SPECIFICATIONS

Amplifier (A-322)

Rated power output

20 watts per channel minimum RMS, both channels drive, at 6 Ω from 60 Hz to 15,000 Hz with no more than 0.9% total harmonic distortion (FTC)

(IEC/NF) From 63 to 12,500 Hz, 0.7% T.H.D.
at 6 Ω ..... 20 W + 20 W
at 8 Ω ..... 18 W + 18 W
(DIN) 1 kHz, at 6 Ω ..... 20 W + 20 W
1 kHz, at 8 Ω ..... 18 W + 18 W
(EIAJ) Maximum useful power output
at 6 Ω ..... 30 W + 30 W
Input sensitivity/impedance
AUX ..... 200 mV/50 kΩ
Output level/impedance
Super Woofer Pre-Out ..... 1.3 V/600 Ω

Graphic equalizer ..... 60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 15 kHz

Power consumption
..... 90 W (For U.K., Europe and Australia)
..... 95 W (For U.S.A. and Canada)
..... 110 W (For other countries)
Dimensions ..... W: 270 mm (10-5/8")
H: 110 mm (4-5/16")
D: 290 mm (11-7/16")
Weight (Net) ..... 4.7 kg (10.36 lb)

CD player (DP-322)

Readout ..... Non-contact optical readout (semiconductor laser)
Frequency response ..... 30 Hz – 20 kHz + 1 dB – 2 dB

Dimensions ..... W: 270 mm (10-5/8")
H: 80 mm (3-1/8")
D: 250 mm (9-13/16")
Weight (Net) ..... 1.8 kg (3.96 lb)

TUNER (T-322/L)

T-322 FM tuner section
Tuning frequency range ..... 87.5 MHz – 108 MHz
Usable sensitivity (MONO at 75 Ω) ..... 2.2 μV

T-322 AM tuner section
Tuning frequency range
9 kHz step ..... 531 kHz – 1,602 kHz
10 kHz step ..... 530 kHz – 1,620 kHz
Usable sensitivity ..... 500 μV (loop antenna)

T-322L FM tuner section
Tuning frequency range ..... 87.5 MHz – 108 MHz
Usable sensitivity (MONO at 75 Ω) ..... 1.8 μV

T-322L MW tuner section
Tuning frequency range ..... 522 kHz – 1,620 kHz
Usable sensitivity ..... 500 μV/m (loop antenna)

T-322L LW tuner section
Tuning frequency range ..... 153 kHz – 281 kHz
Usable sensitivity ..... 500 μV/m (loop antenna)

Dimensions ..... W: 270 mm (10-5/8")
H: 80 mm (3-1/8")
D: 262 mm (10-5/16")
Weight (Net) ..... 1.3 kg (2.86 lb)

Cassette deck (X-322)

Recording system ..... AC bias (Frequency: 105 kHz)
Wow & flutter ..... 0.8% (WRMS)

Dimensions ..... W: 270 mm (10-5/8")
H: 110 mm (4-5/16")
D: 254 mm (10")
Weight (Net) ..... 3.5 kg (7.7 lb)

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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STEREO AUDIO SYSTEM

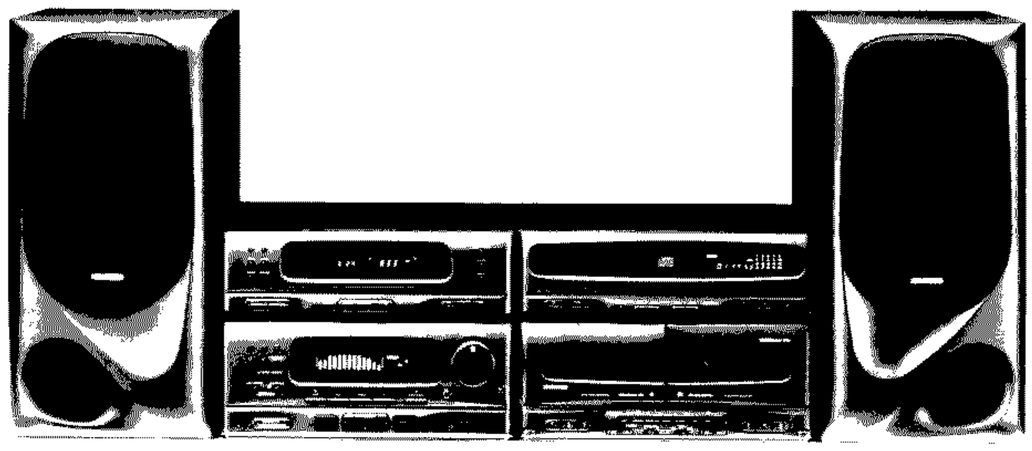
UD-50

SERVICE MANUAL

(A-322/T-322/DP-322/X-322/LS-322)

KENWOOD

1991-11 PRINTED IN JAPAN
B51-4393-00(S)4094



SET UP	AMPLIFIER	TUNER	CD	CASSETTE	SPEAKER
UD-50	A-322	T-32	DP-322	X-322	LS-322

Precautions when performing repairs.

(1) If power is applied to the T-322, DP-322 and X-322 as a stand-alone, from the power supply unit, RM-90PS, ensure that the Test Point is shorted out utilizing a jumper.
(2) Do not look directly at the laser beam while repairing the CD Player.

CONTENTS

AMPLIFIER (A-322)

