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Technical Document Distribution

Brand: Model Product: Description:	Ibanez SDR1000 Stereo Dig Service M	gital Reverb anual		
Musicparts Document	Number: 45074	TechTips: No	Pages: 29	Dated: 1986

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NOTE: Large original over-sized drawings will need to be taped together. We feel this is better than reducing them and losing fine details.

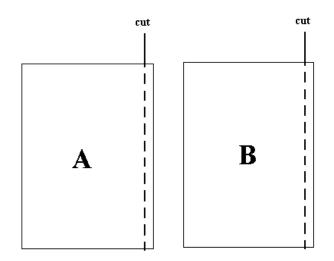
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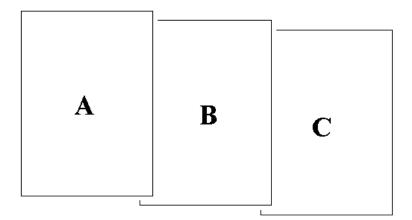
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Pasteup Guide



It's ok to slightly cut into the black print, as documents contain an intentional extended overlaping printed area.



Only one trim cut per page is needed, then overlay as shown and tape.



SERVICE MANUAL

STEREO DIGITAL REVERB

SPECIFICATIONS

	Factory Program
Ξ.	
-	User Program
	Parameters
	EQ
	MIDI
	Remote Control
	Memory Up
	Memory Down
	Effect ON/OFF
	Hold ON/OFF
	Remote
	MIDI IN
	MIDI Remote Control
	Displays
	FL
	LED
	LED
<u> </u>	
	Level Control
	Dry
	Effect
	BYPASS
	Frequency Response Direct
	Effect
	Dynamic Range
÷.	Total Harmonic Distortion
	Digital Cording
	Sampling Rate
-	
	Equalizer
	Low
	L, Mid
	H. Mid
	High
	High
	Input Level
	input impedance
	Audio Output
	Audio Output
	Output Level
	Output Impedance
	Output Impedance
	FUWEI
	F UWEI
	$\langle \rangle$
	Power Consumption
	Dimension
_	Dimension

Weight

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK A ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH IBANEZ PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY IBANEZ.

(ROM) 30

(RAM) 70 REV. T/PRE-DELAY/E. REF. T/E. REF. LEV/RT. HIGH/ SIZE/GATE T/F. B. LEV/TAP/DEPTH/SPEED/EFF. LEV LOW/L. MID/H. MID/HIGH PROG. NO/MEMORY/MID/ CH

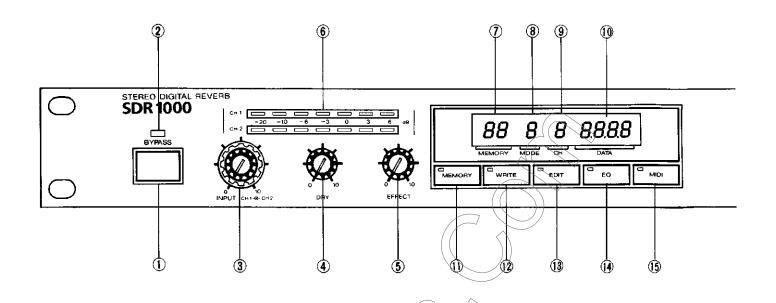
Phone Jack (FS1M) Phone Jack (FS1M) Phone Jack (FS1M) Phone Jack (FS1M) DIN 6P (IFC 60) DIN 5P Program change OMNI ON/OFF

8 digit, 8 segment Input level indicator/Stereo 7 segment/Channel 5 FUNCTION KEYS, 14 PARAMETER KEYS, and BYPASS Input level control/Stereo Direct signal output level control Processed signal output level control ON/OFF (Power OFF: BYPASS ON)

20 -- 20 kHz 20 -- 10 kHz More than 90 dB Less than 0.03% 16 bit linear PCM 26 kHz

ATTENTION AU COMPOSANT AYANT RAPPORT A LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE A SUR LES DIAGRAMMES SCHÉ-MATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REM-PLACER CES COMPOSANTS QUE PAR DES PIÈCES IBANEZ DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR IBANEZ. a) Front Panel



1) BYPASS SWITCH

This switch is used to turn the reverb effect on and off.

2 BYPASS LED

This LED lights when the unit is in bypass (reverb effect off).

3 INPUT LEVEL

This controls the level of input signal going into the unit. It is a "concentric" control. That is, the knob is "split" into separate "outer" and "inner" sections. The outer knob controls the input level of Channel 1, and the inner knob controls the input level of Channel 2. For both knobs, clockwise rotations increase the input level. If you wish to adjust both channels at the same levels, match the markers on both knobs.

(4) DRY LEVEL

This controls the amount of "dry", or unprocessed signal that appears in the output signal, when the reverb effect is on. Clockwise rotations increase the amount of dry signal. When the reverb effect is off, it has no effect on the output level. DRY LEVEL is used along with 5) EFFECT LEVEL to control the mix of dry and effect signals in the output signal.

(5) EFFECT LEVEL

This controls the amount of "effect", or processed signal that appears in the output signal, when the reverb effect is on. Clockwise rotations increase the amount of effect signal. When the reverb effect is off, it has no effect on the output level. EFFECT LEVEL is used along with 4) DRY LEVEL to control the mix of dry and effect signals in the output signal.

(6) INPUT LEVEL LEDS

These LEDs are used along with 3) INPUT LEVEL to adjust the optimum input level. The LEDs are labelled in "dB" levels, with "0 dB" representing the optimum input level. The procedure for setting the optimum input level is discussed in section 1-4, a. 3) of this manual.

T MEMORY DISPLAY

These two digits indicate the SDR1000 memory location that has been recalled for playback, copying or editing. The 30 factory preset programs reside in locations "00" through "29". Note that these programs cannot be erased. The 70 userpreset programs reside in locations "30" through "99". These locations can be edited, copied and erased.

® MODE DISPLAY

This single digit indicates which of the SDR1000's modes (reverb and delay effects) is being used in a particular memory location. The eight modes are numbered from "0" to "7".

(9) CHANNEL DISPLAY

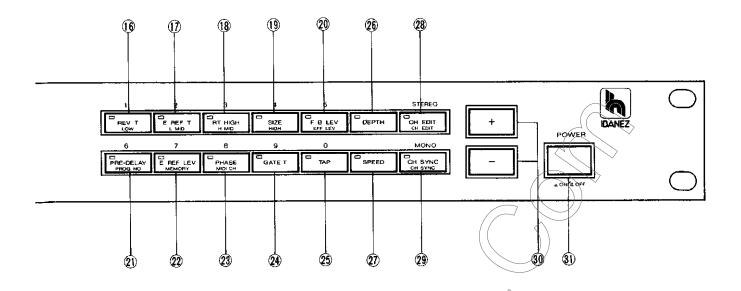
This single digit indicates the SDR1000 channel that is being edited in the "Parameter Edit" and "EQ Edit" functions. It also identifies multi-channel patches when they are recalled.

10 DATA DISPLAY

These four digits indicate various data depending on what operation the user is performing. When recalling and using various memory locations, these digits will indicate the "Reverb Time" set in that location. The other data displayed by these digits are discussed throughout section 1-4. of this manual.

() MEMORY KEY

This key is used to call up a particular memory location for playback, copying or editing. The procedure for calling up memory locations is discussed in section 1-4. b. of this manual. When this key is used, or when an operation concerning this key is occurring, the key's LED will light.



12 WRITE KEY

This key is used to enter an edited program into memory, or to copy a program into another location. The "Program Copy" function are discussed in sections 1-4. c. and 1-4. d. of this manual. When this key is used, or when an operation concerning this key is occurring, the key's LED will light.

(13) EDIT KEY

This key is used when it is desired to edit a parameter(s) in a program (in any memory location). The "Parameter Edit" function is discussed in section 1.4. c. of this manual. When this key is used (when the "Parameter Edit" function is used), the key's LED will light.

(A) EQ KEY

This key is used when it is desired to edit the EQ (equalizer) settings of a particular program (in any memory location). The "EQ Edit" function is described in section 1.4, c. 4) of this manual. When this key is used (when the "EQ Edit" function is used), the key's LED will light.

(5) MIDI KEY

This key is used when it is desired to enter or change the unit's MIDI channel or MIDI receiving mode. It is also used when a memory location is to be assigned to a MIDI patch number. For a discussion of the SDR1000's MIDI operation refer to section 1.4. e. of this manual. When this key is used (when the "MIDI Edit" function is used) the key's LED will light.

(6) REVERB TIME KEY

This key serves three purposes. It serves as the number "1" key for the "Memory Select" and "Program Copy" functions. In the "Parameter Edit" function this key calls up the "Reverb Time" parameter for editing. In the "EQ Edit" function this key calls up the "Low" band (100 Hz center frequency) EQ filter for editing.

17 BARLY REFLECTION TIME KEY

This key serves three purposes. It serves as the number "2" key for the "Memory Select" and "Program Copy" functions. In the "Parameter Edit" function this key calls up the "Early Reflection Time" parameter for editing. In the "EQ Edit" function this key calls up the "Low-Mid" band (400 Hz center frequency) EQ filter for editing.

18 REVERB TIME HIGH FREQUENCY KEY

This key serves three purposes. It serves as the number "3" key for the "Memory Select" and "Program Copy" functions. In the "Parameter Edit" function this key calls up the "Reverb Time High Frequency (attack time of the reverb high-frequency roll-off) parameter for editing. In the "EQ Edit" function this key calls up the "High-Mid" band (1.6 kHz center frequency) EQ filter for editing.

(I) SIZE KEY

This key serves three purposes. It serves as the number "4" key for the "Memory Select" and "Program Copy" functions. In the "Parameter Edit" function this key calls up the "Size" (simulated hall/room/plate size) parameter for editing. In the "EQ_EDIT" function this key calls up the "High" band (6.4 kHz center frequency) EQ filter for editing.

20 FEEDBACK LEVEL KEY

This key serves three purposes. It serves as the number "5" key for the "Memory Select" and "Program Copy" functions. In the "Parameter Edit" function this key calls up the "Feedback Level" parameter for editing. In the "EQ Edit" function this key calls up the "EQ Output Level" parameter for editing.

(1) PRE-DELAY KEY

This key serves three purposes. It serves as the number "6" key for the "Memory Select" and "Program Copy" functions. In the "Parameter Edit" function this key calls up the "Pre-Delay Time" parameter for editing. In the "MIDI Edit" function this key is used to enter the MIDI patch number selection.

2 EARLY REFLECTION LEVEL KEY

This key serves three purposes. It serves as the number "7" key for the "Memory Select" and "Program Copy" functions. In the "Parameter Edit" function this key calls up the "Early Reflection Level" parameter for editing. For MIDI functions this key is used to assign a particular memory location to a particular MIDI patch number (for program selection by MIDI).

23 PHASE KEY

This key serves three purposes. It serves as the number "8" key for the "Memory Select" and "Program Copy" functions. In the "Parameter Edit" function this key inverts the phase of the "Early Reflection" and "Feedback" sound components. In the "MIDI Edit" function this key is used to assign the SDR1000 to a particular MIDI channel.

(2) GATE TIME KEY

This key serves two purposes. It serves as the number "9" for the "Memory Select" and "Program Copy" functions. In the "Parameter Edit" function this key calls up the "Gate Time" parameter for editing.

25 TAP KEY

This key serves two purposes. It serves as the number "O" for the "Memory Select" and "Program Copy" functions. In the "Parameter Edit" function this key is used to select the number of taps (repeats) in the "Dual Delay" Mode only.

26 DEPTH KEY

In the "Parameter Edit" function this key calls up the "Auto-Pan Depth" parameter for editing in the "Auto-Pan" Mode only.

1 SPEED KEY

In the "Parameter Edit" function this key calls up the "Auto-Pan Speed" parameter for editing in the "Auto-Pan" Mode only.

(28) CHANNEL EDIT KEY

This key serves two purposes. In the "Memory Select" function it is used to select "stereo" operation. In the "Parameter Edit" and "EQ Edit" functions this key is used to alternate editing between Channel 1 and Channel 2 (when each channel is to have different parameter settings). When both channels are to be set to identical parameter settings, this key is not used.

29 CHANNEL SYNC KEY

This key serves two purposes. In the "Memory Select" function it is used to select "mono" operation. In the "Parameter Edit" and "EQ Edit" functions this key is used to determine whether each channel will have different parameter settings or identical parameter settings.

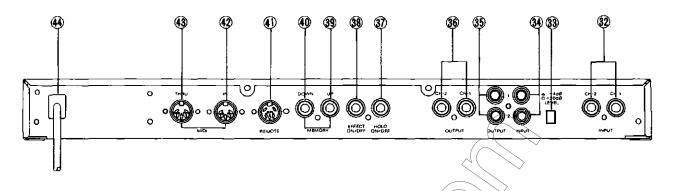
30 INCREMENT/DECREMENT KEYS

These keys serve two basic purposes. For "Memory Select" and "Program Copy" functions these keys are used to select the memory location number. In the "Parameter Edit", "EQ Edit" and "MID1 Edit" functions these keys are used to increase and decrease data settings. Pressing these keys once will cause the data to go up or down by one increment. Pressing and holding these keys will cause the data to increase or decrease more rapidly.

