

# XM-3520

## SERVICE MANUAL

US Model  
Canadian Model  
AEP Model  
E Model



PHOTO : US Model

### SPECIFICATIONS

#### AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION 35 watts per channel minimum continuous average power into 4 ohms, both channels driven from 20-20,000 Hz with no more than 0.08% total harmonic distortion per Car Stereo Ad Hoc Committee standards.

#### Other specifications

Power supply system  
Pulse power supply circuitry

Input Car stereo input (phono jack)

Outputs Speaker outputs

Speaker impedance  
2-8 ohms

Maximum power output  
65 watts per channel minimum RMS at 4 ohms  
140 watts (monaural) at 4 ohms

Frequency response  
8 Hz-100 kHz  $\pm 3$  dB

Harmonic distortion  
0.005%

Input level adjustment range  
0.1-2 V

Power requirements  
12 V DC car battery (negative ground)

Current drain 13 A (at rated output)

Input remote current  
4 mA

Dimensions Approx. 260 x 45 x 130 mm (w/h/d)  
(10 1/4 x 1 13/16 x 5 1/8 inches)

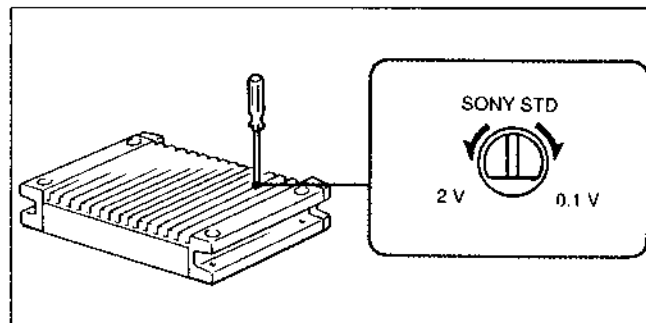
Weight Approx. 1.8 kg (3 lb. 15 oz.)

Accessories supplied  
Mounting screws (4)

Design and specifications subject to change without notice.

#### Level Adjustment Control

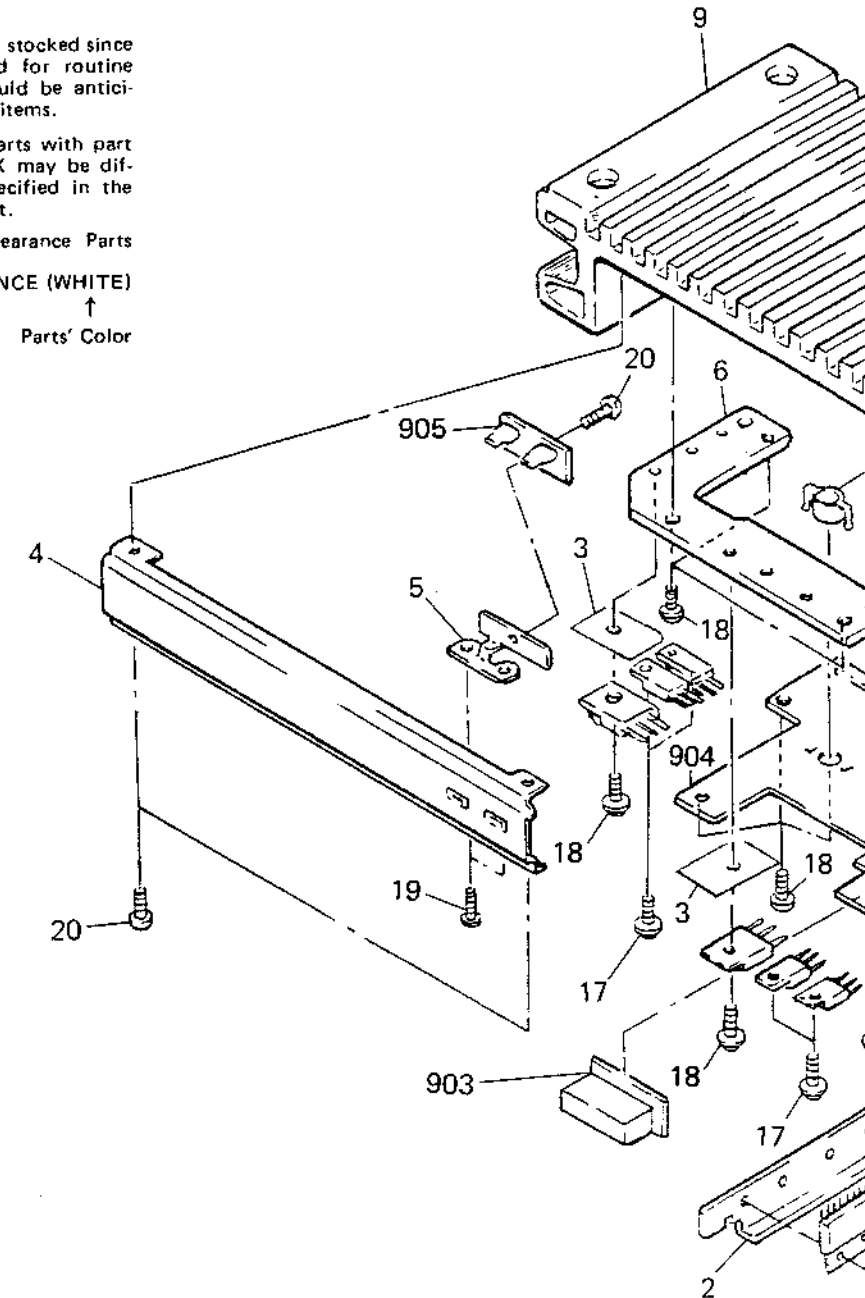
The input level can be varied with this control. Use it to adjust the input sound level when using source equipment of other manufacturers. Be sure to set the control to SONY STD if the unit is connected to a SONY car stereo. Turn it to 0.1 V when the input level of the cassette car stereo or CD player seems low.