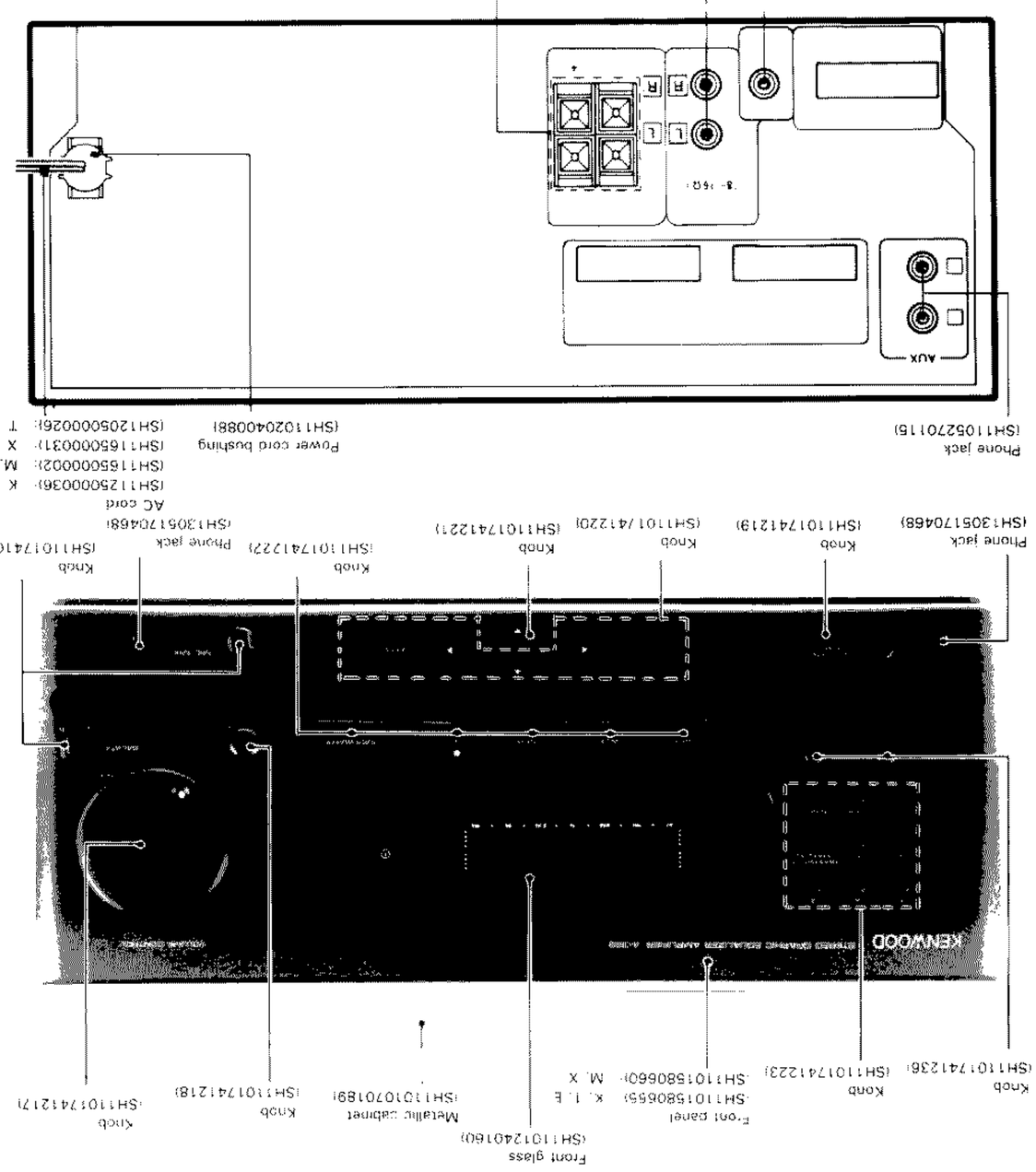


Photo is M type

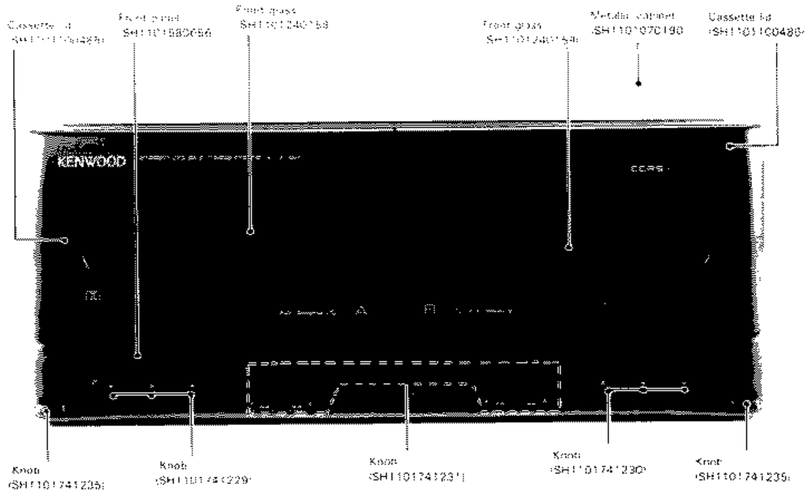
Accessories

- AM loop antenna 1 (SH11050200131)
- FM indoor antenna ..... 1 (SH11063800841).K,T,E (SH11063800851).M,X
- AC plug adaptor ..... 1 (SH11652400071) M (Except for some areas)
- A.V. pin cable ..... 1 (SH11052400491) E,T (For use for some areas)
- Remote control unit ..... 1 (SH11250400041).K,T,E (SH11050400071).M,X
- Batteries (R06 AA) 2
- BATTERY COVER (SH11011705491)

INSTRUCTION MANUAL
B60-0660-00(ENGLISH)
B60-0661-00(FRE.GER)
B60-0662-00(DUT.ITA)
B60-0664-00(CHI.SPA)

UD-50

CASSETTE(X-322)



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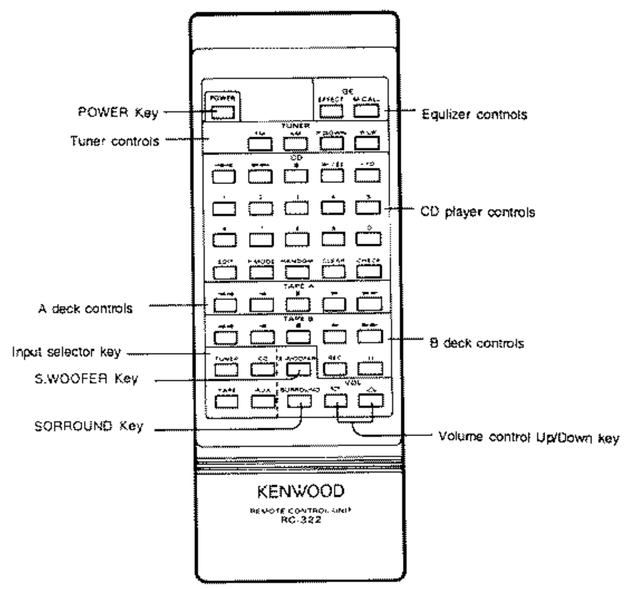
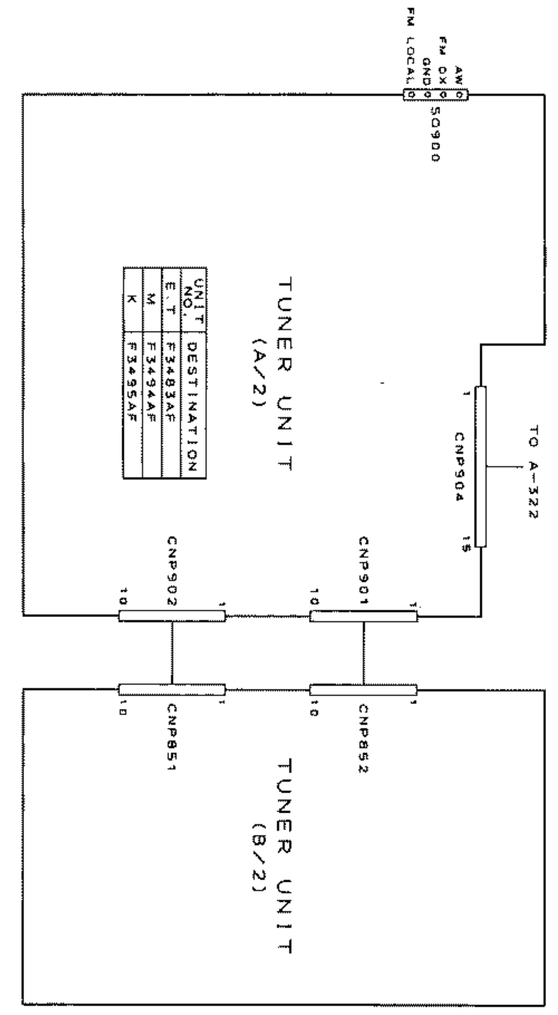
UD-50

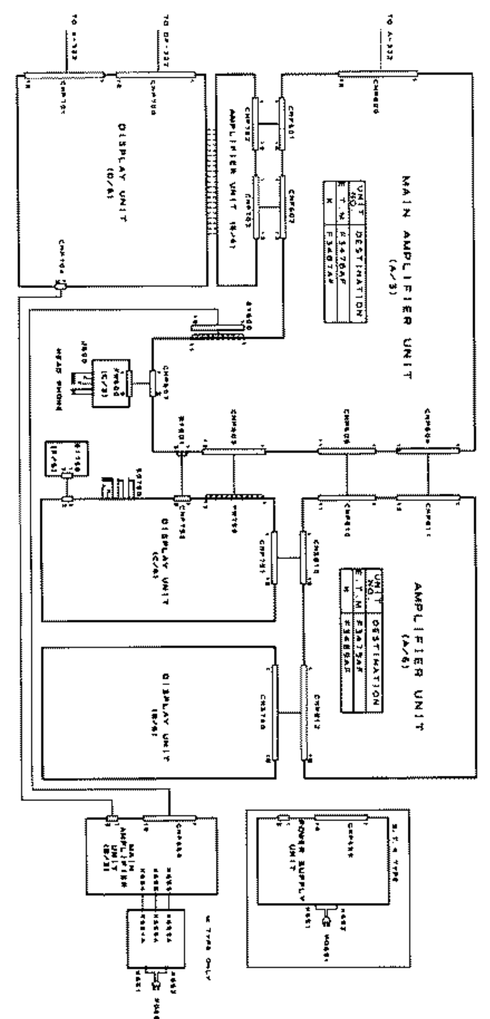
REMOTE CONTROLLER



WIRING DIAGRAM (T-322)