3) POWER SWITCH

This switch powers the unit up and down. When the unit is powered up the flourescent display will light up indicating that power has been applied to the unit.

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32 PHONE INPUT JACKS

These jacks accept input via standard 1/4" mono phone plugs, such as those found on standard "guitar cords". These inputs accept unbalanced line-level or instrument-level signals. The rightmost jack accepts input for Channel 1, while the next jack to the left accepts input for Channel 2. When the SDR1000 is set for "mono" (single-channel) operation, the Channel 1 input should be used. Also, when these jacks are used, the inputs to 34) PIN INPUT JACKS are disconnected.

3 INPUT/OUTPUT LEVEL SWITCH

This switch selects between line-level input (averaging +4 dBv) operation and instrument-level input (averaging -20 dBv) operation. This switch should be set for the correct input level, range before 3) INPUT LEVEL is adjusted.

34 PIN INPUT JACKS

These jacks accept input via standard RCA-type pin plugs, such as those found on "stereo system" cables. These inputs basically duplicate the function of 32) PHONE INPUT JACKS. The upper jack accepts input for Channel 1, while the lower jack accepts input for Channel 2. When the SDR1000 is set for "mono" operation, Channel 1 input should be used. When 32) PHONE INPUT JACKS are used, these inputs are disconnected.

3 PIN OUTPUT JACKS

These jacks accept standard RCA-type pin plugs, such as those found on "stereo system" cables. These outputs provide a mix of the "dry" and "effect" signals. When the SDR 1000 is set for "stereo" operation, the upper jack provides the output from Channel 1 and the lower jack provides the output from Channel 2. When the SDR 1000 is set for "mono" operation, Channel 1's output is used.

36 PHONE OUTPUT JACKS

These jacks accept standard 1/4" phone plugs, such as those found on standard "guitar cords". These outputs basically duplicate the function of 35) PIN OUTPUT JACKS. When the SDR1000 is set for "stereo" operation, the right jack provides the output from Channel 1 and the left jack provides the output from Channel 2. When the SDR1000 is set for "mono" operation, Channel 1's output is used.

Interpretention (Interpretention) (Interprete

This jack accepts input for remote control of the "Hold" feature, via standard 1/4" mono phone plugs. When this input is used with a footswitch or other controller, "Hold" is turned on or off. Use a momentary-type footswitch, such as the lbanez FS1M. For information regarding the "Hold" feature, refer to section 1.4. g. of this manual.

38 EFFECT JACK

This jack accepts input for remote control of EFFECT ON/ OFF, via standard 1/4" mono phone plugs. Operation of this jack duplicates the function of 1) ON/OFF SWITCH. When this input is used with a footswitch or other controller, the unit is taken in or out of EFFECT. Use a momentary-type footswitch, such as the Ibanez FS1M.

MEMORY UP JACK

This jack accepts input for remote incrementing (increasing by steps) of the memory location, via standard 1/4" mono phone plugs. When this input is used with a footswitch or other controller, the memory location is increased by one. When the footswitch is held down, the memory location increases more apidly. Use a momentary-type footswitch, such as the Ibanez FS1M. For more information on this feature, refer to section 1-4. g. of this manual.

MEMORY DOWN JACK

This jack accepts input for remote decrementing (decreasing by steps) of the memory location, via standard 1/4" mono phone plugs. When this input is used with a footswitch or other controller, the memory location is decreased by one. When the footswitch is held down, the memory location decreases more rapidly. Use a momentary-type footswitch, such as the Ibanez FS1M.

(I) REMOTE CONTROLLER JACK

This jack accepts input from the Ibanez IFC60 Intelligent Foot Controller, for remote selection of memory locations. This jack accepts standard 6-pin DIN plugs, as found on the cable supplied with the IFC60. For information about using the IFC60 with the SDR1000 refer to section 1-4. f. of this manual.

(1) MIDI IN JACK

This jack accepts input from any MIDI controller, for MIDIcontrolled selection of memory locations. This jack accepts standard 5-pin DIN plugs, as found on standard "MIDI" cables. For information about using MIDI for selection of program locations refer to section 1-4. e. of this manual.

43 MIDI THRU JACK

This jack transmits the MIDI information received at 42) MIDI IN JACK for MIDI control of other devices. This jack accepts standard 5-pin DIN plugs, as found on standard "MIDI" cables.

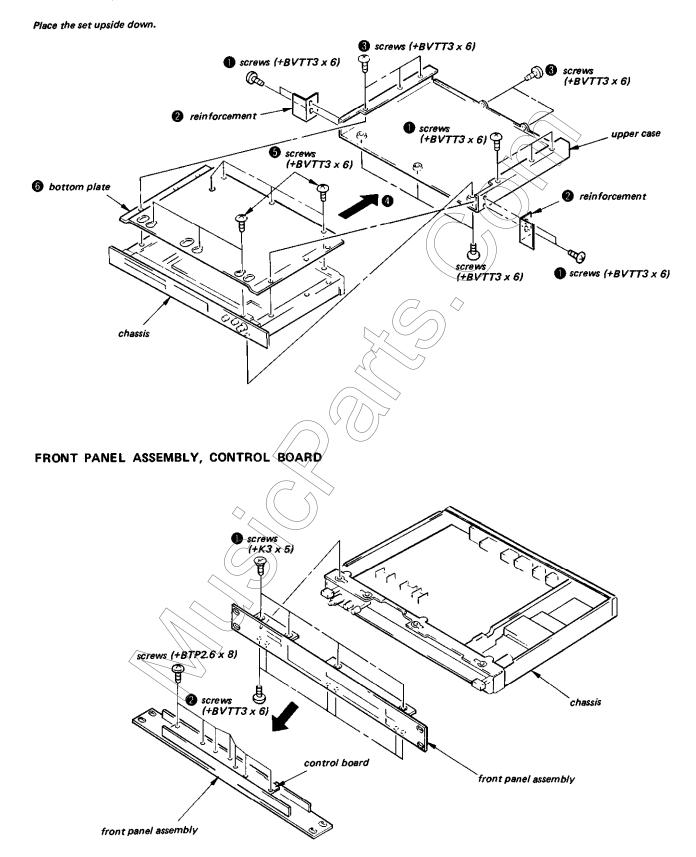
4 AC POWER CORD

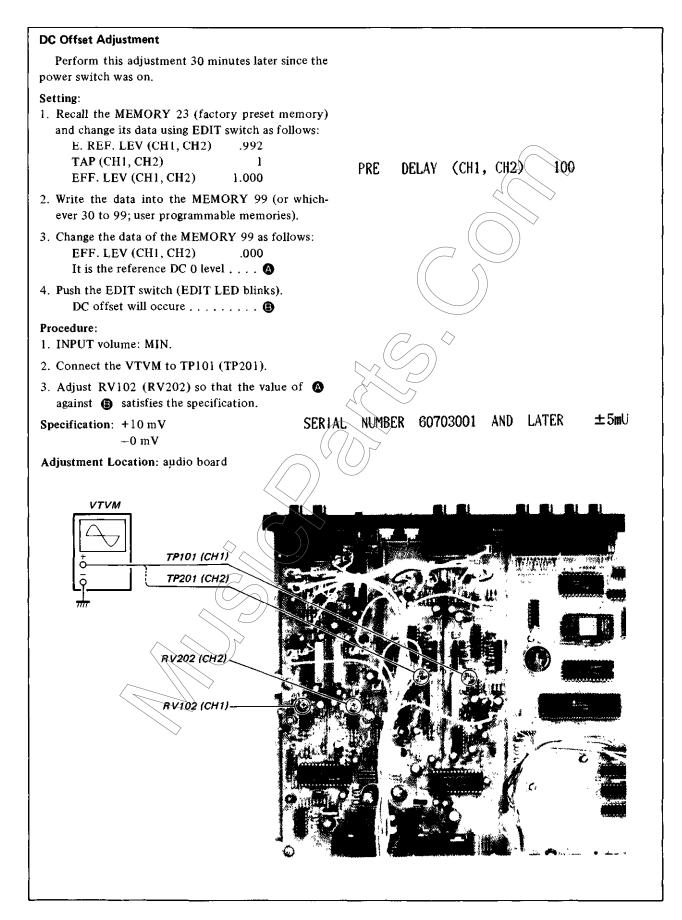
This cord connects the unit to a 120V (220-240V) AC outlet.