### EXPLODED VIEW

#### NOTE:

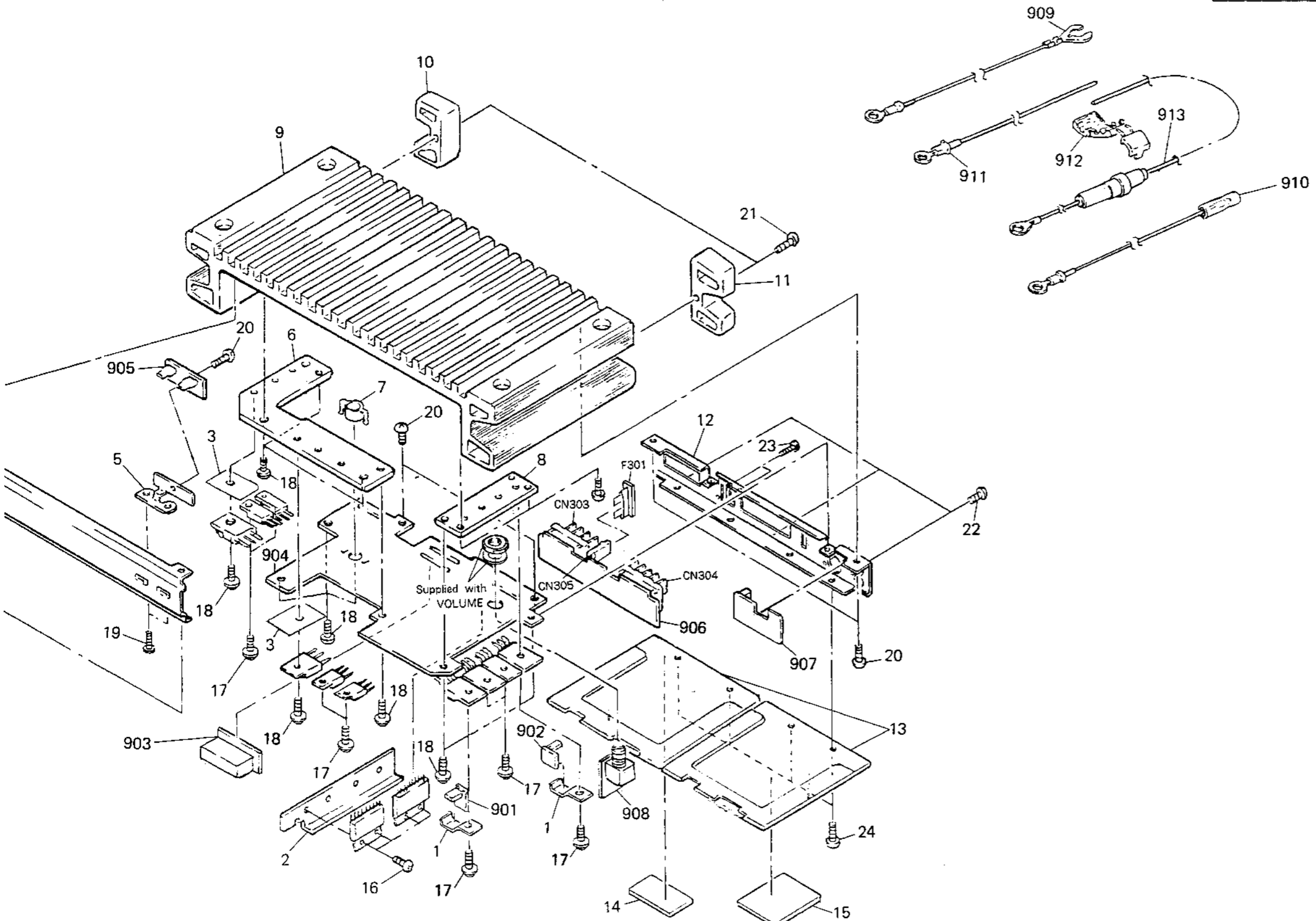
- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts  
Example:  
(RED) ... KNOB, BALANCE (WHITE)  
↑ Cabinet's Color      ↑ Parts' Color



No.	Part No.	Description	Remarks	No.	Part No.	Description
1	*3-396-106-01	BRACKET (TR)		10	*3-395-828-01	PROTECTOR (LEFT)
2	*3-396-105-01	HEAT SINK (SUB C)		11	*3-395-829-01	PROTECTOR (RIGHT)
3	4-857-833-00	INSULATOR, O3P		12	*3-395-835-01	PANEL (B)
4	3-395-833-01	(US, Canadian)...PANEL (FRONT)		13	*3-395-831-01	COVER (BOTTOM)
	3-395-833-11	(E, AEP).....PANEL (FRONT)		14	*3-395-802-01	(US, E, AEP)...LABEL,
5	*3-395-827-01	BRACKET (LED)			*3-395-803-01	(Canadian)....LABEL,
6	*3-395-837-01	HEAT SINK (SUB A)		15	*3-395-897-01	LABEL (INDICATION)
7	*3-395-832-01	SPACER		16	7-685-646-79	SCREW +BTP 3X8 TYPE2
8	*3-395-838-01	HEAT SINK (SUB B)		17	7-628-254-20	+PSW, 2.6X8
9	*3-395-830-01	HEAT SINK		18	7-628-254-30	+PSW, 2.6X10



STEREO POWER AMP  
**SONY**



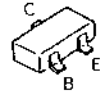
Remarks	No.	Part No.	Description
	10	*3-395-828-01	PROTECTOR (LEFT)
	11	*3-395-829-01	PROTECTOR (RIGHT)
	12	*3-395-835-01	PANEL (B)
	13	*3-395-831-01	COVER (BOTTOM)
	14	*3-395-802-01 *3-395-803-01	(US, E, AEP)...LABEL, MODEL NUMBER {Canadian}.....LABEL, MODEL NUMBER
	15	*3-395-897-01	LABEL (INDICATION)
	16	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S
	17	7-628-254-20	+PSW, 2.6X8
	18	7-628-254-30	+PSW, 2.6X10

Remarks	No.	Part No.	Description
	19	7-627-450-78	SCREW, PRECISION +K 1.7X4
	20	7-685-133-19	SCREW +BTP 2.6X6 TYPE2 N-S
	21	7-685-550-19	SCREW +BTP 3X16 TYPE2 N-S
	22	7-682-546-09	SCREW +B 3X5
	23	7-685-104-19	SCREW +P 2X6 TYPE2 SLIT
	24	7-621-559-30	SCREW +K 2.6X5
	901	*1-632-737-11	PC BOARD, TR1
	902	1-632-737-11	PC BOARD, TR2
	903	*1-632-736-11	PC BOARD, RELAY
	904	*A-3216-973-A	PC BOARD ASSY, MAIN
	905	*1-632-739-11	PC BOARD, LED
	906	*1-632-733-11	PC BOARD, OUTPUT