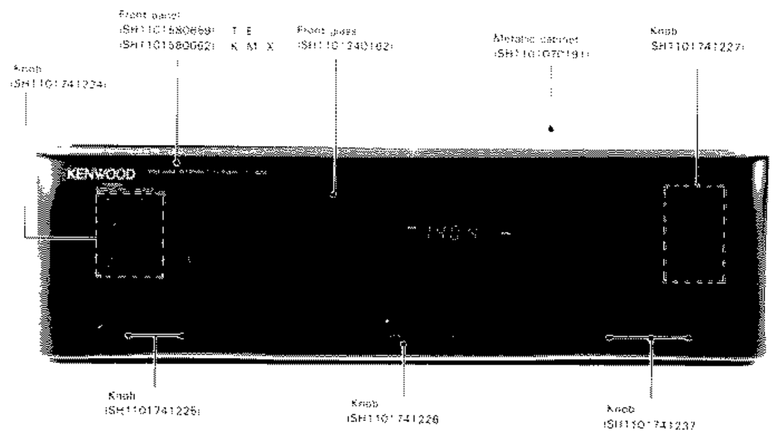
WIRING DIAGRAM



UD-50

UD-50

TUNER (T-322)



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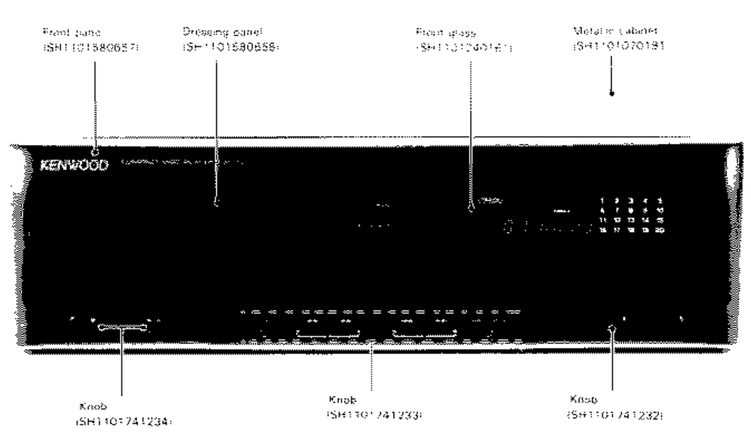
CD (DP-322)



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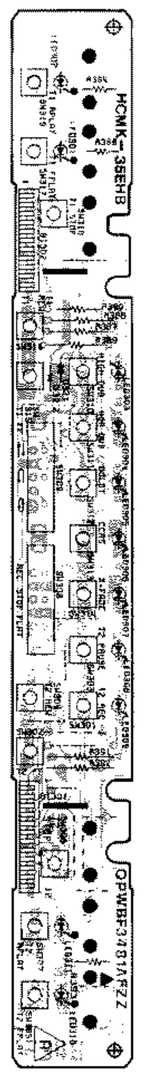
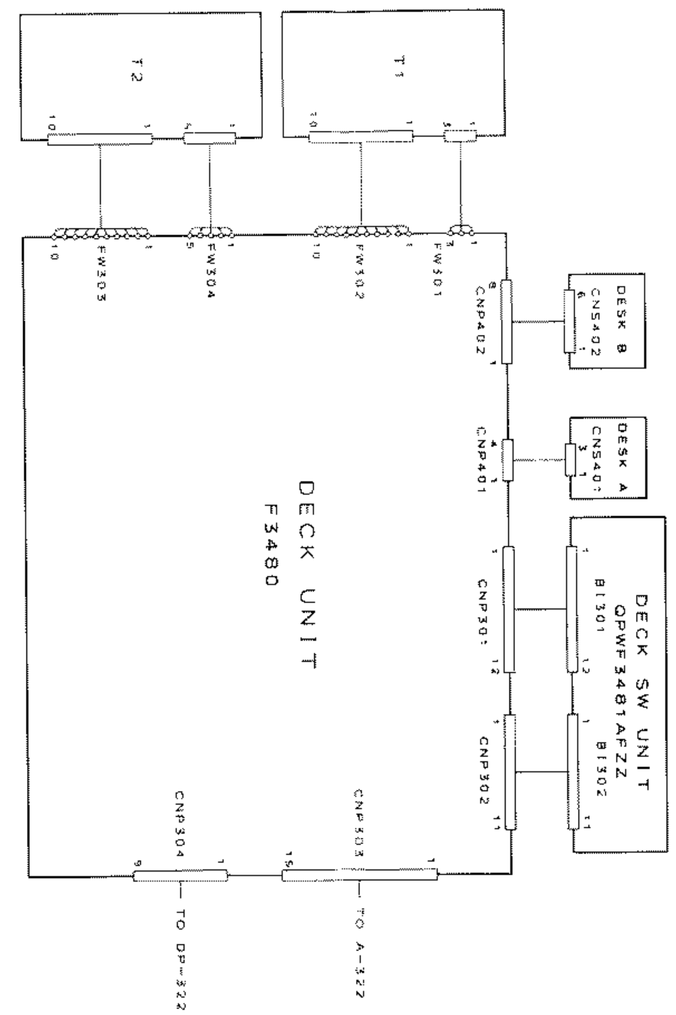


WIRING DIAGRAM (X-322)



UD-50

CIRCUIT DESCRIPTION

PIN DESCRIPTIONS (M50941)

Pin No.	I/O	Signal	Description
1	I	VCC	
2	I	DISK	CD DISK Detect INPUT. After going to the ON mode, it awaits the FUNCTION input signal. If ACT occurs within 10 seconds of going into the CD FUNCTION mode, the FUNCTION changes to the TUNER mode along with ACTIVE . After 10 seconds, the input detection becomes NULL. ACTIVE L.
3	I	AD0	SA Data input for f1 frequency
4	I	AD1	SA Data input for f2 frequency
5	I	AD2	SA Data input for f3 frequency
6	I	AD3	SA Data input for f4 frequency
7	I	AD4	SA Data input for f5 frequency
8	I	AD5	SA Data input for f6 frequency
9	I	AD6	SA Data input for f7 frequency
10, 11	O	G13, G14	FL GRID OUTPUT
12	O	EX CLK	Clock and Data output for I/O Expander BU2040 Clock Frequency is 30KHz (50% Duty Cycle)
13	O	EX DATA	
14	O	CD	Output for FUNCTION change When OFF mode all are "H" ACTIVE L
15	O	TUNER	
16	O	TAPE	
17	O	AUX	
18	I	PIN	POWER Mode Detect input
19	I	TIM IN	Timer ON Detect input. When the input is "H", the Timer is determined to be ON and F0/F1 input's REC Detect determines the Timer REC Mechanical priority.
20	I	CLOCK	Clock and Data output for Electronic Volume. When in initial reset and after the ON mode, an Initial Clock is output. Clock frequency is 30KHz at 50% Duty Cycle.
21	I	DATA	
22	I	F0	TAPE Mode Detect input. The following conditions occur.
23	I	F1	

F0	F1	
L	L	No Cassette
L	H	Cassette IN, PLAY Condition, FUNCTION changes to TAPE Mode
H	L	Cassette IN, condition other than PLAY or REC
H	H	Cassette IN, REC Condition, remains in current FUNCTION

The F0/F1 input is not only present when switching to the ON Mode but it is also present during the ON Mode.

