWITCH, KEY BOARD
S601 🛦	.1-553-318-00 .1-553-319-00 .1-553-447-00	(E)SWITCH, PUSH (AC POWER) (US,Canadian)SWITCH, PUSH (AC POWER) (AEP,GAEP,UK)SWITCH, PUSH (AC POWER)
T601 <u>⊼</u>	.1-447-371-00 .1-447-372-00 .1-447-373-00	(US,Canadian)TRANSFORMER, POWER (AEP,GAEP,UK)TRANSFORMER, POWER (E)TRANSFORMER, POWER
X401	1-527-979-00	OSCILLATOR, CERAMIC

NOTE:

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- : Items marked "

 " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers ($\Delta-\Delta\Delta\Delta-\Delta\Delta\Delta-XX$ or $\Delta-\Delta\Delta\Delta\Delta-\Delta\Delta\Delta-X$) may be different from those used in the set.

SEMICONDUCTORS

In each case, U : μ, for example: UA···: μΑ···, UPA···: μΡΑ···, UPC···: μΡC, UPD···: μΡD···

CAPACITORS:

All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- · F : nonflammable

COILS

· MMH : mH, UH : րH

The components identified by shading and mark A are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque Asont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

ELECTROLYTIC CAPACITORS

			RATING		→: Use the high vol	age rated one.
CAP. (µF)	6.3 VOLT.	10 VOLT.	16 VOLT.	25 VOLT.	35 VOLT.	50 VOLT.
CAP. (µP)	PART No.	PART No.				
0.47					→	1-121-726-00
1.0					→	1-121-391-00
2.2					→	1-121-450-00
3.3	→	→	, →	1-121-392-00	→	1-121-393-00
4.7	_ →	→	→	1-121-395-00	→	1-121-396-00
10	→	→	1-121-651-00	1-121-398-00	-	1-121-738-00
22	→	- →	1-121-479-00	1-121-480-00	1-121-662-00	1-121-152-00
33	-	· →	1-121-403-00	1-121-404-00	1-121-652-00	1-121-405-00
47	→	1-121-352-00	1-121-409-00	1-121-410-00	1-121-653-00	1-121-411-00
100		1-121-414-00	1-121-415-00	1-121-416-00	1-121-357-00	1-121-417-00
220	1-121-419-00	1-121-420-00	1-121-421-00	1-121-422-00	1-121-261-00	1-121-423-00
330	1-121-751-00	1-121-805-00	1-121-521-00	1-121-654-00	1-121-655-00	1-121-656-00
470	1-121-424-00	1-121-425-00	1-121-426-00	1-121-733-00	1-121-361-00	1-121-810-00
1000		1-121-736-00	1-121-245-00	1-121-657-00	1-121-388-00	1-123-061-00
2200	1-121-658-00	1-121-659-00	1-121-660-00	1-123-067-00	1-121-984-00	-
3300	1-121-661-00	1-123-075-00	1-123-071-00	_	-	-

CAR (E)	100 VOLT.	160 VOLT.	250 VOLT.	350 VOLT.
CAP. (µF)	PART No.	PART No.	PART No.	PART No.
0.47		-		
1.0	1-123-249-00	1-123-252-00	1-123-003-00	1-121-168-00
2.2	1-123-250-00	1-123-026-00	-	1-123-028-00
3.3	1-121-995-00		1-123-004-00	1-123-006-00
4.7	1-123-255-00	1-121-246-00	1-121-759-00	1-123-007-00
10	1-121-126-00	1-121-999-00	1-123-254-00	1-123-008-00
22	1-121-996-00	1-123-253-00	1-123-005-00	1-123-022-00
33	1-121-997-00	1-121-757-00	_	-
47	1-123-251-00	1-121-919-00	_	_
100	1-123-084-00			-

CERAMIC CAPACITORS

			RA ¹	TING				
CAP. (pF)	50 VOLT.	040 (-5)	50 VOLT.	0.00 (1.5)	50 VOLT.	040 (5)	50 VOLT.	
CAP. (pr)	PART No.	CAP. (pF)	PART No.	CAP. (pF)	PART No.	CAP. (μF)	PART No.	
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-00	
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-00	
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-00	
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-00	
2.0	1-102-935-00	33	1-102-963-00	220	1-102-978-00	0.0022	1-102-121-0	
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-0	
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-0	
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-0	
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-0	
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-0	
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-0	
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-0	
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-0	
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022	1-101-005-0	
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-0	
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00			
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00			
16	1-102-952-00	110	1-102-815-00					
18	1-102-953-00	120	1-102-816-00					
20	1-102-958-00	130	1-101-081-00					