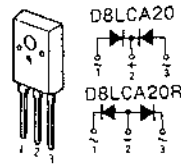
Remarks	No.	Part No.	Description	Remarks
	907	*1-632-734-11	PC BOARD, INPUT	
	908	*1-632-735-11	PC BOARD, VOLUME	
	909	*1-575-056-11	(E, AEP)...CORD (WITH TERMINAL)(GND)	
	910	*1-575-090-11	(E, AEP)...CORD (WITH TERMINAL)(REMOTE)	
	911	*1-575-055-11	(E, AEP)...CORD (WITH TERMINAL)(BUCK UP)	
	912	1-562-594-11	(E, AEP)...CONNECTOR (CL-1814T)	
	913	*1-557-656-11	(E, AEP)...CORD (WITH TERMINAL)	
	CN303	1-537-251-11	TERMINAL BOARD (3P)	
	CN304	1-537-252-11	TERMINAL BOARD (4P)(SPEAKER OUT)	
	CN305	1-533-226-11	HOLDER, FUSE (BRAID)	
	F301	1-532-982-11	FUSE (BRADE TYPE) (AUTO FUSE)(15A)	

Semiconductors Lead Layout

RN2402  
2SA1162-YG  
2SC2712-YG



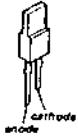
D8LCA20  
D8LCA20R



2SA1358-Y



GL8PG24  
SLP151B-60

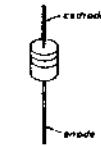


2SC3852

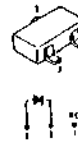


RD15ESB3  
RD16ESB3  
RD22ESB1  
RD6.2ESB1  
RD7.5ESB1  
RD8.2ESB3

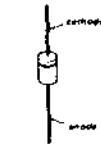
2SA1670-Y  
2SC4385-Y



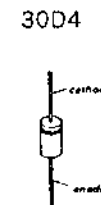
2SA874



2SC945-P



2SD1065-S



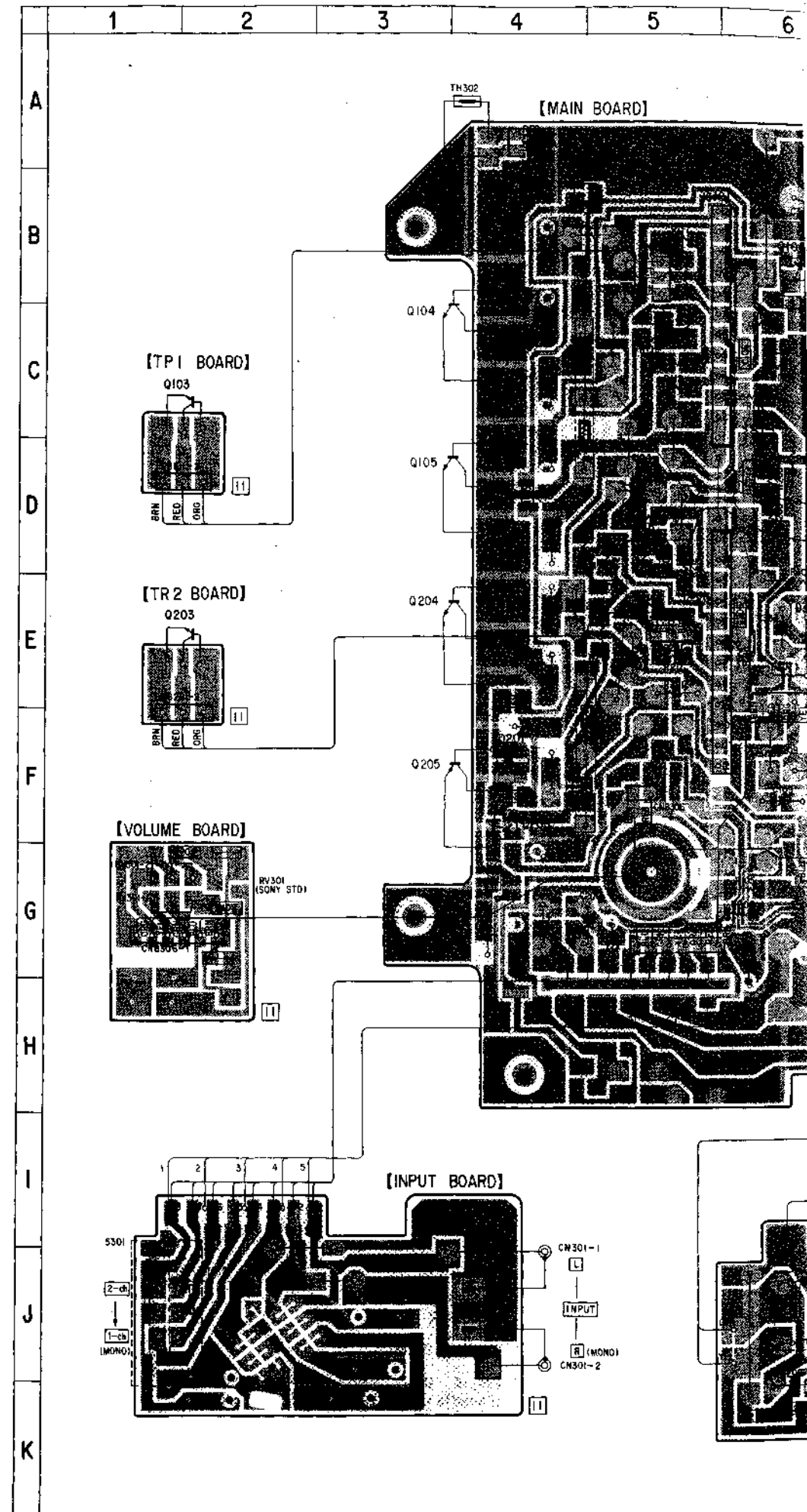
• SEMICONDUCTOR LOCATION

Ref. No.	Location
IC101	B-5
IC201	E-5
IC301	F-7
IC302	F-9
IC303	C-9
IC304	F-8
Q103	C-1
Q104	C-4
Q105	D-4
Q106	B-6
Q203	E-1
Q204	E-4
Q205	F-4
Q206	F-4
Q303	B-6
Q304	F-8
Q305	G-9
Q306	G-10
Q309	H-11
Q310	E-10
Q311	D-10
Q312	D-10
Q313	C-8
Q314	C-8
Q315	D-8
Q316	D-8
Q317	D-13
Q318	E-13
Q319	C-13
Q320	C-12
D101	B-4
D201	F-4
D303	E-7
D304	E-6
D305	E-10
D306	J-8
D307	G-9
D308	F-9
D309	F-17
D310	F-15
D313	F-12
D314	G-10
D315	E-10
D316	E-8
D317	C-11
D318	C-10