24	I	REM	REMOTE CONTROL signal input. The KEY input has priority over the REMOTE CONTROL signal. ACTIVE L.
25	I	CALL	CD FUNCTION request input. When active, the FUNCTION switches to CD Mode. When in CD FUNCTION mode, the input is not used. When in the ON mode, because of the FUNCTION flow, the input is not used until the FUNCTION is determined. ACTIVE H.
26	–	CNVss	
27	–	RESET	
28	–	X in	
29	–	X out	

CIRCUIT DESCRIPTION

Pin No.	I/O	Signal	Description
30	–	Xc in	
31	–	Xc out	
32	–	Vss	
33	–	O	
34	–	R3	
35	–	R2	
36	–	R1	
37	–	R0	
38	–	Vp	
34 ~ 37	I	R3 ~ R0	Key Matrix Signal Return (Chattering Settle Time is 30 ms.)
39 ~ 50	O	G1 ~ G12	FL Grid Output (G6 ~ G12 uses the Key Matrix Scan signal)
51 ~ 62	O	S1 ~ S12	FL Segment Output
63	I	AVcc	
64	I	Vcc	

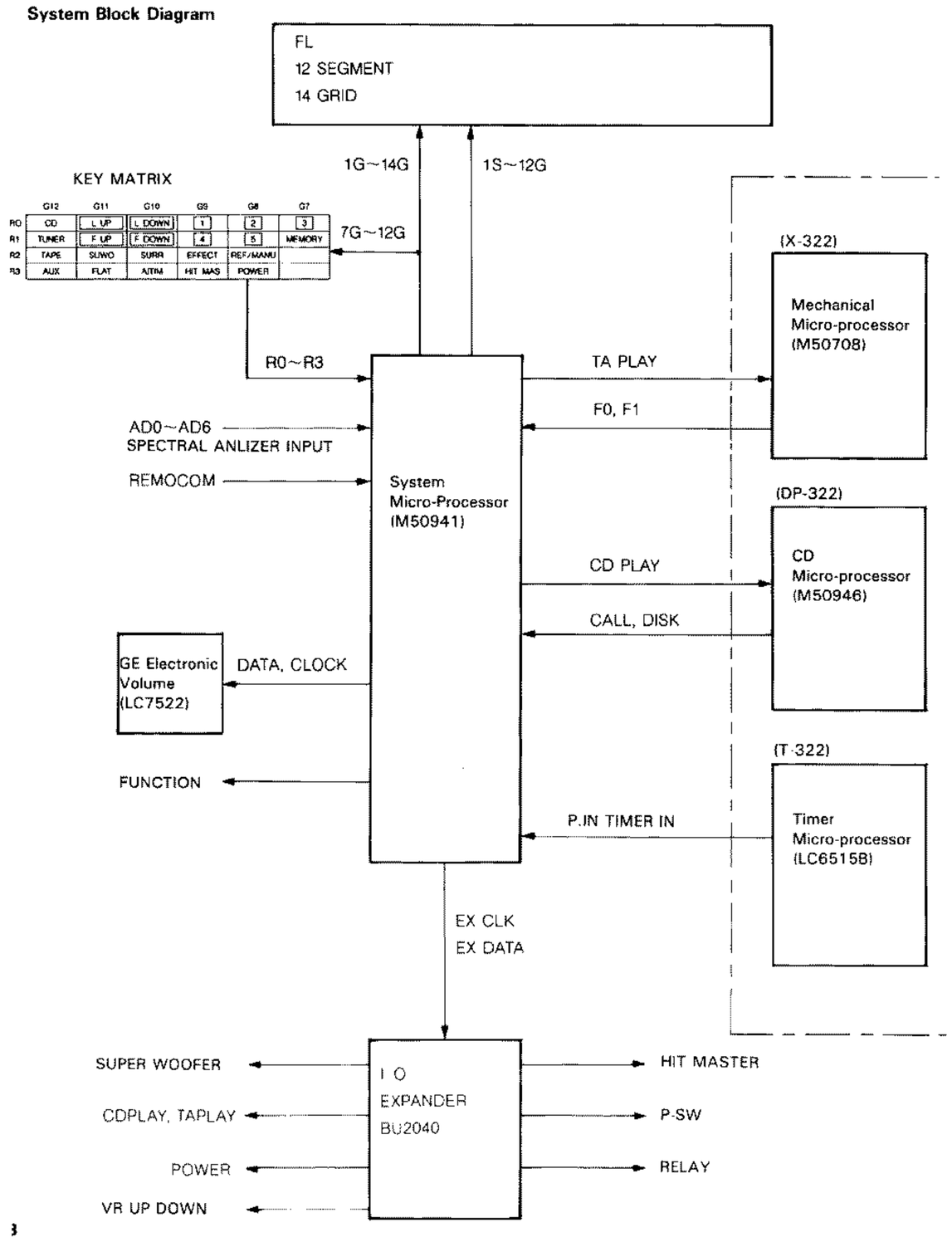
PIN DESCRIPTIONS (BU2040)

Pin No.	I/O	Signal	Description
1	–	Vss	
2	I	EX DATA	
3	I	EX CLK	
4	O	SUW0	
5	O	SURR	SURROUND Output Signal. Toggles with the use of the SURROUND key and the REMOTE CONTROL input. In the OFF Mode, it is "H". After initial reset and and in the initial ON Mode, it is "H". After that, when in the ON Mode, it assumes the last state. ACTIVE L.
6	O	TA PLAY	Forced TAPE Play output signal. The TAPE FUNCTION is "H" and the other FUNCTIONS are "L", but if the TAPE FUNCTION and the REMOTE CONTROL input is present, a 100 ms negative pulse is generated. When in the OFF Mode, it is "L".
7	O	CD PLAY	Forced CD Play output signal. Every time that the CD FUNCTION key and the REMOTE CONTROL input are present, a 200 ms Positive Pulse is generated. Also if within the CD FUNCTION, the CD FUNCTION key and the REMOTE CONTROL input is present, it becomes active. But when the CALL input is present, then no play. When in the OFF Mode, it is "L". ACTIVE "H".
8	O	POWER	The Entire System power output signal. Determined by the PIN, TIM IN, and F0/F1 inputs. After initial reset, it is in the OFF Mode. ACTIVE "L".
9	O	RLY	RELAY output signal. 2.5 seconds after the POWER ON Mode, it becomes "L". ACTIVE "L".
10	O	PSW	POWER key and REMOTE CONTROL signal detect output. For every input, a 200ms Negative pulse is generated. ACTIVE "L".
11	O	MUTE	MUTE output signal. When either in the OFF Mode, going to the ON Mode, during FUNCTION changes, SURR/SUW0/HIT MAS output toggle, Electronic Volume Data change, it becomes active. ACTIVE "L".
12	O	V UP	When the REMOTE CONTROL VOL UP is being inputted or the AI TIMER is working, it becomes active. When in the OFF Mode, it is "L". ACTIVE "H".
13	O	V DOWN	When the REMOTE CONTROL VOL DOWN is being inputted or the AI TIMER is working, it becomes active. When in the OFF Mode, it is "L". ACTIVE "H".
14	O	HIT MAS	HIT MASTER output signal. For every key input, it toggles the output. In the OFF Mode, it is "H". After initial reset and in the initial ON Mode, it is "H". After that, when in the ON Mode, it assumes the last state. ACTIVE "L".
15	O	$\overline{MUTE}$	
16	–	V_{DD}	

CIRCUIT DESCRIPTION

Micro-Processor (Amplifier Section)