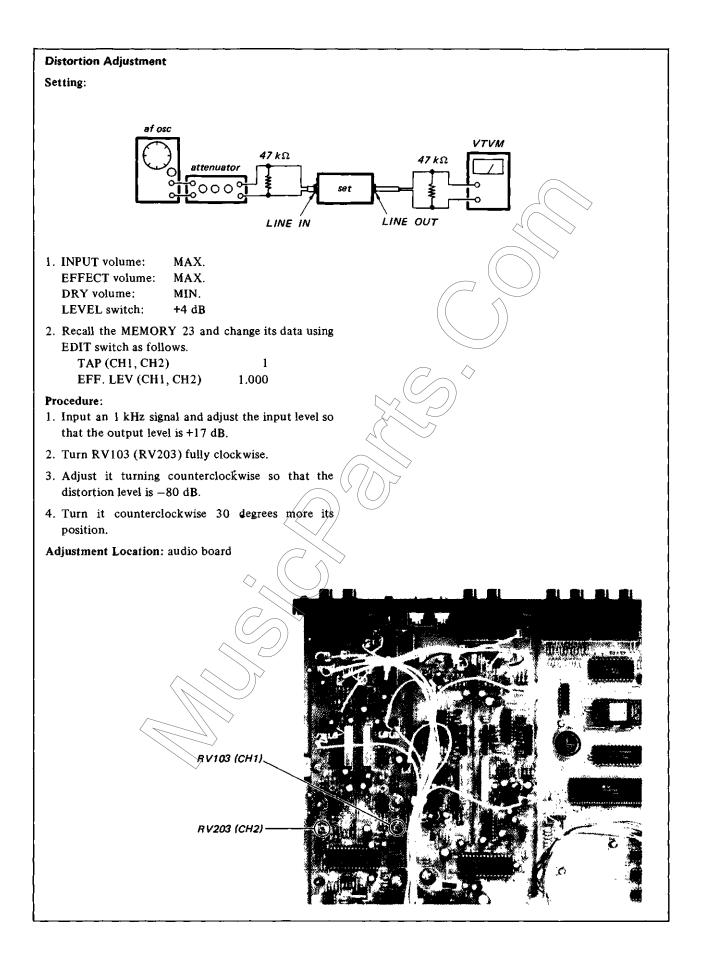
DISASSEMBLY

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

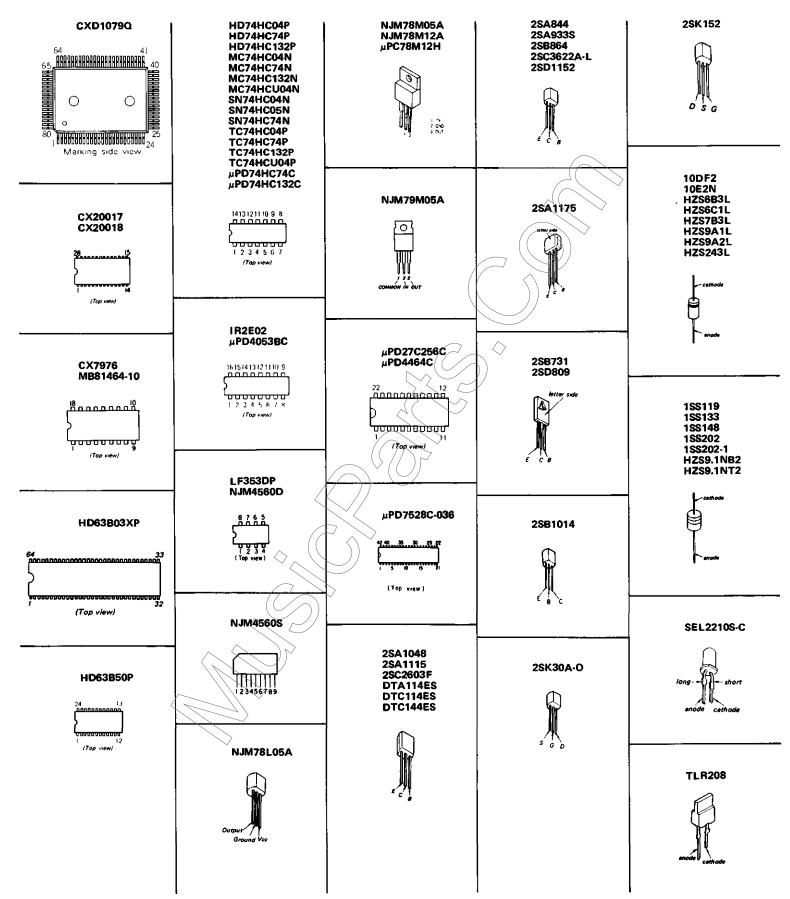
UPPER CASE, BOTTOM PLATE



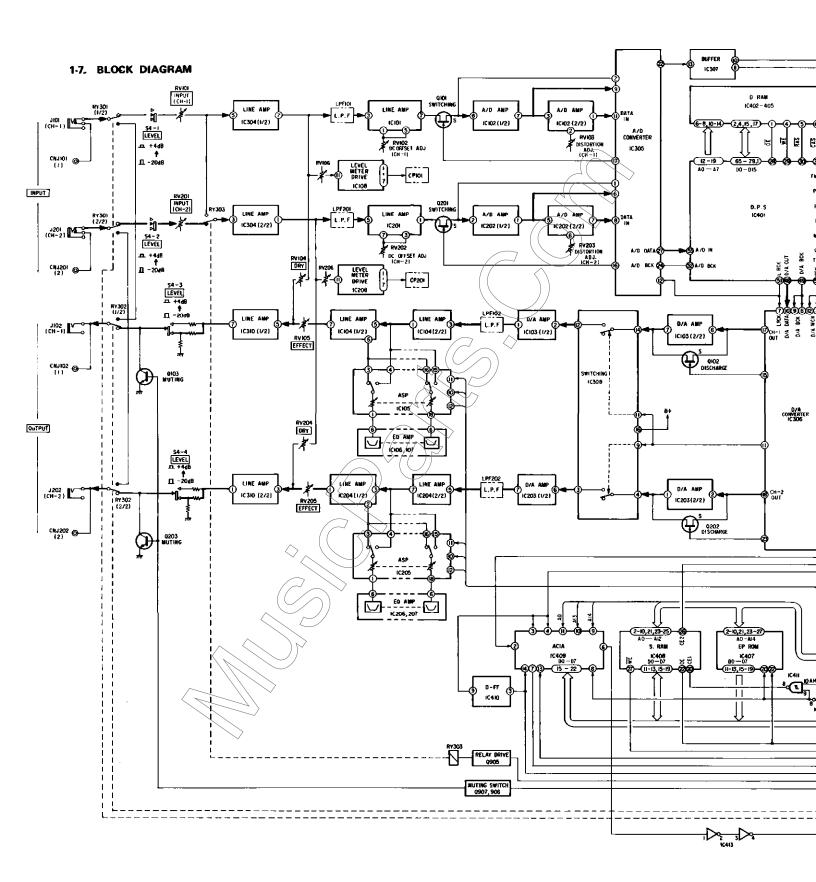


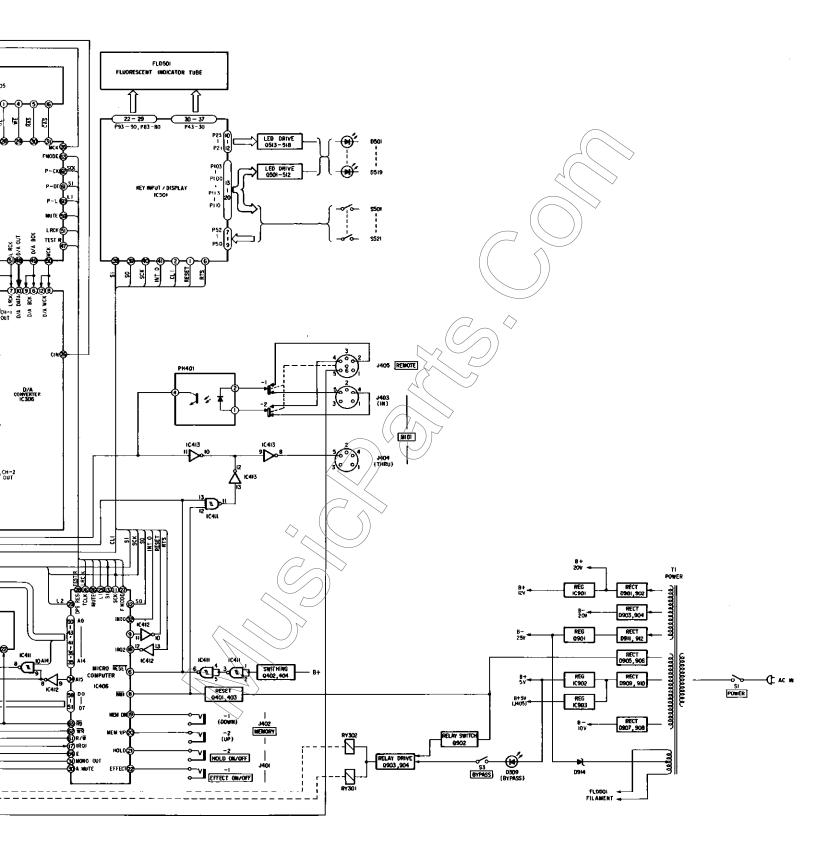


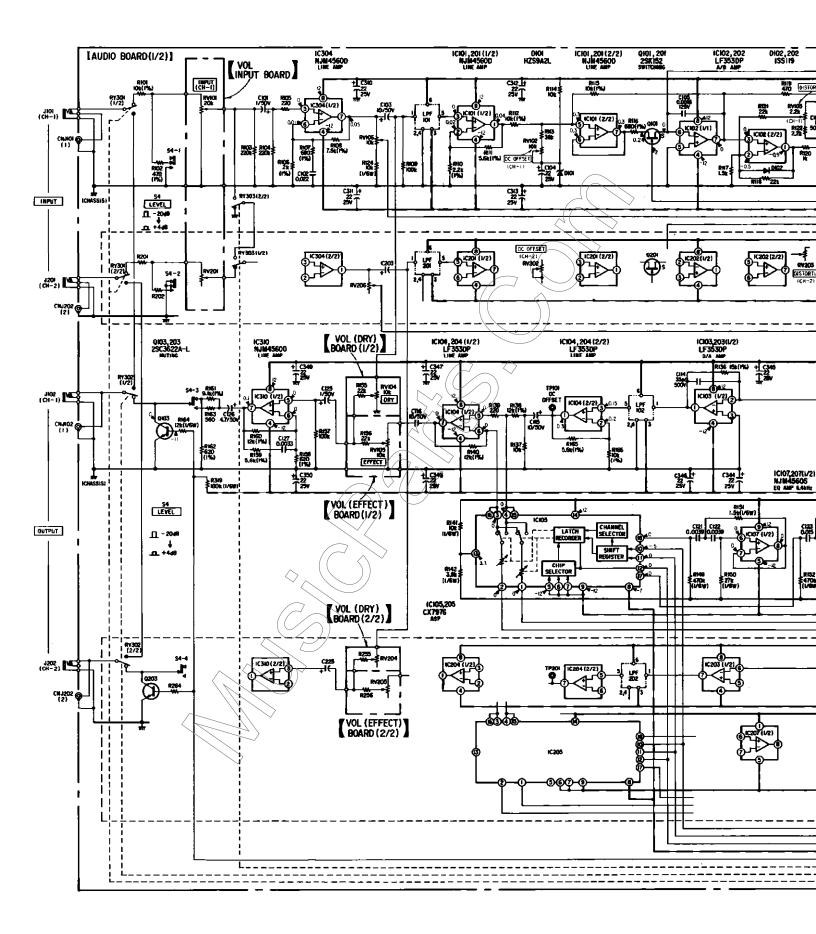
• Semiconductor Lead Layouts

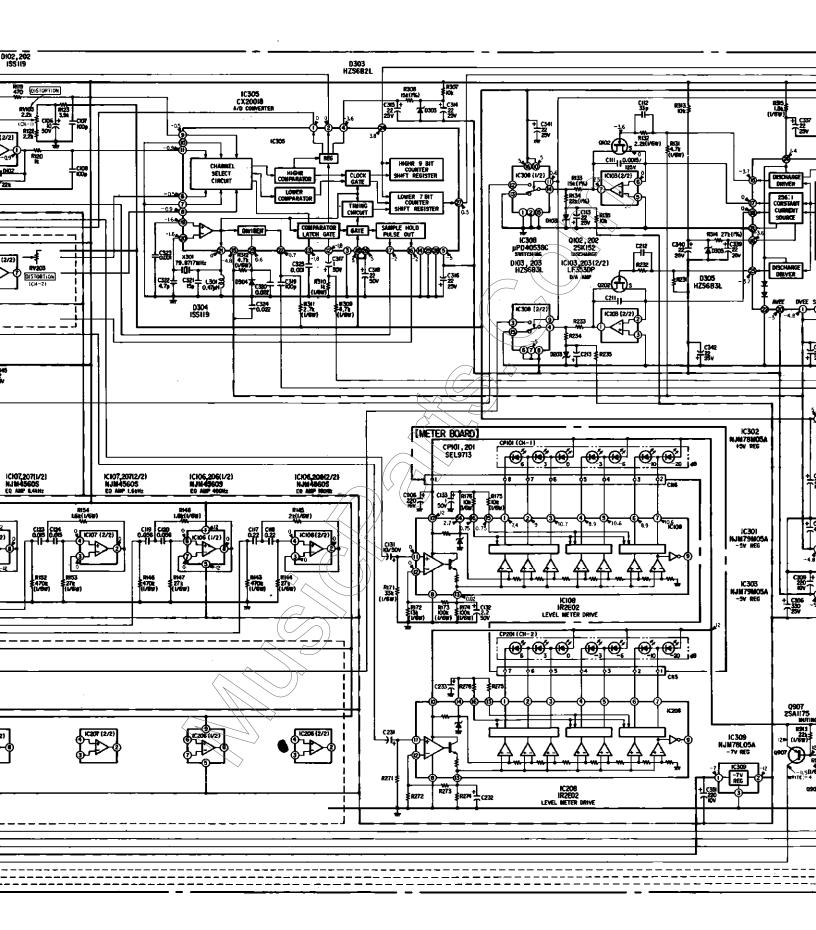


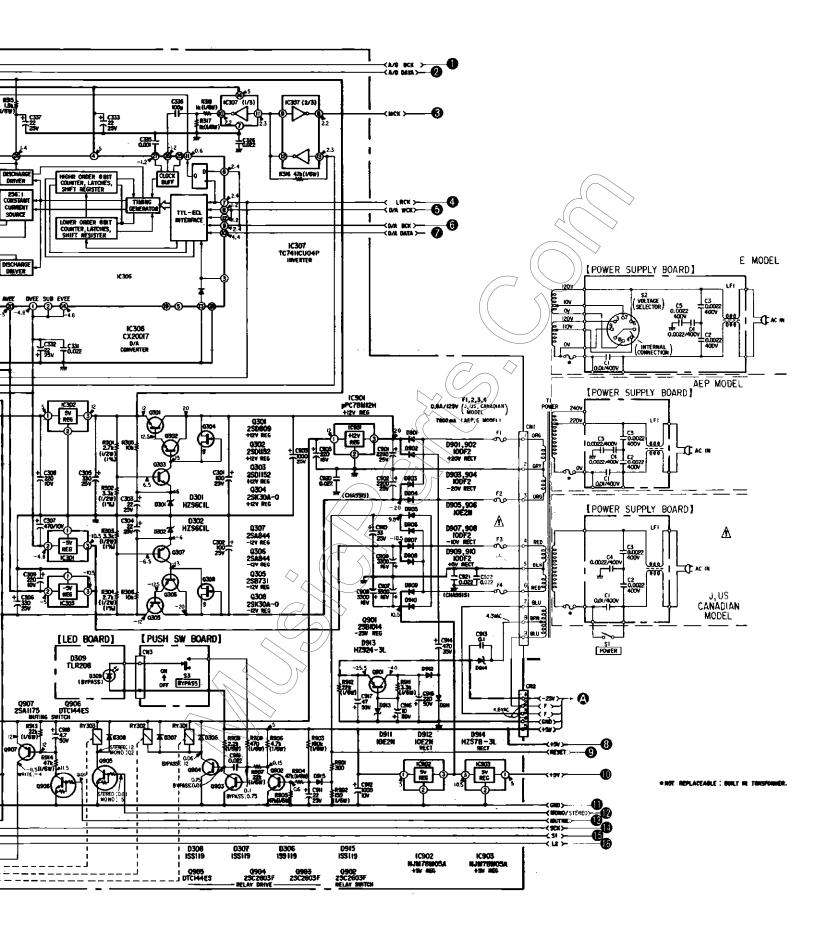
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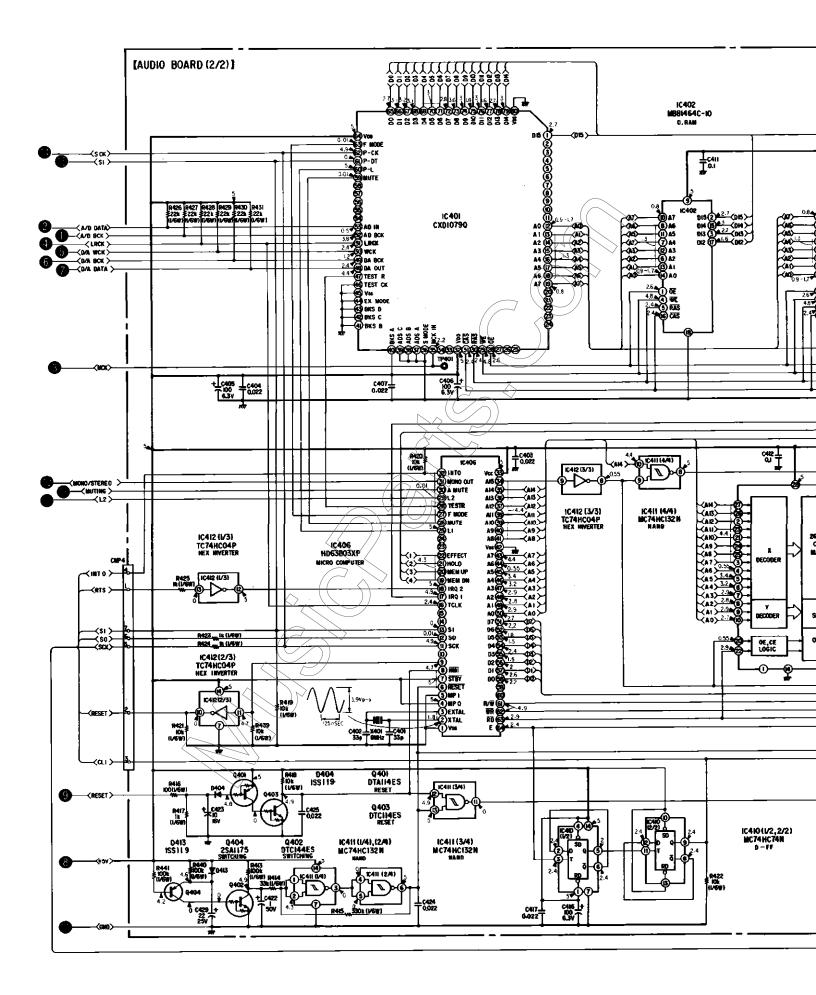