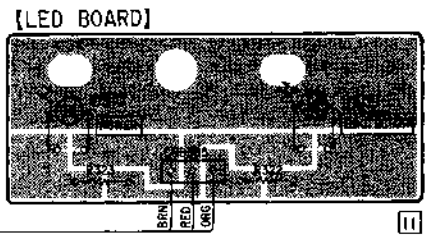
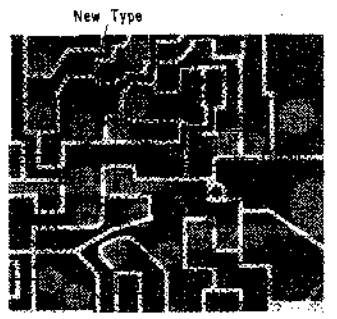
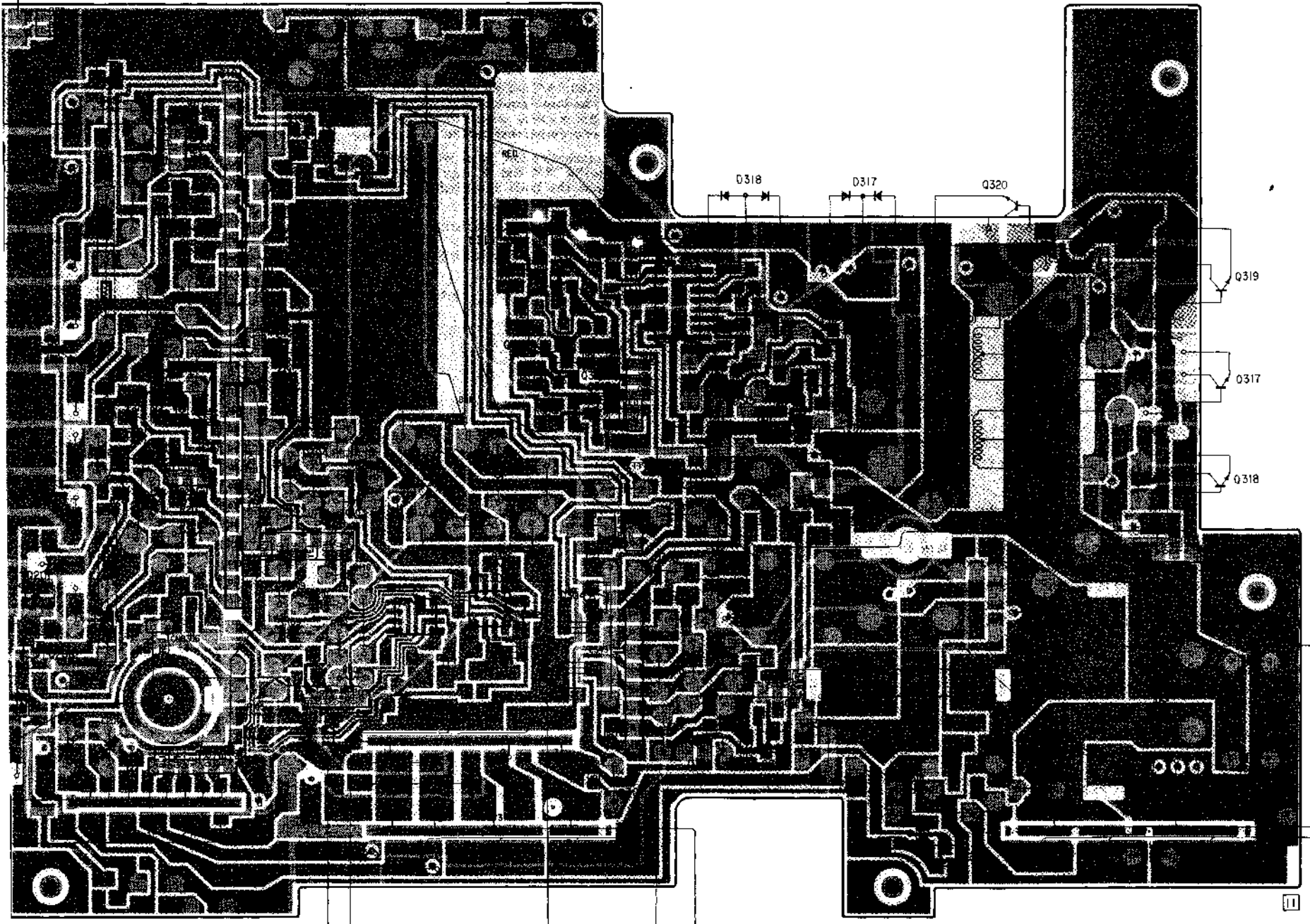
Note:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern of the rear side.
- : Chip components extracted from the rear side.
- ⊙ : Solder (Component side)

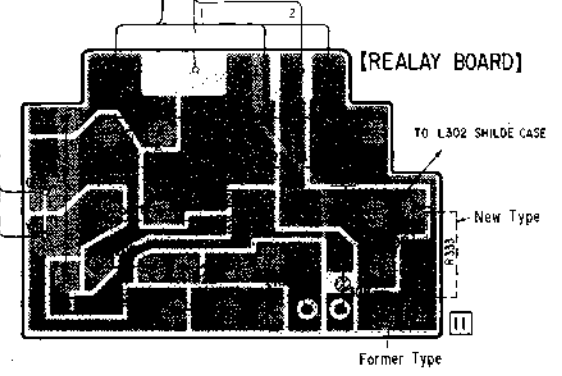
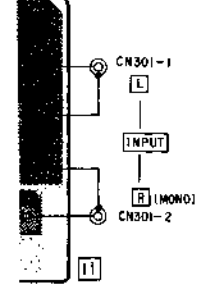
PRINTED WIRING BOARD



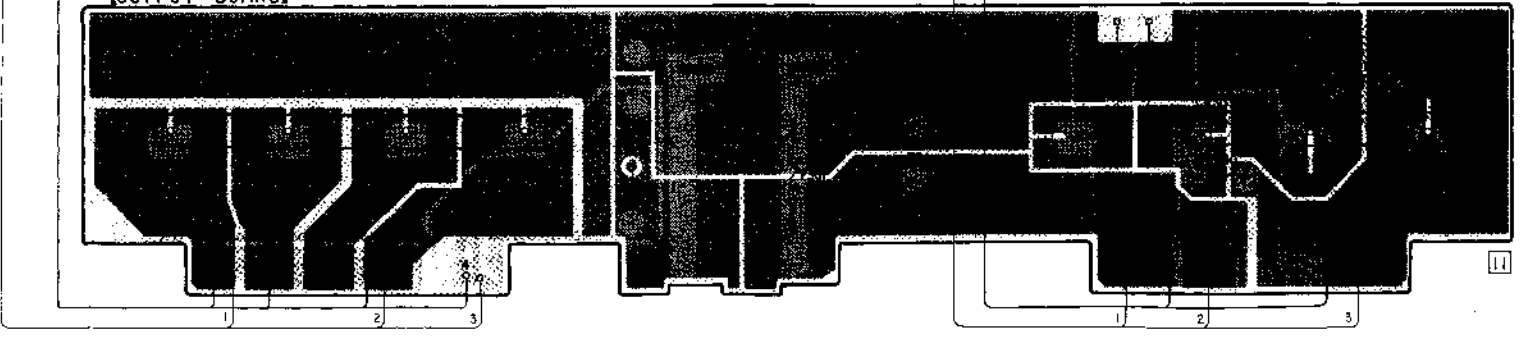
[MAIN BOARD]