 $0.001\mu F = 1,000pF$

CERAMIC (SEMICONDUCTOR) CAPACITORS

		R	ATING -	: Use the high vo	Itage rated one.	
040 (25 VOLT.	50 VOLT.	0.00 (5)	25 VOLT.	50 VOLT.	
CAP. (µF)	PART No.	PART No.	CAP. (µF)	PART No.	PART No.	
0.001	→	1-161-039-00	0.018	1-161-016-00	1-161-054-00	
0.0012	→	1-161-040-00	0.022	1-161-017-00	1-161-055-00	
0.0015		1-161-041-00	0.027	1-161-018-00	1-161-056-00	
0.0018		1-161-042-00	0.033	1-161-019-00	1-161-057-00	
0.0022		1-161-043-00	0.039	1-161-010-00	1-161-058-00	
0.0027	→	1-161-044-00	0.047	1-161-021-00	1-161-059-00	
0.0033	→	1-161-045-00	0.056		1-161-060-00	
0.0039	→	1-161-046-00	0.068		1-161-061-00	
0.0047	→	1-161-047-00	0.082	1-161-024-00	1-161-062-00	
0.0056	-→	1-161-048-00	0.1	1-161-025-00	1-161-063-00	
0.0068	-	1-161-049-00	T			
0.0082	1-161-012-00	1-161-050-00				
0.01	1-161-013-00	1-161-051-00				
0.012	→	1-161-052-00				
0.015	1-161-015-00	1-161-053-00	1			

MYLAR CAPACITORS

						RATING					
CAP. (µF)	50 VOLT.	100 VOLT.	200 VOLT.	CAR (UE)	50 VOLT.	100 VOLT.	200 VOLT.		50 VOLT.	100 VOLT.	200 VOLT.
CAT. (μΓ)	PART No.	PART No.	PART No.	CAP. (µF)	PART No.	PART No.	PART No.	CAP. (µF)	PART No.	PART No.	PART No.
0.001	1-108-227-00	1-108-365-00	1-108-409-00	0.01	1-108-239-00	1-108-377-00	1-108-421-00	0.1	1-108-251-00	1-108-389-00	1-108-433-00
0.0012	1-108-351-00	1-108-366-00	1-108-410-00	0.012	1-108-357-00	1-108-378-00	1-108-422-00	0.12		1-108-390-00	
0.0015	1-108-228-00	1-108-367-00	1-108-411-00	0.015	1-108-240-00	1-108-379-00	1-108-423-00	0.15		1-108-391-00	
0.0018	1-108-352-00	1-108-368-00	1-108-412-00	0.018	1-108-358-00	1-108-380-00	1-108-424-00	0.18	1-108-364-00	1-108-392-00	
0.0022	1-108-230-00	1-108-369-00	1-108-413-00	0.022	1-108-242-00	1-108-381-00	1-108-425-00	0.22		1-108-393-00	
0.0027	1-108-353-00	1-108-370-00	1-108-414-00	0.027	1-108-359-00	1-108-382-00	1-108-426-00	0.27	1-108-854-00		-
0.0033	1-108-232-00	1-108-371-00	1-108-415-00	0.033	1-108-244-00	1-108-383-00	1-108-427-00	0.33	1-108-855-00	_	_
0.0039	1-108-354-00	1-108-372-00	1-108-416-00	0.039	1-108-360-00	1-108-384-00	1-108-428-00	0.39	1-108-856-00	_	_
0.0047	1-108-234-00	1-108-373-00	1-108-417-00	0.047	1-108-246-00	1-108-385-00	1-108-429-00	0.47	1-108-857-00	_	_
0.0056	1-108-355-00	1-108-374-00	1-108-418-00	0.056			1-108-430-00				
0.0068	1-108-237-00	1-108-375-00	1-108-419-00	0.068			1-108-431-00				
0.0082	1-108-356-00	1-108-376-00	1-108-420-00	0.082			1-108-432-00				