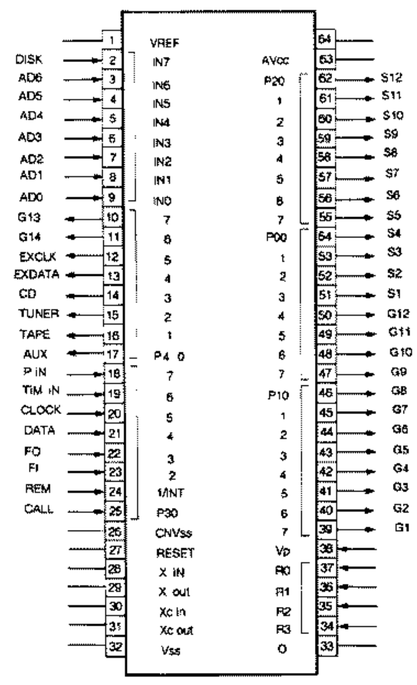
System Block Diagram



CIRCUIT DESCRIPTION

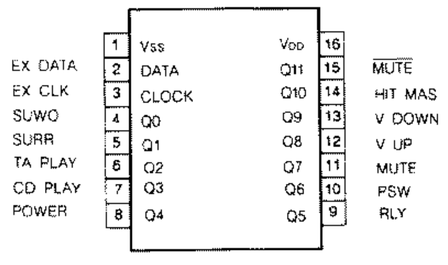
Micro-Processor (M50941)

Port Assignments

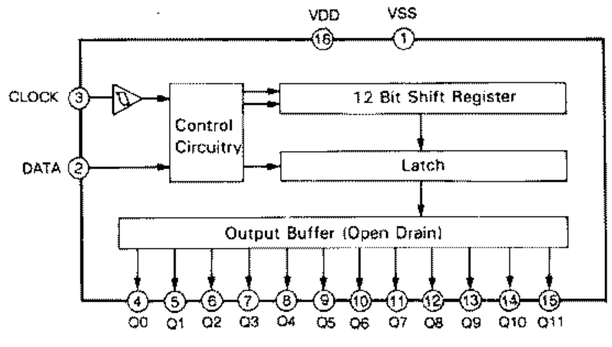


I/O Expander (BU2040)

Port Assignments

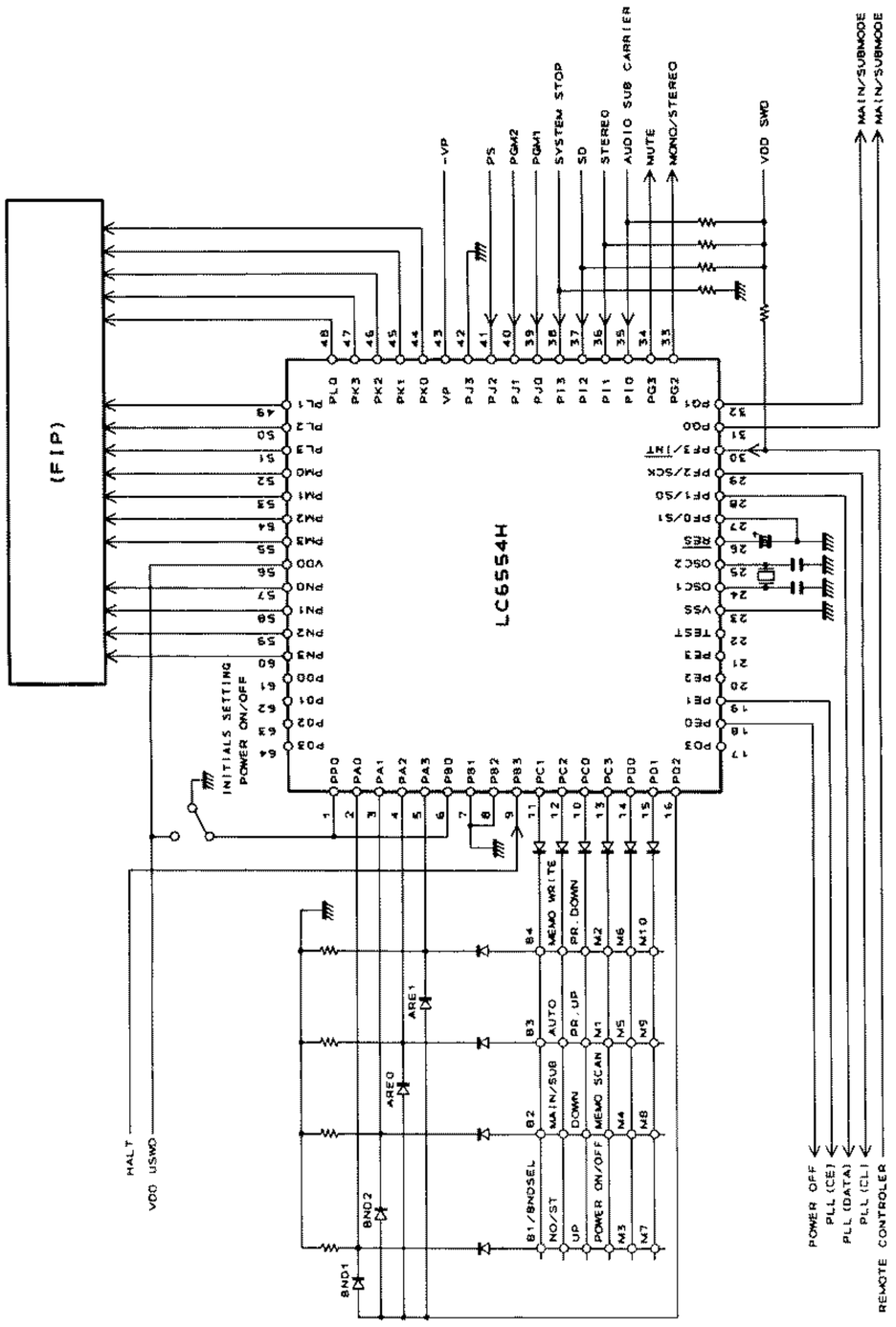


Internal Block Diagram



TIMER Micro-processor (LC5615B)

PORT ASSIGNMENT DIAGRAM



Station selection LC6554H

1. Receive Frequency Bands

Locality	Band	Receive Frequency Band or Receive Frequency	Pre-Scaler	Channel Separation		Deviation	IF Frequency
				AUTO	MANUAL		
U.S.A.	MW	530KHz—1620KHz	—	10KHz	10KHz	10KHz	450KHz
	FM	87.5MHz—108.0MHz	—	100KHz	100KHz	25KHz	10.7MHz
Europe	LW	153KHz—279KHz 280KHz, 281KHz	—	9KHz	1KHz	1KHz	450KHz
	MW	522KHz—1620KHz	—	9KHz	9KHz	9KHz	450KHz
	FM	87.50MHz—108.0MHz	—	50KHz	50KHz	25KHz	10.7MHz
Normal (1)	MW	531KHz—1602KHz	—	9KHz	9KHz	9KHz	450KHz
	FM	87.5MHz—108.00MHz	—	50KHz	50KHz	25KHz	10.7MHz

NOTES:

(1) Auto Channel Separation means that Station Auto-Scan is ON and Manual Channel Separation means that it is in Manual Mode.

(2) For Localities in Europe in the LW Band, when in Station Auto-Scan mode, the receive frequency indication changes in 1 KHz steps, but receive only occurs in 9 KHz steps. Therefore any frequencies at the 280 KHz, 281 KHz and within the 9 KHz span can not utilize the AUTO SCAN stations.
In the LW Band, the frequencies that are in the 9 KHz span;
153 162 171 180 189 198 207 216 225 234

INITIAL SET-UP

The Initial Set-Up is according to chart below.

INITIAL SET-UP DIODE	OPERATION
ARE0	Locations J:NO K:YES E:NO M:YES
ARE1	Locations J:NO K:NO E:YES M:YES
BND1	Band Select B1-B4 or BND SEL Set-Up
BND2	MAIN/SUB Mode signal output (PG0, PG1) Set-Up

PORT ASSIGNMENT	OPERATION
PB0	POWER ON/OFF Mode Set-Up

TEST MODE

When the EFFECT and FLAT keys are depressed simultaneously, the TEST mode operates. After switching to the TEST Mode and going into the ON Mode, all the FL's will remain on for 3 seconds. After that, for every time that the F UP key is depressed, the GE changes as outlined in the chart below. If at any time during the TEST Mode, the FUNCTION Key is depressed, the TEST Mode is terminated and Normal Operation commences.