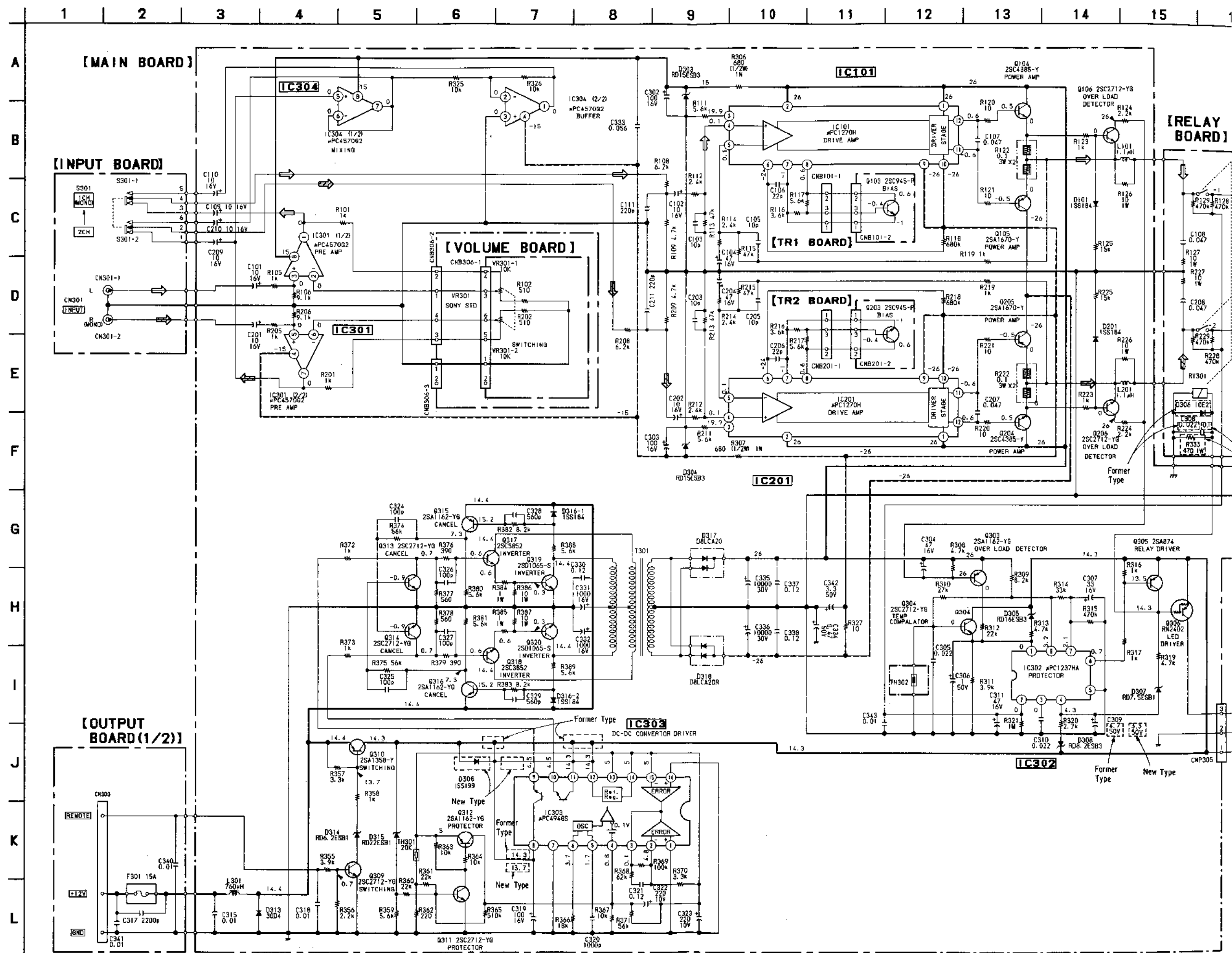


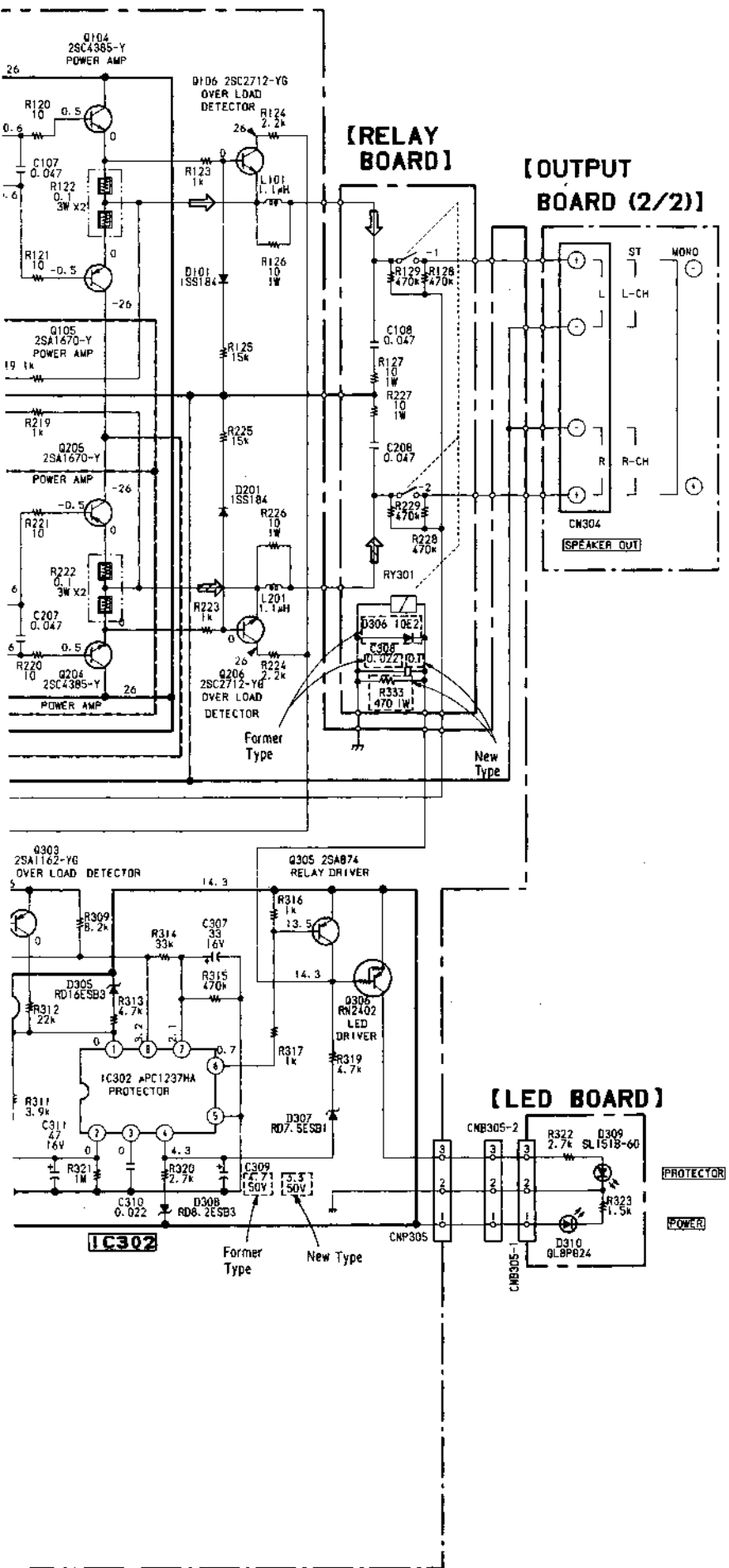
RD]