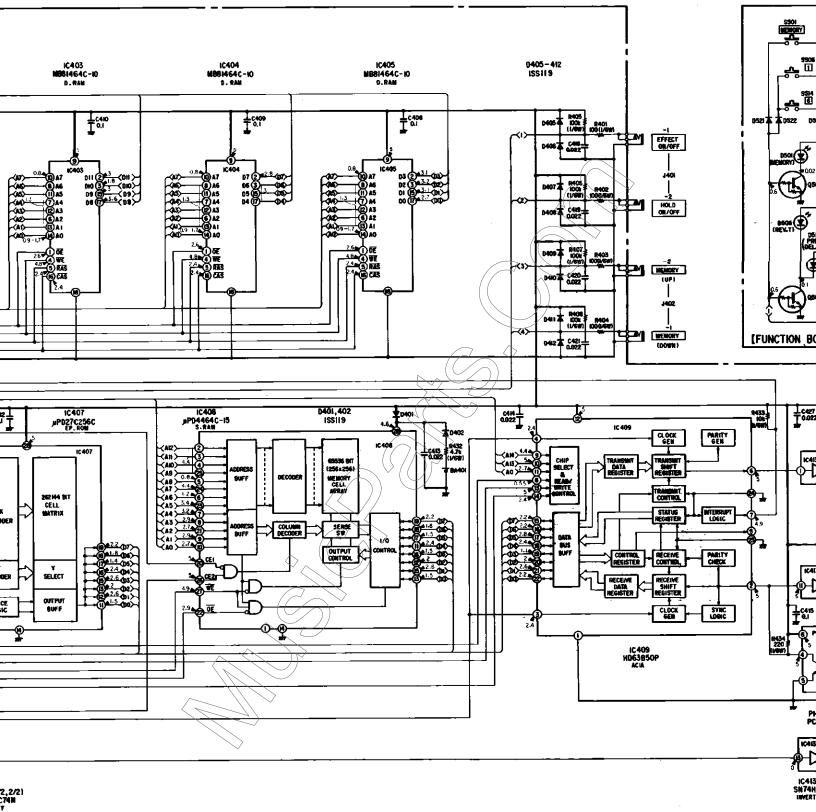


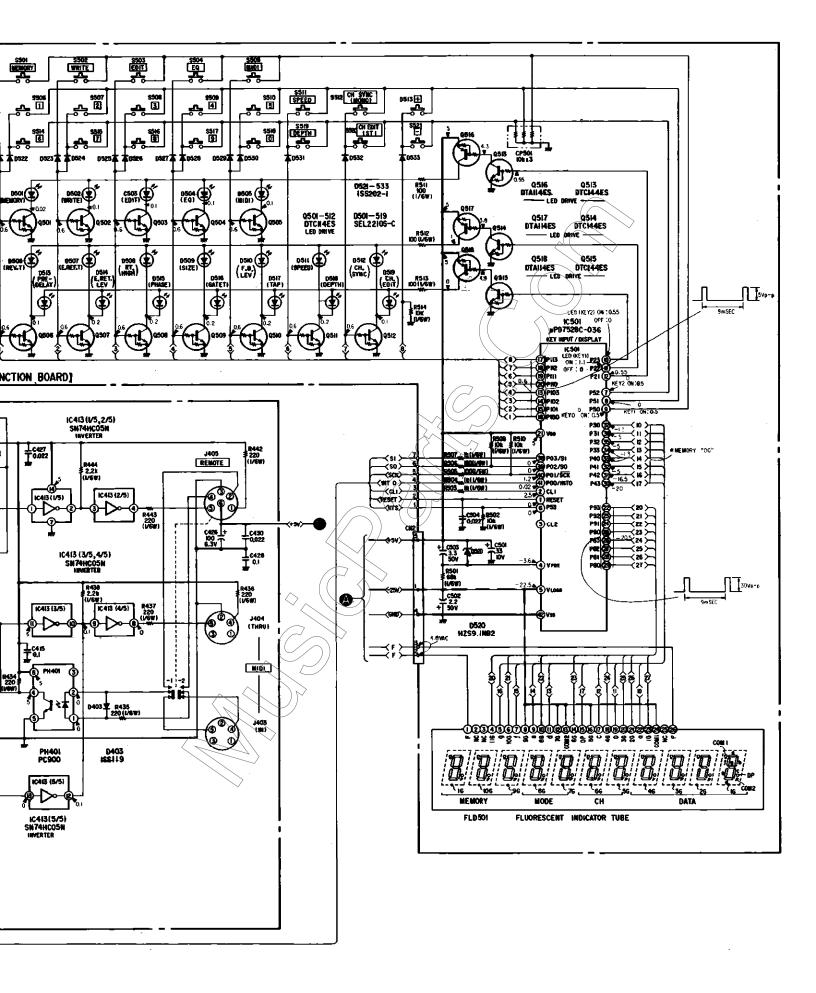












DIAGRAMS

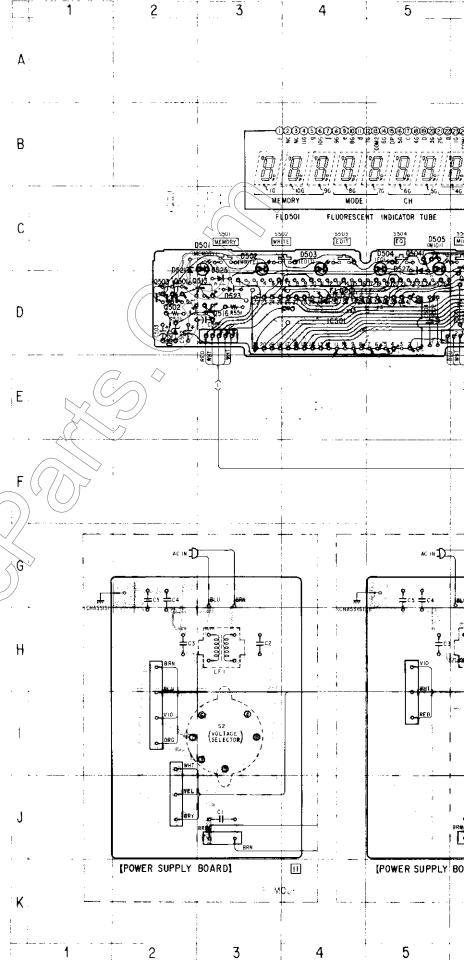
MOUNTING DIAGRAM - Conductor Side -

Note:

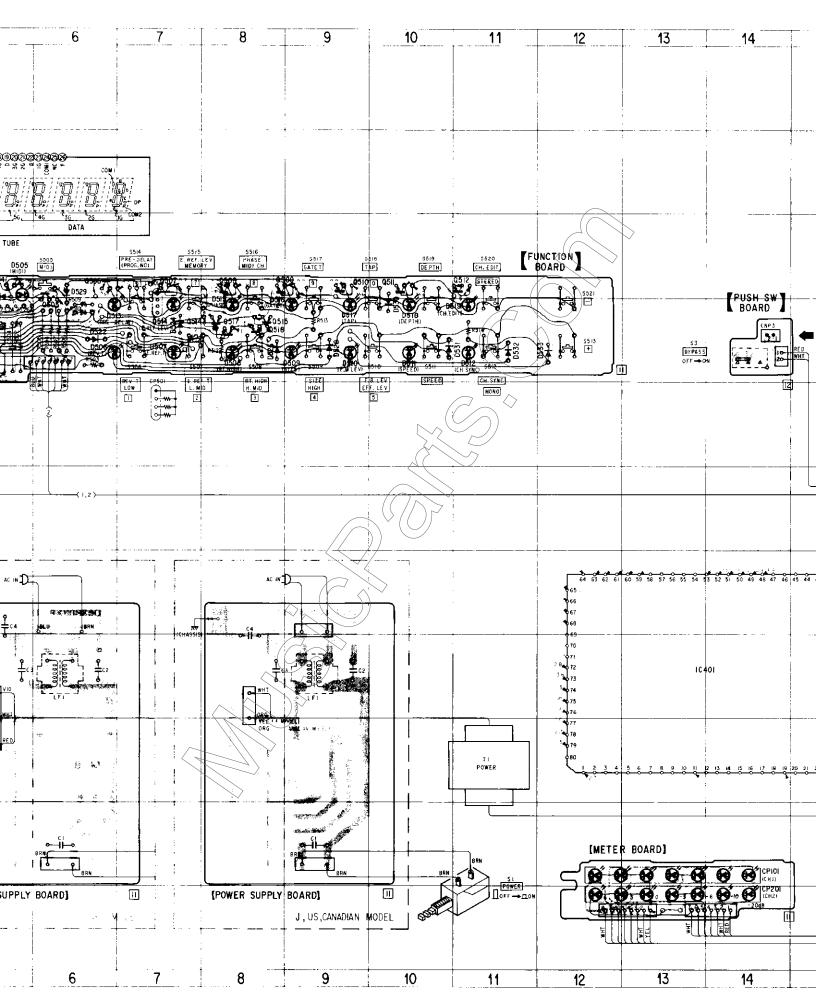
- : parts extracted from the component side. 0-٠
- : parts extracted from the conductor side.
- : part mounted on the conductor side.
- : Through hole.