INPUT	RESULT	
	OFF Mode	
PIN	ON Mode	AUX Function
	All FL's are ON for	3 seconds
	GE FLAT Indication	EFFECT ON, GE, Setup Mode
F UP	GE f1 = +10dB	f2-f7 = FLAT
F UP	GE f1 = −10dB	f2-f7 = FLAT
F UP	GE f2 = +10dB	f1, f3-f7 = FLAT
.	.	.
.	.	.
.	.	.
F UP	GE f6 = −10dB	f1-f5, f7 = FLAT
F UP	GE f7 = +10dB	f1-f6 = FLAT
F UP	GE f7 = −10dB	f1-f6 = FLAT
F UP	GE f1 = +10dB	f2-f7 = FLAT
.	.	.
.	.	.

AI TIMER

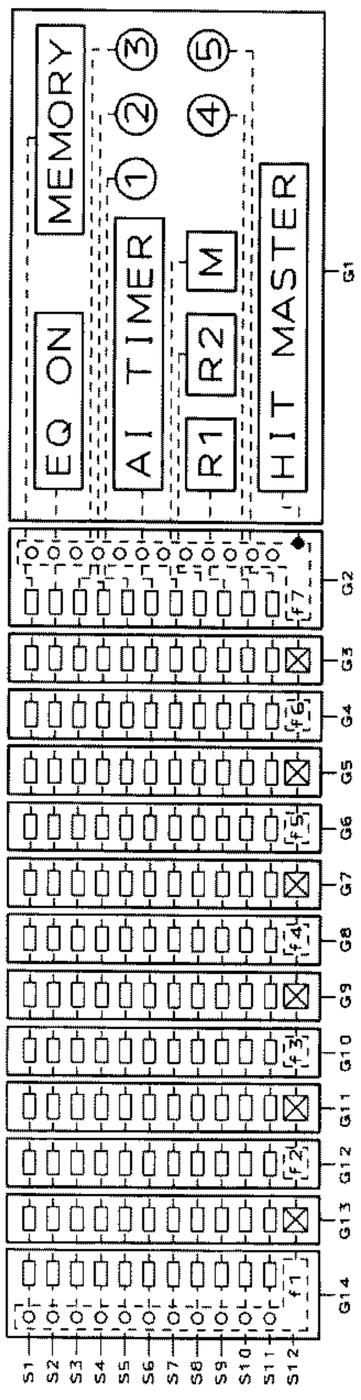
AI TIMER OPERATION

OPERATIONAL STEP	AI TIMER
1	For 15 seconds after going into the ON Mode, the V DOWN output signal becomes active. The AI GE Pattern "A" is generated.
2	For 1 second, the V UP output signal becomes active.
3	30 seconds have past.
4	For 300 (1) ms or 650 (2) ms or 1000 (3) ms, the V UP output signal becomes active. The AI GE Pattern "B" is generated.
5	30 seconds have past.
6	For 300 (1) ms or 650 (2) ms or 1000 (3) ms, the V UP output signal becomes active. When in the LAST POWER ON Mode, the GE Data is generated.
7	End of AI Timer Operation

The EFFECT ON and the Setup Mode are active during the AI TIMER operation through step 6.

When going into the ON Mode during the AI TIMER Operation, the MUTE output signal is active for 15 seconds. If during this operation, this mode is terminated, it becomes the normal ON Mode. Also if the GE Pattern is changed during steps 4 or 6, the MUTE output signal nevers becomes active.

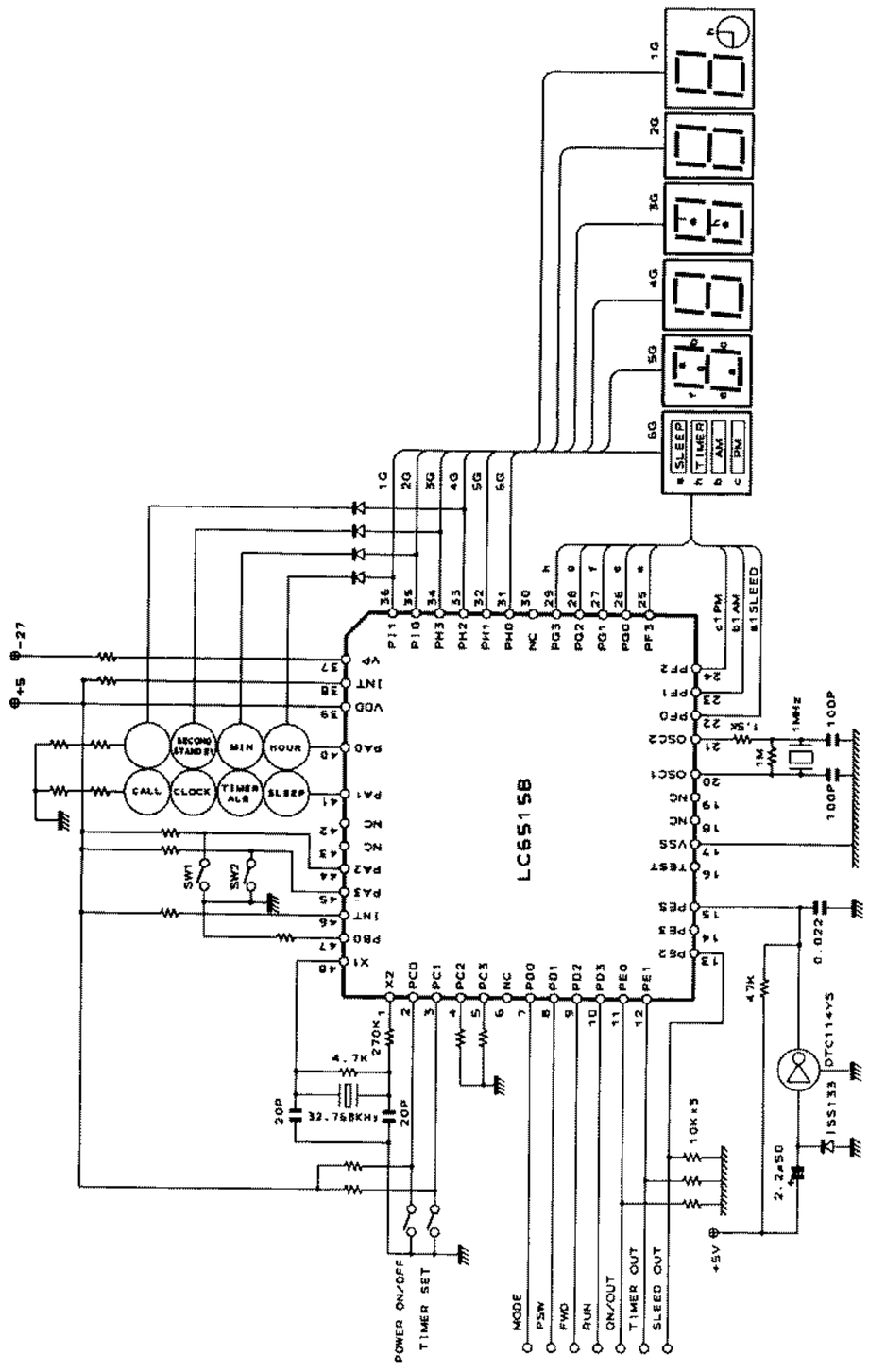
FL INDICATIONS



	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14
S1	MEMORY	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10
S2	EQ ON	+8	+8	+8	+8	+8	+8	+8	+8	+8	+8	+8	+8	+8
S3	3	+6	+6	+6	+6	+6	+6	+6	+6	+6	+6	+6	+6	+6
S4	2	+4	+4	+4	+4	+4	+4	+4	+4	+4	+4	+4	+4	+4
S5	1	+2	+2	+2	+2	+2	+2	+2	+2	+2	+2	+2	+2	+2
S6	AI TIMER	0	0	0	0	0	0	0	0	0	0	0	0	0
S7	M	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
S8	R2	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4
S9	R1	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6
S10	4	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
S11	5	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
S12	HIT WASTER	OFF	☒	f6	☒	f5	☒	f4	☒	f3	☒	f2	☒	f1