[OUTPUT BOARD]

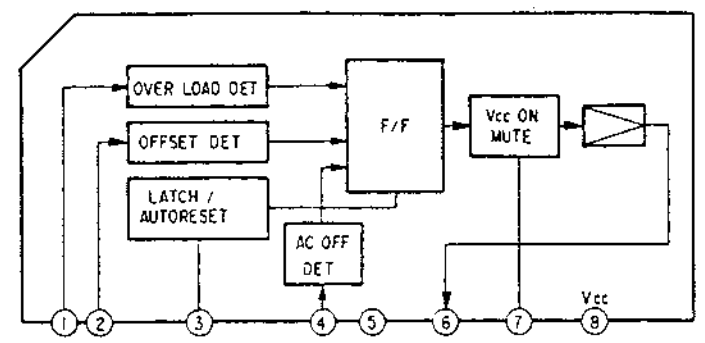






IC BLOCK DIAGRAM

IC302  
μPC1237HA



Note:

- 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 Ω and ¼W or less unless otherwise specified.
- % : indicates tolerance.
- : nonflammable resistor.
- : B+ Line
- : B- Line
- Power voltage is dc 14.4V and fed with regulated dc power supply from external power voltage jack.
- no mark : STEREO
- Voltages are taken with a VOM (input impedance 10M Ω).  
Voltage variations may be noted due to normal production tolerances.
- Signal path.  
 : L-CH  
 : R-CH (MONO)

**ELECTRICAL PARTS LIST**

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in 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:  $\mu$ F, PF:  $\mu$ F.

**RESISTORS**

- All resistors are in ohms.
- F: nonflammable

**COILS**

- MMH: mH, UH:  $\mu$ H

**SEMICONDUCTORS**

In each case, U:  $\mu$ , for example:

UA...:  $\mu$ A..., UPA...:  $\mu$ PA...,

UPC...:  $\mu$ PC, UPD...:  $\mu$ PD...

Ref.No.	Part No.	Description
901	*1-632-737-11	PC BOARD, TR1
902	1-632-737-11	PC BOARD, TR2
903	*1-632-736-11	PC BOARD, RELAY
904	*A-3216-973-A	PC BOARD ASSY, MAIN
905	*1-632-739-11	PC BOARD, LED
906	*1-632-733-11	PC BOARD, OUTPUT
907	*1-632-734-11	PC BOARD, INPUT
908	*1-632-735-11	PC BOARD, VOLUME
909	*1-575-056-11	(E, AEP)...CORD (WITH TERMINAL)(GND)
910	*1-575-090-11	(E, AEP)...CORD (WITH TERMINAL)(REMOTE)
911	*1-575-055-11	(E, AEP)...CORD (WITH TERMINAL)(BUCK UP)
912	*1-562-594-11	(E, AEP)...CONNECTOR (CL-1814T)
913	*1-557-656-11	(E, AEP)...CORD (WITH TERMINAL)
C101	1-126-157-11	ELECT 10MF 20% 16V
C102	1-126-157-11	ELECT 10MF 20% 16V
C103	1-163-093-00	CERAMIC CHIP 10PF 5% 50V
C104	1-124-589-11	ELECT 47MF 20% 16V
C105	1-163-093-00	CERAMIC CHIP 10PF 5% 50V
C106	1-163-101-00	CERAMIC CHIP 22PF 5% 50V
C107	1-136-161-00	FILM 0.047MF 5% 50V
C108	1-136-161-00	FILM 0.047MF 5% 50V
C109	1-126-157-11	ELECT 10MF 20% 16V
C110	1-126-157-11	ELECT 10MF 20% 16V
C111	1-163-125-00	CERAMIC CHIP 220PF 5% 50V
C201	1-126-157-11	ELECT 10MF 20% 16V
C202	1-126-157-11	ELECT 10MF 20% 16V
C203	1-163-093-00	CERAMIC CHIP 10PF 5% 50V
C204	1-124-589-11	ELECT 47MF 20% 16V
C205	1-163-093-00	CERAMIC CHIP 10PF 5% 50V
C206	1-163-101-00	CERAMIC CHIP 22PF 5% 50V
C207	1-136-161-00	FILM 0.047MF 5% 50V
C208	1-136-161-00	FILM 0.047MF 5% 50V
C209	1-126-157-11	ELECT 10MF 20% 16V
C210	1-126-157-11	ELECT 10MF 20% 16V
C211	1-163-125-00	CERAMIC CHIP 220PF 5% 50V
C302	1-126-101-11	ELECT 100MF 20% 16V
C303	1-126-101-11	ELECT 100MF 20% 16V
C304	1-124-589-11	ELECT 47MF 20% 16V
C305	1-136-157-00	FILM 0.022MF 5% 50V
C306	1-124-499-11	ELECT 1MF 20% 50V
C307	1-124-963-11	ELECT 33MF 20% 16V
C308	1-130-843-00	FILM 0.1MF 5% 50V
C309	1-123-382-00	ELECT 3.3MF 20% 50V
C310	1-136-157-00	FILM 0.022MF 5% 50V
C311	1-124-589-11	ELECT 47MF 20% 16V
C315	1-136-153-00	FILM 0.01MF 5% 50V