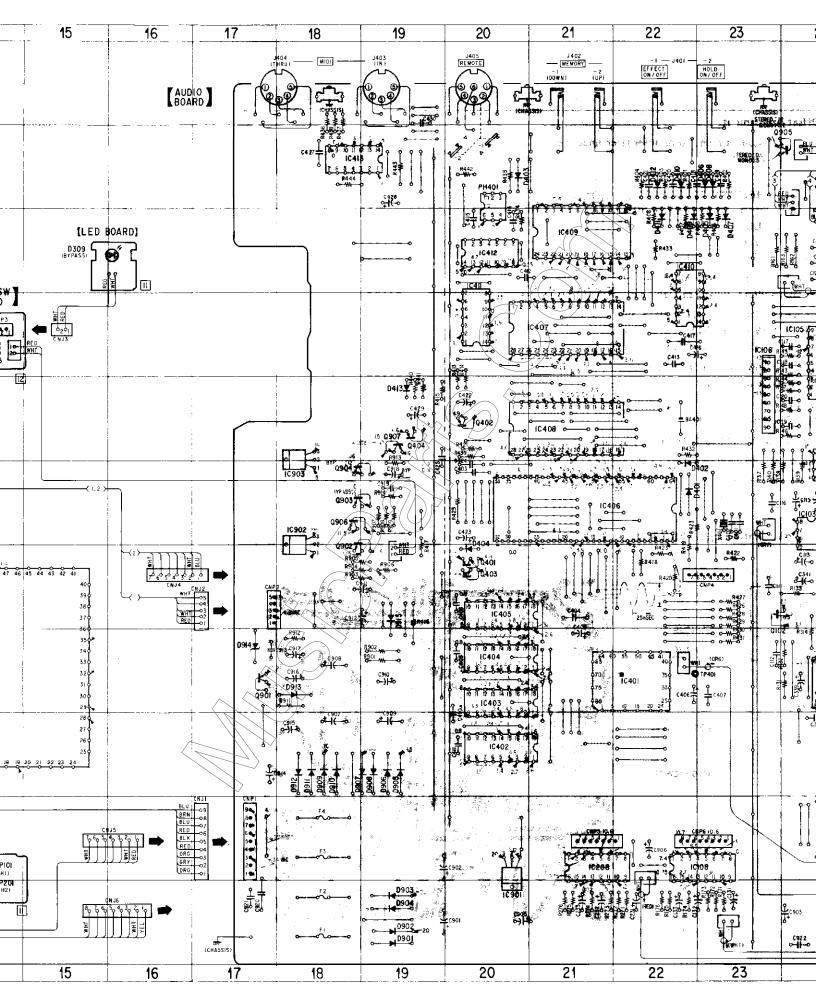
• SEMICONDUCTOR LOCATION

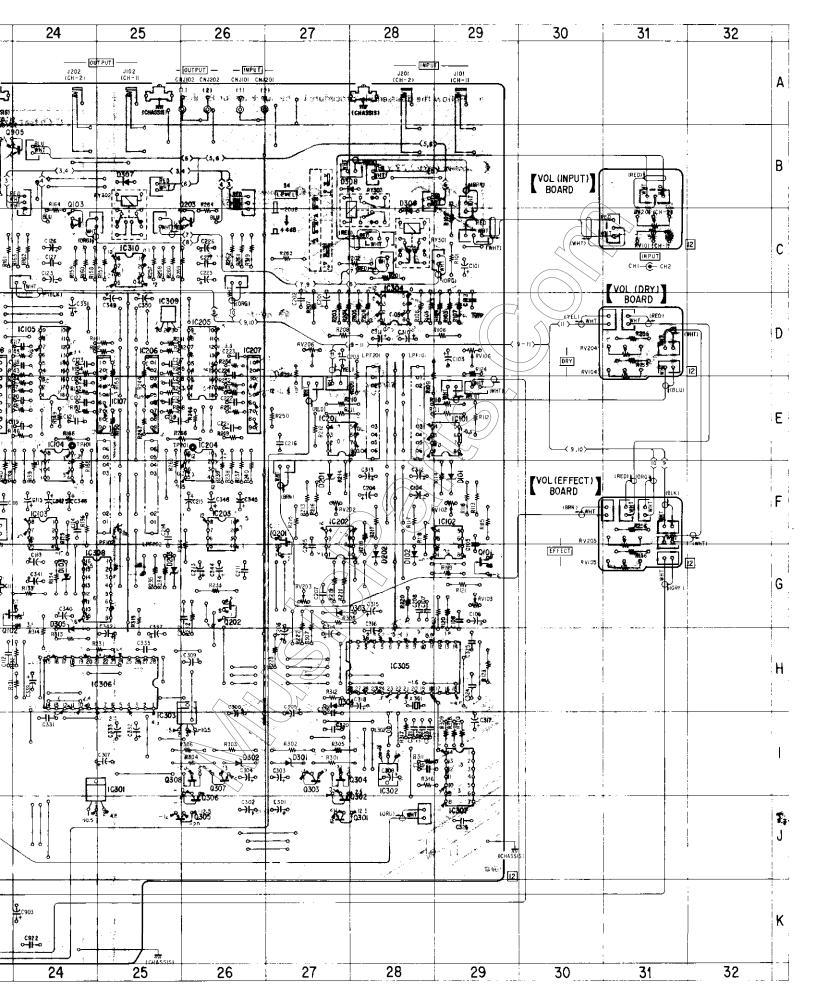
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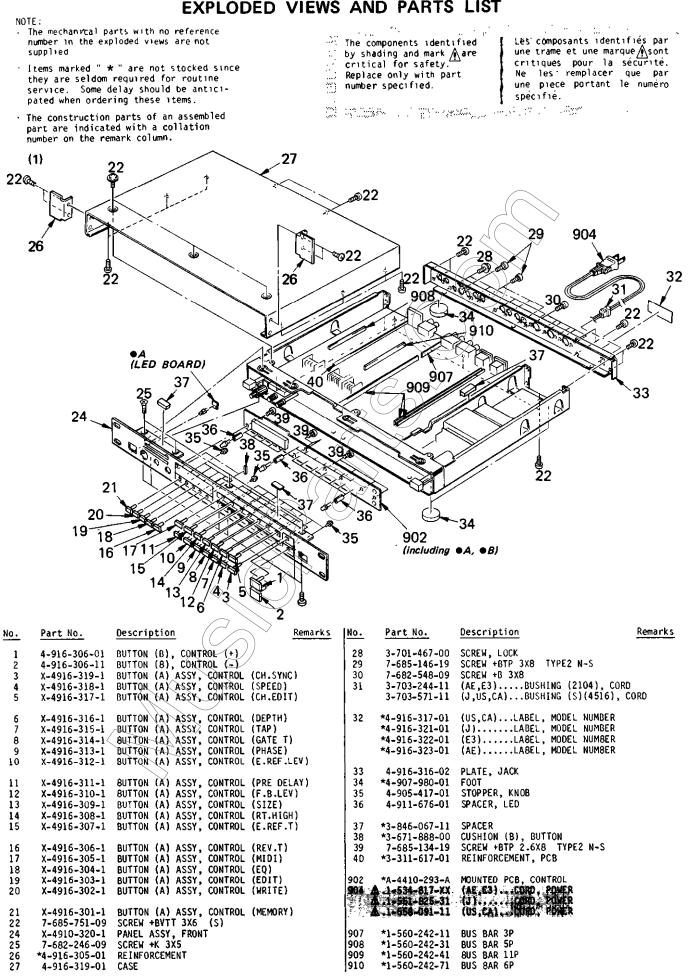


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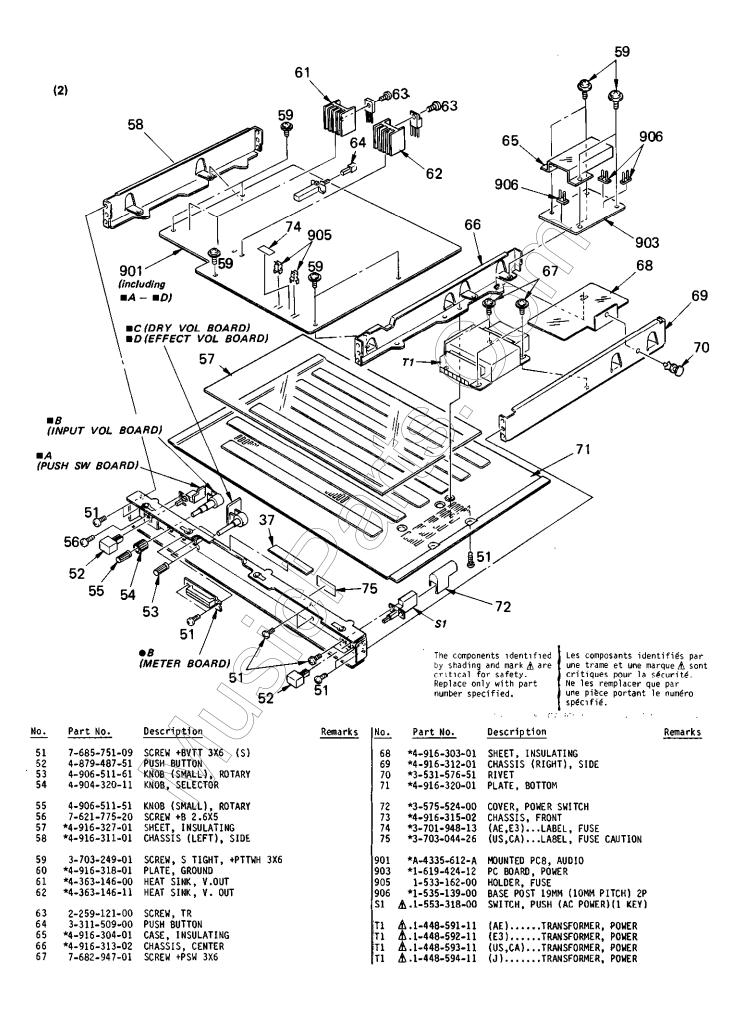








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ELECTRICAL PARTS LIST

NOTE
Items marked " * " are not stocked since
they are seldom required for routine
service. Some delay should be antici-
pated when ordering these items.

 \cdot If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

```
CAPACITORS:
 MF:µF, PF:µµF.
RESISTORS
· All resistors are in ohms.
' F : nonflammable
COILS
· MMH : mH, UH : µH
SEMICONDUCTORS
```

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

The components identified by shading and mark 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.

ELECTRI	CAL PARTS		J	ELECTRIC	AL PARTS	\searrow		
Ref.No. Part No.	Description		Ref.No.	Part No.	Description			
	MOUNTED PCB, AUDIO MOUNTED PCB, CONTROL PC BOARD, POWER		C132 C133 C201	1-124-904-00 1-124-903-00 1-123-380-00	ELECT ELECT ELECT	2.2MF 1MF 1MF	20% 20% 20%	50V 50V 50V
904 A.1-534-817-XX A.1-551-825-31 A.1-558-091-11			C202 C203 C204	1-136-157-00 1-123-356-00 1-123-330-00	FILM ELECT ELECT	0.022MF 10MF 22MF	5% 20% 20%	50V 50V 25V
905 1-533-162-00 906 *1-535-139-00 907 *1-560-242-11 908 *1-560-242-31	BASE POST 19MM (10MM PIT) BUS BAR 3P	CH) 2P	C205 C206 C207	1-104-255-11 1-123-356-00 1-162-282-31	ELECT	0.0018MF 10MF 100PF	5% 20% 10%	125V 50V 50V
			C208 C211 C212	1-162-282-31 1-104-228-00 1-162-211-31	CERAMIC POLYSTYRENE CERAMIC	100PF 0.0015MF 33PF	10% 5% 5%	50V 125V 50V
912 *1-564-500-11 BA401 1-528-120-00	PIN, CONNECTOR 7P BATTERY, LITHIUM (CR-202		C213 C214 C214 C215	1-123-330-00 1-107-159-00 1-123-356-00	MICA	22MF 33PF 10MF	20% 5% 20%	25V 500V 50V
C1 A.1-161-744-00 C2 A.1-161-742-00 C3 A.1-161-742-00 C4 A.1-161-742-00	CERAMIC 0.0022MF CERAMIC 0.0022MF	400V 20% 400V 20% 400V 20% 400V	C216 C217 C218	1-124-186-00 1-136-169-00 1-136-169-00	FILM FILM	10MF 0.22MF 0.22MF	20% 5% 5%	50V 50V 50V
C5 A .1-161-742-00 C101 1-123-380-00 C102 1-136-157-00	ELECT 1MF	MF 20% 400V 20% 50V 5% 50V	C219 C220 C221	1-136-162-00 1-136-162-00 1-110-202-00		0.056MF 0.056MF 0.0039MF	5% 5% 5%	50V 50V 50V
C103 1-123-356-00 C104 1-123-330-00 C105 1-104-255-11		20% 50V 20% 25V 5% 125V	C222 C223 C224	1-110-202-00 1-136-155-00 1-136-155-00	FILM FILM	0.0039MF 0.015MF 0.015MF	5% 5% 5%	50V 50V 50V
C106 1-123-356-00 C107 1-162-282-31 C108 1-162-282-31	CERAMIC 100PF	20% 50V 10% 50V 10% 50V	C225 C226 C227	1-123-380-00 1-123-369-00 1-110-201-00	ELECT MYLAR	1MF 4.7MF 0.0033MF	20% 20% 5%	50V 50V 50V
C111 1-104-228-00 C112 1-162-211-31 C113 1-123-330-00	CERAMIC / 33PF	5% 125V 5% 50V 20% 25V	C231 C232 C233	1-124-907-00 1-124-904-00 1-124-903-00	ELECT ELECT ELECT	10MF 2.2MF 1MF	20% 20% 20%	50V 50V 50V
C114 1-107-159-00 C115 1-123-356-00 C116 1-124-186-00	ELECT	5% 500V 20% 50V 20% 50V	C301 C302 C303	1-123-333-00 1-123-333-00 1-123-330-00	ELECT ELECT	100MF 100MF 22MF	20% 20% 20%	25V 25V 25V
C117 1-136-169-00 C118 1-136-169-00 C119 1-136-162-00	Film 0.22MF FILM 0.22MF FILM 0.22MF FILM 0.256MF	5% 50V 5% 50V 5% 50V	C304 C305 C306	1-123-330-00 1-124-700-11 '-124-700-11		22MF 330MF 330MF	20% 20% 20%	25V 25V 25V
C120 1-136-162-00 C121 1-110-202-00 C122 1-110-202-00	MYLAR 0.0039MF	5% 50V 5% 50V 5% 50V		1-123-310-00 1-123-308-00 1-123-308-00	ELECT ELECT	470NF 220MF 220MF	20% 20% 20%	10V 10V 10V
C123 1-136-155-00 C124 1-136-155-00 C125 1-123-380-00	FILM 0.015MF	5% 50V 5% 50V 20% 50V	C310 C311 C312	1-123-330-00 1-123-330-00 1-123-330-00	ELECT	22MF 22MF 22MF	20% 20% 20%	25V 25V 25V
C126 1-123-369-00 C127 1-110-201-00 C131 1-124-907-00		20% 50V 5% 50V 20% 50V	C313 C314 C315	1-123-330-00 1-123-330-00 1-123-330-00	ELECT ELECT ELECT	22MF 22MF 22MF	20% 20% 20%	25V 25V 25V