TIMER IC CONTROLLER (LC6515B)

PORT ASSIGNMENTS



PIN DESCRIPTIONS

Pin No.	I/O	Signal	Description
1	—	—	CRYSTAL for Clock
2	I	POWER ON/OFF	POWER ON/OFF Key
3	I	Timer Set	Timer Set Key
4	I	—	
5	I	—	
6	NC	—	
7	I	—	For Tape Counter — NOT USED
8	I	—	For Tape Counter — NOT USED
9	I	—	For Tape Counter — NOT USED
10	I	—	For Tape Counter — NOT USED
11	O	ON OUT	POWER ON = "H", POWER OFF = "L"
12	O	TIMER OUT	POWER ON with TIMER = "H"
13	O	SLEEP OUT	POWER ON with SLEEP = "H"
14	O	—	
15	I	RES	RESET
16	—	TEST	
17	Vss	GND	
18	NC		
19	NC		
20	—	—	Micro-processor Clock (1 MHz)
21	—	—	Micro-processor Clock (1 MHz)
22	O	DIGIT	a/SLEEP Line
23	O	DIGIT	b/AM Line
24	O	DIGIT	c/PM Line
25	O	DIGIT	d Line
26	O	DIGIT	e Line
27	O	DIGIT	f Line
28	O	DIGIT	g Line
29	O	DIGIT	h Line
30	NC		
31	O	Grid	6G
32	O	Grid	5G
33	O	Grid	4G
34	O	Grid	3G
35	O	Grid	2G
36	O	Grid	1G
37	—	Voltage	Pull-Down (–VP)
38	—	—	
39		Power	+5V
40	I	KEY 1	Key Scan
41	I	KEY 2	Key Scan
42	NC	—	
43	NC	—	
44	I	Indication Set up	
45	I		
46	I	—	
47	I	—	
48	—	—	Crystal for Clock

24 Hour Indication	12 Hour Indication	
	AM 12:00	AM 0:00
H	H	L
H	L	L

PIN DESCRIPTIONS

Pin No.	I/O	Signal	Description
1	O	PP0	Not Used (OPEN)
2	I	PA0	Key Matrix Return
3	I	PA1	Key Matrix Return
4	I	PA2	Key Matrix Return
5	I	PA3	Key Matrix Return
6	I	PB0	Initial Set-Up (POWER ON/OFF Set-Up)
7	I	PB1	Not Used (Connect to Ground)
8	I	PB2	
9	I	PB3	HALT Mode (Stand-by) Low Vt or less: Stand-by "H" Level: Normal Operation
10	O	PC0	Key Strobe
11	O	PC1	Key Strobe
12	O	PC2	Key Strobe
13	O	PC3	Key Strobe
14	O	PD0	Key Strobe
15	O	PD1	Key Strobe
16	O	PD2	Key Strobe
17	O	PD3	Not Used
18	O	PE0	POWER OFF
19	O	PE1	PLL Data (CE)
20	O	PE2	Not Used
21	O	PE3	Not Used
22	—	TEST	LSI Test Signal (Connect to ground)
23	—	Vss	For Power signal (Connect to ground)
24	I	OSC 1	System Clock
25	O	OSC 2	System Clock
26	I	$\overline{RES}$	System Reset
27	I	PF0/S1	Not Used (Connect to ground)
28	O	PF1/S0	PLL Data (DATA)
29	O	PF2/$\overline{SCK}$	PLL Data (CLOCK)
30	I	PF3/$\overline{INT}$	REMOTE CONTROL (Actively LOW)
31	O	PG0	MAIN/SUB Mode
32	O	PG1	MAIN/SUB Mode
33	O	PG2	MONO/STEREO H:MONO L:STEREO
34	O	PG3	MUTE
35	I	PI 0	AUDIO SUB-CARRIER
36	I	PI 1	STEREO
37	I	PI 2	SD
38	I	PI 3	System Stop
39	I	PJ 0	PGM1
40	I	PJ 1	PGM2
41	I	PJ 2	PS

Pin No.	I/O	Signal	Description
42	I	PJ 3	Not Used (Connect to ground)
43	—	VP	Power for Pull-Down Resistor
44	O	PK 0	Fluorescent Display Segment a
45	O	PK 1	Fluorescent Display Segment b
46	O	PK 2	Fluorescent Display Segment c
47	O	PK 3	Fluorescent Display Segment d
48	O	PL 0	Fluorescent Display Segment e
49	O	PL 1	Fluorescent Display Segment f
50	O	PL 2	Fluorescent Display Segment g
51	O	PL 3	Fluorescent Display Segment h
52	O	PM 0	Fluorescent Display Digit G1
53	O	PM 1	Fluorescent Display Digit G2
54	O	PM 2	Fluorescent Display Digit G3
55	O	PM 3	Fluorescent Display Digit G4
56	—	V_{DD}	Power (V_{DD})
57	O	PH 0	Fluorescent Display Digit G5
58	O	PH 1	Fluorescent Display Digit G6
59	O	PH 2	Fluorescent Display Digit G7
60	O	PH 3	Fluorescent Display Digit G8
61	O	PO 0	Not Used
62	O	PO 1	(OPEN)
63	O	PO 2	
64	O	PO 3	

* PF0, PF3, Pi0-3 ports are being used for input but, in Stand-By, the Output is a LOW.

CIRCUIT DESCRIPTION

PIN DESCRIPTIONS

Pin No.	I/O	Signal	Description
1	—	VREF	Reference Voltage
2	I	Audio (A/D)	Audio Signal when in Peak Search
3	I	OPEN sw	Tray is open L
4	I	CLOSE sw	When Tray is closed L
5	I	SUPPLY	Servo Voltage ON = HIGH/OFF = LOW
6	I	PUIN sw	LOW when the Pick Up in at the inner most point
7	I	T.COUNT	Track Count is present = LOW, else HIGH
8	I	Dout	Sub-Code Data Serial
9	I	WQ	Sub-Code Output Flag OK = HIGH
10	O	SCK	Serial Clock
11	O	Din	Command Data (Serial)
12	O	R/W	Command = HIGH and used as a COMPLETION Signal
13	O	TRY-CLOSE	CONDITION: OPEN CLOSED NORMAL BRAKE
14	O	TRY-OPEN	P44: HIGH LOW LOW HIGH P43: LOW HIGH LOW HIGH
15	O	MUTE	MUTE ON = LOW PLAY = HIGH
16	O	LASER ON	LASER ON/OFF CONTROL ON = LOW
17	O	CCRS SEARCH	Kick-Pulse changeover during Peak Search (HIGH during Search)
18	O	KP-0	Kick-Pulse (−) during Peak Search
19	O	KP+0	Kick-Pulse (+) during Peak Search
20	I	KP+	Kick-Pulse Timing Monitor during Peak Search
21	O	CCRS SEARCH	P40(CCRS Search) determining signal (LOW during Peak Search)
22	O	STROBE	Cassette control 4094 Strobe (X-322)
23	O	DATA	Cassette control 4094 Data (X-322)
24	I	REMO	LED Remote Controller
25	O	CLOCK	Cassette control 4094 Clock (X-322)
26	—	Vss	GND
27	I	RESET	Reset with 2us or more (LOW)
28	I	Xin	Oscillator Circuitry Clock
29	O	Xout	Oscillator Circuitry Clock
30	—	NC	
31	—	NC	
32	—	Vss	GND
33	—	NC	NC
34	I	CD-PLAY	HIGH = CD PLAY
35	I	KEY2-IN	Key Scan
36	I	KEY1-IN	Key Scan
37	I	KEY0-IN	Key Scan
38	—	−VP	Pull-Down Voltage (−VP)
39	O	1G	FL Grid Control
40	O	2G	FL Grid Control
41	O	3G	FL Grid Control
42	O	4G	FL Grid Control
43	O	5G	FL Grid Control
44	O	6G	FL Grid Control
45	O	7G	FL Grid Control
46	O	8G	FL Grid Control
47	O	9G	FL Grid Control
48	O	10G	FL Grid Control
49	O	a	FL DIGIT Control
50	O	b	FL DIGIT Control
51	O	c	FL DIGIT Control
52	O	d	FL DIGIT Control
53	O	e	FL DIGIT Control
54	O	f	FL DIGIT Control
55	O	g	FL DIGIT Control
56	O	h	FL DIGIT Control
57	O	i	FL DIGIT Control
58	O	j	FL DIGIT Control
59	O	FUNC.CALL	SUPPLY = LOW (Other functions = HIGH)
60	I	— — —	Not Used
61	O	DISC	DISK = HIGH NO DISK = LOW
62	O	CCRS-MUTE	MUTE = LOW during CCRS Peak Search
63	—	Avcc	A/D converter voltage
64		Vcc	+5v