Ref.No.	Part No.	Description
C317	1-130-475-00	FILM 0.0022MF 5% 50V
C318	1-136-153-00	FILM 0.01MF 5% 50V
C319	1-126-101-11	ELECT 100MF 20% 16V
C320	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V
C321	1-136-837-11	FILM 0.12MF 5% 50V
C322	1-126-176-11	ELECT 220MF 20% 10V
C323	1-126-176-11	ELECT 220MF 20% 10V
C324	1-163-117-00	CERAMIC CHIP 100PF 5% 50V
C325	1-163-117-00	CERAMIC CHIP 100PF 5% 50V
C326	1-163-117-00	CERAMIC CHIP 100PF 5% 50V
C327	1-163-117-00	CERAMIC CHIP 100PF 5% 50V
C328	1-163-135-00	CERAMIC CHIP 560PF 5% 50V
C329	1-163-135-00	CERAMIC CHIP 560PF 5% 50V
C330	1-136-837-11	FILM 0.12MF 5% 50V
C331	1-124-360-00	ELECT 1000MF 20% 16V
C332	1-124-360-00	ELECT 1000MF 20% 16V
C333	1-136-162-00	FILM 0.056MF 5% 50V
C334	1-124-902-00	ELECT 0.47MF 20% 50V
C335	1-126-980-11	ELECT 10000MF 20% 30V
C336	1-126-980-11	ELECT 10000MF 20% 30V
C337	1-136-837-11	FILM 0.12MF 5% 50V
C338	1-136-837-11	FILM 0.12MF 5% 50V
C340	1-136-153-00	FILM 0.01MF 5% 50V
C341	1-136-153-00	FILM 0.01MF 5% 50V
C342	1-124-273-00	ELECT 3.3MF 20% 50V
C343	1-136-153-00	FILM 0.01MF 5% 50V
CN301	1-569-108-11	JACK, PIN 2P (INPUT)
CN303	1-537-251-11	TERMINAL BOARD (3P)
CN304	1-537-252-11	TERMINAL BOARD (4P)(SPEAKER OUT)
CN305	1-533-226-11	HOLDER, FUSE (BRAID)
CNP305	*1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
D101	8-719-801-78	DIODE 1SS184
D201	8-719-801-78	DIODE 1SS184
D303	8-719-110-42	DIODE RD15ESB3
D304	8-719-110-42	DIODE RD15ESB3
D305	8-719-110-46	DIODE RD16ESB3
D306	8-719-911-19	DIODE 1SS119
D307	8-719-110-02	DIODE RD7.5ESB1
D308	8-719-110-09	DIODE RD8.2ESB3
D309	8-719-938-11	DIODE SLP151B-60 (PROTECTOR)
D310	8-719-979-90	DIODE GL8PG24 (POWER)
D313	8-719-230-04	DIODE 30D4
D314	8-719-109-92	DIODE RD6.2ESB1

Ref.No.	Part No.	Description
D315	8-719-110-56	DIODE RD22ESB1
D316	8-719-801-78	DIODE 1SS184
D317	8-719-500-41	DIODE DBLCA20
D318	8-719-500-42	DIODE DBLCA20R
F301	1-532-982-11	FUSE (BRADE TYPE) (AUTO FUSE)(15A)
IC101	8-759-148-11	IC UPC1270H
IC201	8-759-148-11	IC UPC1270H
IC301	8-759-106-02	IC UPC4570G2
IC302	8-759-111-68	IC UPC1237HA
IC303	8-759-144-88	IC UPC494GS
IC304	8-759-106-02	IC UPC4570G2
L101	*1-428-086-11	COIL, AIR-CORE
L201	*1-428-086-11	COIL, AIR-CORE
L301	1-424-301-11	COIL, CHOKE 760UH
Q103	8-729-194-57	TRANSISTOR 2SC945-P
Q104	8-729-321-29	TRANSISTOR 2SC4385-Y
Q105	8-729-321-26	TRANSISTOR 2SA1670-Y
Q106	8-729-230-49	TRANSISTOR 2SC2712-YG
Q203	8-729-194-57	TRANSISTOR 2SC945-P
Q204	8-729-321-29	TRANSISTOR 2SC4385-Y
Q205	8-729-321-26	TRANSISTOR 2SA1670-Y
Q206	8-729-230-49	TRANSISTOR 2SC2712-YG
Q303	8-729-230-46	TRANSISTOR 2SA1162-YG
Q304	8-729-230-49	TRANSISTOR 2SC2712-YG
Q305	8-729-987-42	TRANSISTOR 2SA874
Q306	8-729-207-68	TRANSISTOR RN2402
Q309	8-729-230-49	TRANSISTOR 2SC2712-YG
Q310	8-729-207-89	TRANSISTOR 2SA1358-Y
Q311	8-729-230-49	TRANSISTOR 2SC2712-YG
Q312	8-729-230-46	TRANSISTOR 2SA1162-YG
Q313	8-729-230-49	TRANSISTOR 2SC2712-YG
Q314	8-729-230-49	TRANSISTOR 2SC2712-YG
Q315	8-729-230-46	TRANSISTOR 2SA1162-YG
Q316	8-729-230-46	TRANSISTOR 2SA1162-YG
Q317	8-729-321-86	TRANSISTOR 2SC3852
Q318	8-729-321-86	TRANSISTOR 2SC3852
Q319	8-729-822-54	TRANSISTOR 2SD1065-S
Q320	8-729-822-54	TRANSISTOR 2SD1065-S
R101	1-247-713-11	CARBON 1K 1% 1/4W
R102	1-216-042-00	METAL GLAZE 510 5% 1/10W
R105	1-249-417-11	CARBON MELF 1K 5% 1/5W
R106	1-215-444-00	CARBON MELF 9.1K 5% 1/5W
R108	1-215-440-00	CARBON MELF 6.2K 5% 1/5W
R109	1-249-425-11	CARBON MELF 4.7K 5% 1/5W