TANTALUM CAPACITORS

	·		RATING	→:	Use the high voltage	e rated one.	
CAP. (µF)	3.15 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	25 VOLT.	35 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.01		Ì			→	→	1-131-396-00
0.015						→	1-131-397-00
0.022						→	1-131-398-00
0.033					İ	→	1-131-399-00
0.047							1-131-400-00
0.068					→	—	1-131-401-00
0.1						→	1-131-402-00
0.15						_	1-131-403-00
0.22					i _		1-131-404-00
0.33						1-131-409-00	1-131-405-00
0.47	_	_			1-131-412-00	1-131-409-00	1-131-406-00
0.68	_	_	_	1-131-415-00	1-131-412-00	1-131-410-00	
1.0	_	_	1-131-418-00	1-131-413-00	1-131-413-00		1-131-407-00
1.5	_	1-131-421-00	- 1731-418-00	1-131-416-00		→ 1 121 411 00	1-131-408-00
2.2	1-131-424-00		1-131-419-00	1-131-410-00	→ 1-131-414-00	1-131-411-00	1-131-348-00
3.3	-	1-131-422-00		1-131-417-00		1-131-355-00	1-131-349-00
4.7	1-131-425-00	-	1-131-420-00		1-131-362-00	1-131-356-00	1-131-350-00
6.8	-	1-131-423-00	1-131-376-00	1-131-369-00	1-131-363-00	1-131-357-00	1-131-351-00
10	1-131-426-00	1-131-383-00	1-131-376-00	1-131-370-00	1-131-364-00	1-131-358-00	1-131-352-00
15	1-131-390-00	1-131-384-00	1	1-131-371-00	1-131-365-00	1-131-359-00	1-131-353-00
22	1-131-390-00		1-131-378-00	1-131-372-00	1-131-366-00	1-131-360-00	
33		1-131-385-00	1-131-379-00	1-131-373-00	1-131-367-00		
	1-131-392-00	1-131-386-00	1-131-380-00	1-131-374-00			
47	1-131-393-00	1-131-387-00	1-131-381-00	_			
68	1-131-394-00	1-131-388-00	-	_			
100	1-131-395-00	_	-	_		1	

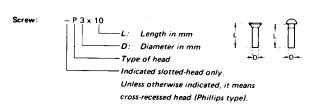


	-		RATING				
CAP. (µF)	3 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	35 VOLT	
	PART No.						
0.033						1-131-273-00	
0.047						1-131-274-00	
0.068						1-131-275-00	
0.1		!				1-131-276-00	
0.15						1-131-277-00	
0.22					1-131-262-00	1-131-278-00	
0.33			_	_	1-131-263-00	1-131-279-00	
0.47			1-131-169-00		1-131-264-00	1-131-280-00	
0.68			_	1-131-258-00	1-131-265-00	1-131-281-00	
1.0			1-131-254-00	_	1-131-266-00	1-131-282-00	
1.5		1-131-250-00			1-131-267-00	1-131-283-00	
2.2		_	_	1-131-259-00	1-131-268-00	1-131-284-00	
3.3		_	1-131-255-00	_	1-131-269-00	_	
4.7		1-131-251-00	1-131-171-00	_	1-131-270-00	_	
6.8		-	_	1-131-260-00	1-131-271-00	_	
10	-	_	1-131-256-00	_	1-131-272-00		
15		1-131-252-00	_	1-131-261-00		1	
22		-	1-131-257-00	-			
33	1-131-176-00	1-131-253-00	1-131-173-00	_			
47	1-131-288-00	1-131-174-00	_	_			
100	1-131-177-00		-		+		

1/4 WATT CARBON RESISTORS

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1 0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00		1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-476-00	13k	1-246-500-00	130k	1-246-524-00	l .	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-477-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1 -210 -817 -00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-478-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-479-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-480-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-481-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-482-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-0
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-483-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-0
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-484-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-0
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-485-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-0
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-486-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-0
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-487-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-0
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-0
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-0
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-0
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

HARDWARE NOMENCLATURE



Reference Designation	Shape	Description	Remarks
	·	SCREWS	
P	₽	pan-head screw	binding-head (B) screw for replacement
PWH	₽	pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP	863	pan-head screw with spring washer	binding-head (B) screw and spring washer for replace- ment
PSW PSPW	()(1)	pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R	€	round-head screw	binding-head (B) screw for replacement
к	Þ	flat-countersunk-head screw	
RK	₽	oval-countersunk-head screw	
В	þ	binding-head screw	
Т	€ ⊃	truss-head screw	binding-head (B) screw for replacement
F	[]	flat-fillister-head screw	
RF	€⊃	fillister-head screw	
B∨	₽	brazier-head screw	1

Nut, Washer,	Retaining ring:
	N 3
	Diameter of usable screw or shaft
	Reference designation

Reference Designation	Shape	Description	Remarks
		SELF TAPPING SCRE	ws
TA	(13)	self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self- tapping (TA, B) screw for replacement
PTPWH	#	pan-head self-tapping screw with washer face	binding-head self tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
		SET SCREWS	t
sc		set screw	
SC	-⊚€⊒-	hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
		NUT	
N	-[]-©	nut	
		WASHERS	
w	0	flat washer	
sw	-⊙ { -	spring washer	
LW	0	internal-tooth lock washer	ex: LW3, internal
LW	٥	external-tooth lock washer	ex: LW3, external
		RETAINING RINGS	
E	0	retaining ring	
G	®	grip-type retaining ring	

Sony Corporation