	ELECTRIC	AL PARTS				1	ELECTRIC	AL PARTS			
Ref.No.	Part No.	Description				Ref.No.	Part No.	Description			
C316 C317 C318	1-123-330-00 1-123-380-00 1-123-330-00	ELECT ELECT ELECT	22MF 1MF 22M F	20% 20% 20%	25V 50V 25V	C429 C430 C501	1-124-481-11 1-162-596-00 1-123-645-00	ELECT CERAMIC ELECT	22MF 0.022MF 33MF	20% 20%	25V 25V 10V
C319 C320 C321	1-162-282-31 1-162-596-00 1-162-203-31	CERAMIC CERAMIC CERAMIC	100PF 0.022MF 15PF	10% 5%	50V 25V 50V	C502 C503 C504	1-123-612-00 1-123-613-00 1-162-596-00		2.2MF 3.3MF 0.022MF	20% 20%	50V 50V 25V
C322 C323 C324	1-162-195-31 1-162-294-31 1-162-596-00	CERAMIC CERAMIC CERAMIC	4.7PF 0.001MF 0.022MF	10% 10%	50V 50V 25V	C901 C902 C903	1-124-563-11 1-124-563-11 1-124-557-11	FLECT	2200MF 2200MF 1000MF	20% 20% 20%	25V 25V 25V
C325 C326 C331	1-162-294-31 1-162-596-00 1-162-596-00	CERAMIC CERAMIC CERAMIC	0.001MF 0.022MF 0.022MF	10%	50V 25V 25V	C905 C906 C907	1-123-321-00 1-123-321-00 1-124-897-11	ELECT	220MF 220MF 3300MF	20% 20% 20%	16V 16V 16V
C332 C333 C335	1-123-330-00 1-123-330-00 1-162-294-31	ELECT	22MF 22MF 0.001MF	20% 20% 10%	25V 25V 50V	C908 C909 C910	1-124-897-11 1-124-897-11 1-123-343-00	ELECT	3300MF 3300MF 33MF	20% 20% 20%	16V 16V 25V
C336 C337 C339		CERAMIC ELECT ELECT	100PF 22MF 22MF	10% 20% 20%	50V 25V 25V	C911 C912 C913	1-124-481-11 1-124-473-11 1-136-165-00	ELECT))	22MF 1000MF 0.1MF	20% 20% 5%	25V 10V 50V
C340 C341 C342		ELECT Elect Elect	22MF 22MF 22MF	20% 20% 20%	25V 25V 25V	C914 C915 C916	1-124-900-51 1-124-911-51 1-124-907-00	ELECT ELECT ELECT	470MF 220MF 10MF	20% 20% 20%	35V 50V 50V
C344 C345 C346	1-123-330-00 1-123-330-00 1-123-330-00	ELECT ELECT ELECT	22MF 22MF 22MF	20% 20% 20%	25V 25V 25V	C917 C918 C919	1-124-910-91 1-124-927-11 1-162-596-00	ELECT ELECT CERAMIC	47MF 4.7MF 0.022MF	20% 20%	50V 50V 25V
C347 C348 C349	1-123-330-00 1-123-330-00 1-123-330-00	ELECT ELECT ELECT	22MF 22MF 22MF	20% 20% 20%	25V 25V 25V	C920 C921 C922	1-162-596-00 1-162-596-00 1-162-596-00	CERAMIC CERAMIC CERAMIC	0.022MF 0.022MF 0.022MF		25V 25V 25V
C350 C351 C401	1-123-330-00 1-123-308-00 1-162-211-31	ELECT ELECT CERAMIC	22MF 220MF 33PF	20% 20% 5%	25V 10V 50V	CNJ102 CNJ201	1-507-908-11 1-507-908-11 1-507-908-11 1-507-908-11 1-507-908-11	JACK, PIN 4P JACK, PIN 4P			
C402 C403 C404	1-162-211-31 1-162-596-00 1-162-596-00	CERAMIC	33PF 0.022MF 0.022MF	5%	50V 25V 25V	CNP1 CNP2	*1-560-339-00 *1-564-339-00 *1-564-495-11	PIN. CONNECT	OR SP		
C405 C406 C407	1-124-468-11 1-124-468-11 1-162-596-00	ELECT ELECT CERAMIC	100MF 100MF 0.022MF	20 3 20 5	6.3V 6.3V 25V	CNP4 CNP5	*1-564-341-11 *1-564-341-11 *1-564-342-11	PIN, CONNECT PIN, CONNECT	OR 7P OR 7P		
C408 C409 C410	1-162-561-11 1-162-561-11 1-162-561-11		0.1MF 0.1MF 0.1MF	$\langle \rangle$	16V 16V 16V	CP101 CP201	1-807-492-11 1-807-492-11 1-232-154-00	·	LOCK } LOCK }	ĸ	
C411 C412 C413	1-162-561-11 1-162-561-11 1-162-596-00	CERAMIC	0.1MF 0.1MF 0.022MF	7	16V 16V 25V	D101 D102 D103	8-719-933-54 8-719-911-19 8-719-933-38	DIODE HZS9A2 DIODE 1SS119 DIODE HZS6B3	L		
C414 C415 C416	1-162-596-00 1-162-561-11 1-124-468-11	CERAMIC	0.022mf 0.1mf 100mf	20%	25V 16V 6.3V	D201 D202 D203	8-719-933-53 8-719-911-19 8-719-933-38	DIODE HZS9A2 DIODE 1SS119 DIODE HZS6B3	L		
C417 C418 C419	I-162-596-00 1-162-596-00 1-162-596-00	CERAMIC CERAMIC CERAMIC	0.022MF 0.022MF 0.022MF		25V 25V 25V	D301 D302 D303	2-719-933-39 8-714-933-39 8-719-933-38	DIODE HZS6C1 DIODE HZS6C1 DIODE HZS6B3	L -		
C420 C421 C422		CERAMIC CERAMIC ELECT	0.022MF 0.022MF 1MF	20%	25V 25V 50V	D304 D305 D306	8-719-911-19 8-719-933-38 8-719-911-19	DIODE 1\$5119 DIODE HZS6B31 DIODE 1\$5119			
C423 C424 C425	1-124-907-00 1-162-596-00 1-162-596-00	CERAMIC	10MF 0.022MF 0.022MF	20%	50V 25V 25V	D307 D308 D309	8-719-911-19 8-719-911-19	DIODE 1SS119 DIODE 1SS119 DIODE TLR208			
C426 C427 C428	1-124-468-11 1-162-596-00 1-162-561-11	CERAMIC	100MF 0.022MF 0.1MF	20%	6.3V 25V 16V	D401 D402 D403	8-719-911-19 8-719-911-19 8-719-911-19	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119			

ELECTRICAL PARTS

	ELECTRIC	AL PARIS	
Ref.No.	Part No.	Description	
0404	8-719-911-19	DIODE ISSI19	
0405	8-719-911-19	DIODE ISSI19	
0406	8-719-911-19	DIODE ISSI19	
D407	8-719-911-19	D10DE ISS119	
D408	8-719-911-19	D10DE ISS119	
D409	8-719-911-19	D10DE ISS119	
D410	8-719-911-19	DIODE 1SS119	
D411	8-719-911-19	DIODE 1SS119	
D412	8-719-911-19	DIODE 1SS119	
D413	8-719-911-19	DIODE ISS119	
D501	8-719-301-38	DIODE SEL2210S-C	
D502	8-719-301-38	DIODE SEL2210S-C	
0503	8-719-301-38	DIODE SEL2210S-C	
0504	8-719-301-38	DIODE SEL2210S-C	
0505	8-719-301-38	DIODE SEL2210S-C	
D506	8-719-301-38	DIODE SEL2210S-C	
D507	8-719-301-38	DIODE SEL2210S-C	
D508	8-719-301-38	DIODE SEL2210S-C	
0509	8-719-301-38	DIODE SEL2210S-C	
0510	8-719-301-38	DIODE SEL2210S-C	
0511	8-719-301-38	DIODE SEL2210S-C	
D512	8-719-301-38	DIODE SEL2210S-C	
D513	8-719-301-38	DIODE SEL2210S-C	
D514	8-719-301-38	DIODE SEL2210S-C	
D515	8-719-301-38	DIODE SEL2210S-C	
D516	8-719-301-38	DIODE SEL2210S-C	
D517	8-719-301-38	DIODE SEL2210S-C	
D518	8-719-301-38	DIODE SEL2210S-C	
D519	8-719-301-38	DIODE SEL2210S-C	
D520	8-719-929-15	DIODE HZS9.1N82	
D521	8-719-107-94	DIODE 155202-1	
D522	8-719-107-94	DIODE 155202-1	
D523	8-719-107-94	DIODE 155202-1	
D524	8-719-107-94	DIODE 155202-1	/
D525	8-719-107-94	DIODE 155202-1	
D526	8-719-107-94	DIODE 155202-1	
D527	8-719-107-94	DIODE 155202-1	
D528	8-719-107-94	DIODE 155202-1	
D529	8-719-107-94	DIODE 155202-1	
D530	8-719-107-94	DIODE 155202-1	\
D531	8-719-107-94	DIODE 155202-1	\
D532	8-719-107-94	DIODE 155202-1	\
D533	8-719-107-94	DIODE 1SS202-1	
D901	8-719-210-12	DIODE 10DF2	
D902	8-719-210-12	DIODE 10DF2	
D903	8-719-210-12	DIOUE 10DF2	
D904	8-719-210-12	DIODE 10DF2	
D905	8-719-200-77	DIODE 10E2N	
0906	8-719-200-77	D10DE 10E2N	
0907	8-719-210-12	D10DE 10DF2	
0908	8-719-210-12	D10DE 10DF2	
D909	8-719-210-12	DIODE 10DF2	
D910	8-719-210-12	DIODE 10DF2	
D911	8-719-200-77	DIODE 10E2N	
0912	8-719-200-77	DIODE 10E2N	
0913	8-719-934-15	DIODE HZS24-3L	
0914	8-719-933-48	DIODE HZS7B3L	
0915	8-719-911-19	DIODE ISS119	
The compo	monte adoptation	Les composants identifiés (па

The components identified by shading and mark $\underline{\mathbb{A}}$ are critical for safety. Replace only with part number specified. Les composants identifiés par une trame et une marque $\underline{\mathbb{A}}$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

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ELECTRICAL PARTS

1	<u>Ref.Nc.</u>	Part No.	Description
		.1-532-215-11 .1-532-739-11	(AE,E3)FUSE, TINE-LAG D.8A 2509 (J.US,CAT-JUTUSE, GLASS TUBE D.CA 1250
	FLD501	1-519-397-11	INDICATOR TUBE, FLUORESCENT
	1C101	8-759-745-60	IC NJM4560D
	1C102	8-759-910-75	IC LF353DP
	1C103	8-759-910-75	IC LF353DP
	IC104	8-759-910-75	IC LF353DP
	IC105	8-759-909-98	IC CX-7976
	IC106	8-759-700-40	IC NJM4560S
	IC107	8-759-700-40	IC NJM45605
	1C108	8-759-912-79	IC IR2E02
	IC201	8-759-745-60	IC NJM45600
	10203	8-759-910-75 8-759-910-75 8-759-910-75	IC LF3530P IC LF3530P IC LF3530P
		8-759-909-98 8-759-700-40 8-759-700-40	IC CX-7976 IC NJM4560S IC NJM4560S
	1C208	8-759-912-79	IC 1R2E02
	1C301	8-759-700-20	IC NJM79M05A
	1C302	8-759-700-11	IC NJM78M05A
	1C303	8-759-700-20	IC NJM79M05A
	IC304	8-759-745-60	IC NJM4560D
	IC305	8-752-001-80	IC CX20018
	16306	8-752-001-70	IC CX20017
	10307	8-759-202-13	IC TC74HCU04P
	10308	8-759-140-53	IC UPD4053BC
	16309	8-759-708-05	IC NJM78L05A
	16310	8-759-745-60	IC NJM4560D
	16401	8-759-927-77	IC CXD1079Q
	10402 10403 10404	8-759-929-47 8-759-929-47 8-759-929-47 8-759-929-47	IC M881464-10 IC M881464-10 IC M881464-10
	IC405	8-759-929-47	1C M881464-10
	IC406	8-759-303-78	1C HD63803XP
	IC407	8-759-108-85	1C UPD27C256C-SDR1000
	1C408	8-759-102-95	1C UPD4464C-15
	1C409	8-759-303-74	IC HD63850P
	IC410	8-759-000-99	IC MC74HC74C
	IC411	8-759-001-00	IC MC74HC132N
	IC412	8-759-202-74	IC TC74HC04P
	IC413	8-759-916-15	IC SN74HC05N
	1C501	8-759-108-75	IC UPD7528C-036
	1C901	8-759-170-12	IC UPC78M12H
	1C902	8-759-700-11	IC NJM78N05A
	1C903	8-759-700-11	IC NJM78N05A
	J101	1-563-363-11	JACK, LARGE TYPE 2P
	J102	1-563-363-11	JACK, LARGE TYPE 2P
	J201	1-563-363-11	JACK, LARGE TYPE 2P
	J202	1-563-363-11	JACK, LARGE TYPE 2P
	J401	1-563-363-11	JACK, LARGE TYPE 2P
	J402	1-563-363-11	JACK, LARGE TYPE 2P
	J403	1-563-169-11	CONNECTOR, DIN 5P
	J404	1-563-169-11	CONNECTOR, DIN 5P
	J405	1-563-369-11	CONNECTOR, DIN 6P
	L301	1-408-902-21	MICRO INDUCTOR 0.470H
	LF1	1-421-340-00	LINE FILTER