Ref.No.	Part No.	De
R111	1-249-426-11	CA
R112	1-215-430-00	CA
R113	1-249-437-11	CA
R114	1-215-430-00	CA
R115	1-249-437-11	CA
R116	1-215-434-00	CA
R117	1-249-426-11	CAI
R118	1-215-489-00	CAI
R119	1-249-417-11	CAI
R120	1-249-393-11	CAI
R121	1-249-393-11	CAI
R122	1-219-130-11	REI
R123	1-216-198-00	MEI
R124	1-216-206-00	MEI
R125	1-216-077-00	MEI
R126	1-215-857-11	MEI
R127	1-215-857-11	MET
R128	1-216-113-00	MET
R129	1-216-113-00	MET
R201	1-247-713-11	CAR
R202	1-216-042-00	MET
R205	1-249-417-11	CAR
R206	1-215-444-00	CAR
R208	1-215-440-00	CAR
R209	1-249-425-11	CAR
R211	1-249-426-11	CAR
R212	1-215-430-00	CAR
R213	1-249-437-11	CAR
R214	1-215-430-00	CAR
R215	1-249-437-11	CAR
R216	1-215-434-00	CAR
R217	1-249-426-11	CAR
R218	1-215-489-00	CAR
R219	1-249-417-11	CAR
R220	1-249-393-11	CARI
R221	1-249-393-11	CARI
R222	1-219-130-11	RES
R223	1-216-198-00	MET/
R224	1-216-206-00	MET/
R225	1-216-077-00	MET/
R226	1-215-857-11	MET/
R227	1-215-857-11	MET/
R228	1-216-113-00	MET/
R229	1-216-113-00	MET/
R306	1-214-860-11	MET/
R307	1-214-860-11	MET/

(AUTO FUSE)(15A)

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Ref.No.	Part No.	Description				
R111	1-249-426-11	CARBON MELF	5.6K	5%	1/5W	
R112	1-215-430-00	CARBON MELF	2.4K	5%	1/5W	
R113	1-249-437-11	CARBON MELF	47K	5%	1/5W	
R114	1-215-430-00	CARBON MELF	2.4K	5%	1/5W	
R115	1-249-437-11	CARBON MELF	47K	5%	1/5W	
R116	1-215-434-00	CARBON MELF	3.6K	5%	1/5W	
R117	1-249-426-11	CARBON MELF	5.6K	5%	1/5W	
R118	1-215-489-00	CARBON MELF	680K	5%	1/5W	
R119	1-249-417-11	CARBON MELF	1K	5%	1/5W	
R120	1-249-393-11	CARBON	10	5%	1/4W	
R121	1-249-393-11	CARBON	10	5%	1/4W	
R122	1-219-130-11	RES,METAL PLATE	0.1X2		3W	
R123	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R124	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R125	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R126	1-215-857-11	METAL OXIDE	10	5%	1W	
R127	1-215-857-11	METAL OXIDE	10	5%	1W	
R128	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R129	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R201	1-247-713-11	CARBON	1K	1%	1/4W	
R202	1-216-042-00	METAL GLAZE	510	5%	1/10W	
R205	1-249-417-11	CARBON MELF	1K	5%	1/5W	
R206	1-215-444-00	CARBON MELF	9.1K	5%	1/5W	
R208	1-215-440-00	CARBON MELF	6.2K	5%	1/5W	
R209	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R211	1-249-426-11	CARBON MELF	5.6K	5%	1/5W	
R212	1-215-430-00	CARBON MELF	2.4K	5%	1/5W	
R213	1-249-437-11	CARBON MELF	47K	5%	1/5W	
R214	1-215-430-00	CARBON MELF	2.4K	5%	1/5W	
R215	1-249-437-11	CARBON MELF	47K	5%	1/5W	
R216	1-215-434-00	CARBON MELF	3.6K	5%	1/5W	
R217	1-249-426-11	CARBON MELF	5.6K	5%	1/5W	
R218	1-215-489-00	CARBON MELF	680K	5%	1/5W	
R219	1-249-417-11	CARBON MELF	1K	5%	1/5W	
R220	1-249-393-11	CARBON	10	5%	1/4W	
R221	1-249-393-11	CARBON	10	5%	1/4W	
R222	1-219-130-11	RES,METAL PLATE	0.1X2		3W	
R223	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R224	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R225	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R226	1-215-857-11	METAL OXIDE	10	5%	1W	
R227	1-215-857-11	METAL OXIDE	10	5%	1W	
R228	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R229	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R306	1-214-860-11	METAL OXIDE	680	1%	1/2W	
R307	1-214-860-11	METAL OXIDE	680	1%	1/2W	

Ref.No.	Part No.	Description				
R308	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R309	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R310	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R311	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R312	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R313	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R314	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R315	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R316	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R317	1-249-417-11	CARBON	1K	5%	1/4W	
R319	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R320	1-216-208-00	METAL GLAZE	2.7K	5%	1/8W	
R321	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R322	1-249-422-11	CARBON	2.7K	5%	1/4W	
R323	1-249-419-11	CARBON	1.5K	5%	1/4W	
R325	1-249-429-11	CARBON MELF	10K	5%	1/5W	
R326	1-249-429-11	CARBON MELF	10K	5%	1/5W	
R327	1-247-727-11	CARBON	10	5%	1/4W	
R333	1-215-867-00	METAL GLAZE	470	5%	1W	
R355	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R356	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R357	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R358	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R359	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R360	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R361	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R362	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R363	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R364	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R365	1-247-896-11	CARBON	510K	5%	1/4W	
R366	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R367	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R368	1-216-092-00	METAL GLAZE	62K	5%	1/10W	
R369	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R370	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R371	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R372	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R373	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R374	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R375	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R376	1-216-188-00	METAL GLAZE	390	5%	1/8W	
R377	1-216-192-00	METAL GLAZE	560	5%	1/8W	
R378	1-216-192-00	METAL GLAZE	560	5%	1/8W	
R379	1-216-188-00	METAL GLAZE	390	5%	1/8W	
R380	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R381	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	

Ref.No.	Part No.	Description				
R382	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R383	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R384	1-216-349-00	METAL OXIDE	1	5%	1W	
R385	1-216-349-00	METAL OXIDE	1	5%	1W	
R386	1-215-857-11	METAL OXIDE	10	5%	1W	
R387	1-215-857-11	METAL OXIDE	10	5%	1W	
R388	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R389	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
RV301	1-238-825-11	RES, VAR, CARBON 10K (SONY STD)				
RY301	1-515-766-11	RELAY				
S301	1-572-146-11	SWITCH, SLIDE (1 CH/2 CH)				
T301	1-449-864-11	TRANSFORMER, POWER				
TH301	1-800-427-00	POSISTOR				
TH302	1-808-877-11	THERMISTOR				

ACCESSORY & PACKING MATERIAL

3-395-839-02	SCREW (DIA. 5), TAPPING
*3-395-855-01	INDIVIDUAL CARTON
*3-395-865-01	SHEET, PROTECTION
*3-395-857-01	CUSHION (MAIN)
*3-395-858-01	CUSHION (LID)
3-750-927-11	(E, AEP).....MANUAL, INSTRUCTION
3-750-927-21	(US,Canadian)...MANUAL, INSTRUCTION
3-750-927-41	(E, AEP).....MANUAL, INSTRUCTION
3-750-927-51	(E, AEP).....MANUAL, INSTRUCTION
3-706-714-00	(E, AEP).....GROMMET