ELECTRICAL PARTS

	ELECTRIC	AL PARTS]	ELECTRIC	AL PARTS
Ref.No.	Part No.	Description				Ref.No.	Part No.	Descript
LPF102 LPF201	1-464-664-11 1-464-664-11 1-464-664-11 1-464-664-11	FILTER UNIT FILTER UNIT FILTER UNIT FILTER UNIT	, LOW PAS	S S		R110 R111 R112	1-247-717-11 1-249-941-91 1-249-947-11	CARBON CARBON CARBON
рн401	8-719-938-71	PC900				R113 R114 R115	1-249-589-11 1-249-429-11 1-249-947-11	CARBON CARBON
Q101 Q102 Q103	8-769-162-00 8-769-162-00 8-729-107-98	TRANSISTOR TRANSISTOR TRANSISTOR	2 SK 152	L		R116 R117	1-249-919-11 1-249-556-11	CARBON CARBON CARBON
Q201 Q202 Q203	8-769-162-00 8-769-162-00 8-729-107-98	TRANSISTOR TRANSISTOR TRANSISTOR	2SK152	L		R118 R119 R120	1-247-163-00 1-247-708-11 1-247-713-11	CARBON CARBON CARBON
Q301 Q302 Q303	8-729-180-93 8-729-315-22 8-729-315-22	TRANSISTOR TRANSISTOR TRANSISTOR	2SD1152			R121 R122 R123	1-247-163-00 1-247-747-11 1-247-145-00 1-249-429-11	CARBON CARBON CARBON CARBON
Q304 Q305 Q306	8-729-203-02 8-729-173-13 8-729-384-48	TRANSISTOR TRANSISTOR TRANSISTOR	2SB731			R124 R131 R132	1-249-425-11 1-249-421-11	CARBON CARBON
Q307 Q308 Q401	8-729-384-48 8-729-203-02 8-729-900-61	TRANSISTOR TRANSISTOR TRANSISTOR	25K30A-0			R1/33 R134 R135 R135	1-249-951-11 1-247-193-00 1-247-725-11	CARBON CARBON CARBON CARBON
Q402 Q403 Q404	8-729-900-89 8-729-900-80 8-729-117-54	TRANSISTOR TRANSISTOR TRANSISTOR	DTC114ES			R136 R137 R138	1-249-951-11 1-247-725-11 1-249-949-91	CARBON CARBON
Q501 Q502 Q503	8-729-900-80 8-729-900-80 8-729-900-80	TRANSISTOR TRANSISTOR TRANSISTOR	DTC114ES			R139 R140 R141	1-247-704-11 1-249-949-91 1-249-429-11	CARBON CARBON CARBON
Q504 Q505 Q506	8-729-900-80 8-729-900-80 8-729-900-80	TRANSISTOR TRANSISTOR TRANSISTOR	DTC114ES	($\overline{\Omega}$	R142 R143 R144 R145	1-247-845-00 1-247-895-00 1-249-434-11	CARBON CARBON CARBON CARBON
Q507 Q508 Q509	8-729-900-80 8-729-900-80 8-729-900-80	TRANSISTOR TRANSISTOR TRANSISTOR	DTC114ES)	\bigcirc	R145 R146 R147 R148	1-247-838-00 1-247-895-00 1-249-434-11 1-247-837-00	CARBON CARBON CARBON
Q510 Q511 Q512	8-729-900-80 8-729-900-80 8-729-900-80	TRANSISTOR TRANSISTOR TRANSISTOR	DTÇ1,14E'S	$\widehat{\mathbb{N}}$	>	R149 R150	1-247-895-00 1-249-434-11	CARBON CARBON CARBON
Q513 Q514 Q515	8-729-900-89 8-729-900-89 8-729-900-89	TRANSISTOR TRANSISTOR TRANSISTOR	DIC144ES)		R151 R152 R153 R153	1-249-419-11 1-247-895-00 1-249-434-11	CARBON CARBON
Q516 Q517 Q518	8-729-900-61 8-729-900-61 8-729-900-61	TRANSISTOR TRANSISTOR TRANSISTOR	DTA114ES			R154 R155 R156	1-247-836-00 1-247-163-00 1-247-163-00 1-249-469-11	CARBON CARBON CARBON
0901 0902 0903	8-729-802-22 8-729-606-33 8-729-606-33	TRANSISTOR TRANSISTOR TRANSISTOR	2SC2603-F			R157 R158 R159 R160	1-249-918-91 1-249-918-91 1-249-941-91 1-249-949-91	CARBON CARBON CARBON CARBON
0904 0905 0906 0907	8-729-606-33 8-729-900-89 8-729-900-89 8-729-117-54	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	DTC144ES DTC144ES	:		R161 R162 R163	1-249-946-91 1-249-918-91 1-247-125-00	CARBON CARBON CARBON
R101 R102 R103	1-249-947-11 1-249-915-11 1-249-608-91	CARBON CARBON CARBON	10K 470 220K	1% 1%	1/4W 1/4W 1/4W	R164 R165 R166	1-247-857-00 1-249-941-91 1-249-947-11	CARBON CARBON CARBON
R104 R105 R106	1-249-608-91 1-247-704-11 1-249-930-91	CARBON CARBON CARBON	220K 220 2K	1%	1/4W 1/4W 1/4W	R171 R172 R173	1-249-435-11 1-247-858-00 1-249-441-11	CARBON CARBON CARBON
R107 R108 R109	1-249-919-11 1-249-944-91 1-249-469-11	CARBON CARBON CARBON	680 7.5K 100K	1% 1%	1/4W 1/4W 1/4W	R174 R175 R176	1-249-441-11 1-249-429-11 1-249-429-11 1-249-429-11	CARBON CARBON CARBON

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R110	1-247-717-11	CARBON	2.2K	1%	1/4W
R111	1-249-941-91	CARBON	5.6K	1%	1/4W
R112	1-249-947-11	CARBON	10K	1%	1/4W
R113 R114 R115	1-249-589-11 1-249-429-11 1-249-947-11	CARBON CARBON CARBON	36K 10K 10K	12	1/4W 1/6W 1/4W
R116 R117 R118	1-249-919-11 1-249-556-11 1-247-163-00	CARBON CARBON CARBON	680 1.5K 22K	1%]/4W 1/4W 1/4W
R119 R120 R121	1-247-708-11 1-247-713-11 1-247-163-00	CARBON CARBON CARBON	470 1K 22K		1/4W 1/4W 1/4W
R122 R123 R124	1-247-717-11 1-247-145-00 1-249-429-11	CARBON CARBON CARBON	2.2K 3.9K 10K	5%	1/4W 1/4W 1/6W
R131	1-249-425-11	CARBON	4.7K	5%	1/6W
R132	1-249-421-11	CARBON	2.2K	5%	1/6W
R133	1-249-951-11	CARBON	15K	1%	1/4W
R134 R135 R136	1-247-193-00 1-247-725-11 1-249-951-11	CARBON CARBON CARBON	22K 10K 15K	1% 1%	1/4W 1/4W 1/4W
R137 R138 R139	1-247-725-11 1-249-949-91 1-247-704-11	CARBON CARBON CARBON	10K 12K 220	1%	1/4W 1/4W 1/4W
R140	1-249-949-91	CARBON	12K	1%	1/4W
R141	1-249-429-11	CARBON	10K	5%	1/6W
R142	1-247-845-00	CARBON	3.9K	5%	1/6W
R143	1-247-895-00	CARBON	470K	5%	1/6W
R144	1-249-434-11	CARBON	27K	5%	1/6W
R145	1-247-838-00	CARBON	2K	5%	1/6W
R146	1-247-895-00	CARBON	470K	5%	1/6W
R147	1-249-434-11	Carbon	27K	5%	1/6W
R148	1-247-837-00	Carbon	1.8K	5%	1/6W
R149	1-247-895-00	CARBON	470K	5%	1/6W
R150	1-249-434-11	CARBON	27K	5%	1/6W
R151	1-249-419-11	CARBON	1.5K	5%	1/6W
R152	1-247-895-00	CARBON	470K	5%	1/6W
R153	1-249-434-11	CARBON	27K	5%	1/6W
R154	1-247-836-00	CARBON	1.6K	5%	1/6W
R155 R156 R157	1-247-163-00 1-247-163-00 1-249-469-11	CARBON CARBON CARBON	22K 22K 100K		1/4W 1/4W 1/4W
R158	1-249-918-91	CARBON	620	1%	1/4W
R159	1-249-941-91	CARBON	5.6K	1%	1/4W
R160	1-249-949-91	CARBON	12K	1%	1/4W
R161 R162 R163	1-249-946-91 1-249-918-91 1-247-125-00	CARBON Carbon Carbon	9.1K 620 560	1% 1%	1/4W 1/4W 1/4W
R164	1-247-857-00	CARBON	12K	5%	1/6W
R165	1-249-941-91	CARBON	5.6K	1%	1/4W
R166	1-249-947-11	CARBON	10K	1%	1/4W
R171	1-249-435-11	CARBON	33K	5%	1/6W
R172	1-247-858-00	CARBON	13K	5%	1/6W
R173	1-249-441-11	CARBON	100K	5%	1/6W
R174	1-249-441-11	CARBON	100K	5%	1/6W
R175	1-249-429-11	CARBON	10K	5%	1/6W
R176	1-249-429-11	CARBON	10K	5%	1/6W

ELECTRICAL PARTS

	ELECTRIC	AL PARTS					ELECTRIC	AL PARTS			
Ref.No.	Part No.	Description				Ref.No.	Part No.	Vescription			
R201	1-249-947-11	CARBON	10K	1%	1/4W	R272	1-247-858-00	CARBON	13K	5%	1/6W
R202	1-249-915-11	CARBON	470	1%	1/4W	R273	1-249-441-11	CARBON	100K	5%	1/6W
R 203	1-249-608-91	CARBON	220K		1/4W	R274	1-249-441-11	CARBON	100K	5%	1/6W
R204	1-249-608-91	CARBON	2 20K		1/4W	R275	1-249-429-11	CARBON	10K	5%	1/6W
R205	1-247-704-11	CARBON	220		1/4W	R276	1-249-429-11	CARBON	10K	5%	1/6W
R206	1-249-930-91	CARBON	2K	1%	1/4W	R301	1-249-812-91	CARBON	2.7K	1%	1/2₩
R207	1-249-919-11	CARBON	680	1%	1/4W	R302	1-249-814-91	CARBON	3.3K	1%	1/2₩
R208	1-249-944-91	CARBON	7.5K	1%	1/4W	R303	1-249-814-91	CARBON	3.3K	1%	1/2W
R 209	1-249-469-11	CARBON	100K		1/4W	R304	1-249-812-91	CARBON	2.7K	1%	1/2₩
R210	1-247-717-11	CARBON	2.2K	1%	1/4W	R305	1-247-725-11	CARBON	10K		1/4W
R211	1-249-941-91	CARBON	5.6K	1%	1/4W	R306	1-247-725-11	CARBON	10K		1/4W
R212	1-249-947-11	CARBON	10K	1%	1/4W	R307	1-247-725-11	CARBON	́10К	••	1/4W
R213	1-249-589-11	CARBON	36K		1/4W	R308	1-249-951-11	CARBON	15K	1%	1/4W
R214	1-249-429-11	CARBON	10K		1/6₩	R309	1-249-425-11	CARBON	4.7K	5%	1/6W
R215	1-249-947-11	CARBON	10K	1%	1/4W	R310	1-249-417-11	CARBON	1K	5%	1/6W
R216	1-249-919-11	CARBON	680	1%	1/4W	R311	1-249-422-11	CARBON	2.7K	5%	1/6W
R217	1-249-556-11	CARBON	1.5K		1/4W	R312	1-249-425-11	CARBON	4.7K	5%	1/6W
R218	1-247-163-00	CARBON	2 2K		1/4W	R313	1-247-725-11	CARBON	10K		1/4W
R219	1-247-708-11	CARBON	470		1/4W	R314	1-249-957-91	CARBON	27K	12	1/4W
R220	1-247-713-11	CARBON	1K		1/4W	R315	1-249-419-11	CARBON	1.5K	5%	1/6W
R221	1-247-163-00	CARBON	22K		1/4W	R316	1-249-437-11	CARBON	47K	5%	1/6W
R2 22	1-247-717-11	CARBON	2.2K		1/4W	R317	71-249-417-11	CARBON	IK	5%	1/6W
R223	1-247-145-00	CARBON	3.9K		1/4W	R318	1-249-417-11	CARBON	1K	5%	1/6W
R224	1-249-429-11	CARBON	10K	5%	1/6W	R319	1-249-441-11	CARBON	100K	5%	1/6W
R231	1-249-425-11	CARBON	4.7K	5%	1/6W	R401	4-249-405-11	CARBON	100	5%	1/6W
R232	1-249-421-11	CARBON	2.2K	5%	1/6W /	R402	1-249-405-11	CARBON	100	5%	1/6W
R233	1-249-951-11	CARBON	15K	1%	1/4₩	R403	1-249-405-11	CARBON	100	5%	1/6W
R234	1-247-193-00	CARBON	22K	1%	1/4₩	R404	1-249-405-11	CARBON	100	5%	1/6W
R235	1-247-725-11	CARBON	10K		1/4W ((/	_R405	1-249-441-11	CARBON	100K	5%	1/6W
R236	1-249-951-11	CARBON	15K	1%	1/4W 🗸 ((/R406	1-249-441-11	CARBON	100K	5%	1/6W
R237	1-247-725-11	CARBON	10K		1/4W	R407	1-249-441-11	CARBON	100K	5%	1/6W
R238	1-249-949-91	CARBON	12K	1% <	1/4¥ /	R408	1-249-441-11	CARBON	100K	5%	1/6W
R239	1-247-704-11	CARBON	220		1./4W	R413	1-249-441-11	CARBON	100K	5%	1/6W
R240	1-249-949-91	CARBON	12K	1%	71/4W	R414	1-249-435-11	CARBON	33K	5%	1/6W
R241	1-249-429-11	CARBON	10K	5%	1/6W	R415	1-247-891-00	CARBON	330K	5%	1/6W
R242	1-247-845-00	CARBON	3.9K	5%	176W	R416	1-249-405-11	CARBON	100	5%	1/6W
R243	1-247-895-00	CARBON	470K	53	_1/6w	R417	1-249-417-11	CARBON	1K	5%	1/6W
R244	1-249-434-11	CARBON	27K	5%	1/6W	R418	1-249-429-11	CARBON	10K	5%	1/6W
R245	1-247-838-00	CARBON	/2K-/	5%	^{>} 1/6W	R419	1-249-429-11	CARBON	10K	5%	1/6W
R24 6	1-247-895-00	CARBON	470K	5%	1/6W	R420	1-249-429-11	CARBON	10K	5%	1/6W
R248	1-247-837-00	CARBON	1.8K	5%	1/6W	R421	1-249-429-11		10K	5%	1/6W
R249	1-247-895-00	CARBON	47.0K	5%	1/6W	R422 R423	1-249-429-11 1-249-417-11	CARBON CARBON	10K 1K	5% 5%	1/6W
R251	1-249-419-11	ÇARBON	1). 5K	5%	1/6W	K423	1-249-41/-11	CARDON	Τν	3.6	1/6W
R252 R254	1-247-895-00 1-247-836-00	CARBON	470K	5%	1/6W	R424	1-249-417-11		1K	5%	1/6W
K234	1-24/-030-00	CARBON	1.6K	5%	1/6W	R425 R426	1-249-417-11 1-249-433-11		1K 22K	5% 5%	1/6W 1/6W
R255	1-247-163-00	CARBON	2 2K		1/4W	N420	1-249-499-11	CARBON	228	36	1708
R256	1-247-163-00	CARBON	22K		1/4W	R427	1-249-433-11		22K	5%	1/6W
R257	1-249-469-11	CARBON	100K		1/4W	R423 R429	1-249-433-11 1-249-433-11	CARBON CARBON	22K 22K	5% 5%	1/6W 1/6W
R258	1-249-918-91	CARBON	620	1%	1/4W	~~= 5	1-249-499-11	CARSON	LCN	7.0	1/04
R259	1-249-941-91	CARBON	5.6K	1%	1/4W	R430	1-249-433-11	CARBON	22K	5%	1/6W
R260	1-249-949-91	CARBON	12K	1%	1/4W	R431 R432	1-249-433-11 1-249-425-11	CARBON CARBON	22K 4.7K	5% 5%	1/6W 1/6W
R261	1-249-946-91	CARBON	9.1K	1%	1/4W	1.434	1-249-429-11	VARUUM	7./1	9.0	1/04
R262	1-249-918-91	CARBON	620	12	1/4W	R433	1-249-429-11		10K	5%	1/6W
R263	1-247-125-00	CARBON	560		1/4W	R434 R435	1-247-815-00 1-247-815-00	CARBON CARBON	220 220	5% 5%	1/6W 1/6W
R264	1-247-857-00	CARBON	12K	5%	1/6W	1430	1-24/-010-00	CARDON	220	10	1/04
R265	1-249-941-91	CARBON	5.6K	1%	1/4W	R436	1-247-815-00		220	5% 5%	1/6W
R266 R271	1-249-947-11 1-249-435-11		10K 33K	1% 5%	1/4W 1/6W	R437 R438	1-247-815-00 1-249-421-11	CARBON CARBON	220 2.2K	5% 5%	1/6W 1/6W
	1 2 33 400-11	STRUGH	2.02	20	1/08	1 1,700		φ/inσon	6 .4N	3.0	1/07

	ELE	CTRI	CAL	PARTS
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<u>Ref.No.</u>	Part No.	Description			
R439	1-249-429-11	CARBON	10K	5%	1/6W
R440	1-249-441-11	CARBON	100K	5%	1/6W
R441	1-249-441-11	CARBON	100K	5%	1/6W
					-1
R442	1-247-815-00	CARBON	220	5%	1/6W
R443	1-247-815-00	CARBON	220	5%	1/6W
R444	1-249-421-11	CARBON	2.2K	5%	1/6W
				-	
R501	1-247-875-00	CARBON	68K	5%	1/6W
R502	1-249-429-11	CARBON	10K	5%	1/6W
R503	1-249-417-11	CARBON	1K	5%	1/6W
R504	1-249-417-11	CARBON	1K	5%	1/6W
R505	1-249-405-11	CARBON	100	5%	1/6W
R506	1-249-405-11	CARBON	100	5%	1/6W
					-,
R507	1-249-417-11	CARBON	1K	5%	1/6W
R509	1-249-429-11	CARBON	10K	5%	1/6W
R510	1-249-429-11	CARBON	10K	5%	1/6W
R511	1-249-405-11	CARBON	100	5%	1/6W
	1-249-405-11	CARBON	100	5%	1/6W
R513	.1-249-405-11	CARBON	100	5%	1/6W
R514	1-249-429-11	CARBON	10K	5%	1 (5)
R523	1-249-434-11	CARBON	27K	5%	1/6W 1/6W
R901	1-247-118+00	CARBON	300	5%	1/4W
1,201	1-541-110-00	GRINDON	500	5.0	1/ TM
R902	1-247-811-00	CARBON	150	5%	1/6W
R903	1-247-885-00	CARBON	180K	5%	1/6W
R904	1-249-437-11	CARBON	47K	5%	1/6W
			_		
R905	1-249-437-11	CARBON	47K	5%	1/6W
R906	1-249-425-11	CARBON	4.7K	5%	1/6W
R907	1-249-433-11	CARBON	22K	5%	1/6₩
R908	1-249-421-11	CARBON	2.2K	5%	1/6W
R908	1-247-823-00	CARBON	470	5%	1/6W
R911	1-247-843-00	CARBON	3.3K	5%	1/6W
	1.11.010.00			••	
R912	1-249-433-11	CARBON	22K	5% /	/1/6w / /
R913	1-249-433-11	CARBON	22K	5% <	1/6₩/
R914	1-249-437-11	CARBON	47K	5%	31/6W/
					$\neg \land \land$
RV101	1-237-292-11	RES, VAR, CAR	BON 20	к/20к	\sim \sim
	1 000 500 11		WWDE	、 ((an and
% RV102	1-230-523-11	(UP TO SERIAL	ADI	RETAL	04,011) GLAZE LOK
*RV102	1-224-252-XX	(SERIAL NUMBE	_~~00,< ₽	MA MIZ	AND LATER)
	1-CC4-COC-XV				GLAZE 10K
			17	\frown	\sim
RV103	1-230-521-11	RES, ADJ, MET	AL GLA	ZE 2.2	ĸ
RV104	1-237-306-11	RES. VAR. CAR	80N-10	K / 1/0K -	
RV105	1-237-306-11	RES, VAR, CAR	BON 10	K/łok	
	1 000 004 00			2	
RV106	1-228-994-00	RES, ADJ, GAR	80N 10	K (2017	
R¥201	1-237-292-11	RES, VAR, CAR	BON 20	K72UK	
** 01/20/2	1-230-523-11	UP TO SERIAL	NIMPE	R	04,011)
≈r¥2Ų2	x=230+323+11	RES		METAL	GLAZE 10K
₩RV202	1-224-252-**	SERIAL NUMBE	R .	04.012	AND LATER)
		RES.	ADJ.	METAL	GLAZE 10K
RV203		RES, ADJ, MET			2K
RV204		RES, VAR, CAP	BON 10	K/10K	
	1-237-306-11	RES, VAR, CAR			
RV206	1-228-994-00	RES, ADJ, CAF	(BON 10	IК	

ELECTRICAL PARTS

Ref.No.	Part No.	Description
RY301 RY302 RY303	1-515-519-00 1-515-519-00	RELAY RELAY
SI 🛦	1-515-519-00	RELAY SWITCH, PUSH (AC POWER)(1:KEY)
52 🛦	2-526-576-51	(E3)SELECTOR, POWER VOLTAGE
53	1-552-571-00	SWITCH, PUSH (BYPASS)
S4	1-553-963-00	SWITCH, PUSH (1 KEY)(LEVEL)
S501	1-554-813-11	SWITCH, KEY BOARD (MEMORY)
S502	1-554-813-11	SWITCH, KEY BOARD (WRITE)
S503	1-554-813-11	SWITCH, KEY BOARD (EDIT)
\$504	1-554-813-11	SWITCH, KEY BOARD (EQ)
\$505	1-554-813-11	SWITCH, KEY BOARD (MIDI)
S506	1-554-303-21	SWLIGH, KEY BOARD (REV.T.LOW)
S507	1-554-303-21	SWITCH, KEY BOARD (E.REF.T)
\$508	1-554-303-21	SWITCH, KEY BOARD (RT.HIGH)
S509	1-554-303-21	SWITCH, KEY BOARD (SIZE)
S510	1-554-303-21	SWITCH, KEY BOARD (F.B.LEV)
S511	1-554-303-21	SWITCH, KEY BOARD (SPEED)
S512	1-554- <u>303-21</u>	SWITCH, KEY BOARD (CH.SYNC)
S513	1-554-303-21	SWITCH, KEY BOARD (+)
S514	1-554-303-21	SWITCH, KEY BOARD (PRE-DELAY)
\$515	1-554-303-21	SWITCH, KEY BOARD (E.REF.LEV)
\$516	1-554-303-21	SWITCH, KEY BOARD (PHASE)
\$517	-1-554-303-21	SWITCH, KEY BOARD (GATE T)
S518	1-554-303-21	SWITCH, KEY BOARD (TAP)
S519	1-554-303-21	SWITCH, KEY BOARD (DEPTH)
\$520	1-554-303-21	SWITCH, KEY BOARD (CH.EDIT)
\$521	1-554-303-21	SWITCH, KEY BOARD (-)
	#1+448-591-11/ #1+448-592-11 *	(AE) TRANSFORMER, POWER (E3) TRANSFORMER: POWER
	.1-448-593-11 .1-448-594-11*	(E3):TRANSFORMER, POWER (US,CA)TRANSFORMER, POWER (J):TRANSFORMER, POWER
X301	1-567-709-11	OSCILLATOR, CRYSTAL
X401	1-567-132-00	VIBLATOR, CERAMIC

ACCESSORY & PACKING MATERIAL

Part No.	Description			
3-701-630-00 3-765-463-01 3-765-463-11 3-765-463-21	(US,CA,AE,E3	HYLENE MANUAL, 3)MANUAL, MANUAL,	INSTRUCTION	
4-916-325-01 4-916-326-01 4-916-328-01 4-916-329-01	SHEET, PROTE INDIVIDUAL C CUSHION (RIG CUSHION (LEF	CARTON HT)		
The component by shading an critical for Replace only number specif	d mark A are safety. with part	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.		

* : selected to yield optimum performance.

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