CIRCUIT DESCRIPTION

Test Mode

TEST MODE SET-UP

(1) Short out Test Point

(2) Turn POWER ON while simultaneously depressing the REPEAT and TIME DISPLAY Keys.

* When entering Test Mode, ALL the indications should light.
  The Synchro and full-duplex is inoperative.
  To terminate Test Mode, you must turn the POWER OFF.

TEST MODE OPERATION

NO	KEY	OPERATION
①	PLAY/PAUSE	The Disk plays. The clock indicator will be a single indication. It will pause on the second depression of the PLAY key.
②	STOP	STOP
③	UP ▶▶|	Slide (Feed) will be sent while the key is depressed
④	DOWN |◀◀	Slide (Feed) will be sent while the key is depressed
⑤	CUE ▶▶	CUE
⑥	REV ◀◀	REVIEW
⑦	OPEN/CLOSE	Opens/Closes the tray during the STOP Mode

But the OPEN/CLOSE during PLAY/PAUSE can not be done.
CUE/REV during PLAY is at fast speed and during PAUSE, it is at low speed and no operation during STOP.
During REV TNO = 00 and the key OFF is STOP.

CIRCUIT DESCRIPTION

CD PLAYER SECTION

INPUT SECTION

(1) Tray Assembly and Dis-Assembly procedure.

Dis-Assembly (1) Open the Tray
(2) Remove the two fasteners at the rear of the tray and remove the tray.

Assembly (1) Turn the Rotary Gear fully clockwise.
(The Mechanism should be in the down position)
(2) Insert the tray along the tray guides.

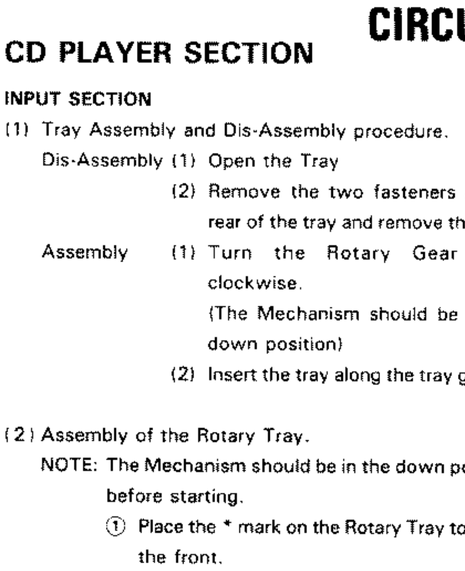
(2) Assembly of the Rotary Tray.

NOTE: The Mechanism should be in the down position before starting.

① Place the * mark on the Rotary Tray towards the front.
② Tighten the screw.
③ Turn the Rotary Gear either clockwise or counter-clockwise and confirm that the Mechanism Ass'y moves smoothly.

PICKUP REPLACEMENT PROCEDURE

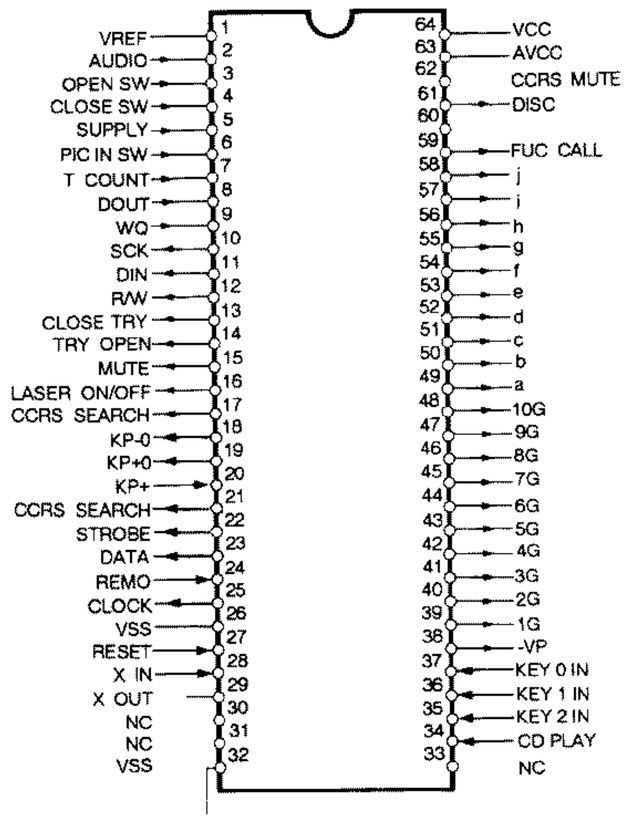
1. Remove the three screws marked with a ❶ and remove the Pick-Up Chassis.



2. Remove the four screws marked with a ❷ and remove the Pick.

CIRCUIT DESCRIPTION

CD Controller Micro-processor (M50946)



CIRCUIT DESCRIPTION

Pin explanation

PIN No.	Pin Name	IN/OUT	Response system	Function
1	Vcc	IN		Input voltage 5V ± 10% applied
2	MTRH	OUT	Deck mechanism	Capstan motor rotation switch (During double speed: H! During double speed dubbing (H) output, at other times (L) output
3	TIMMT	OUT	Deck mechanism	Tape 1 main motor output (L: rotate, H: stop)
4	TISOL	OUT	Deck mechanism	Tape 1 solenoid output (Used in triggering and in maintaining status) (L: ON H: OFF)
5	TIRMR	OUT	Deck mechanism	Tape 1 reel motor reverse rotation (RMF, RMR) (L, L) Forbidden (H, H) Stop
6	TIRMF	OUT	Deck mechanism	Tape 1 reel motor forward rotation (H, L) Forward rotation (L, H) Reverse rotation
7	TIRMH	OUT	Deck mechanism	Tape 1 reel motor high speed output (H: high speed)
8	T2MMT	OUT	Deck mechanism	Tape 2 main motor output (L: rotate, H: stop)
9	T2SOL	OUT	Deck mechanism	Tape 2 solenoid output (Used in triggering and in maintaining status)
10	T2RMR	OUT	Deck mechanism	Tape 2 reel motor reverse rotation (RMF, RMR) (L, L) Forbidden (H, H) Stop
11	T2RMF	OUT	Deck mechanism	Tape 2 reel motor forward rotation (H, L) Forward rotation (L, H) Reverse rotation
12	T2RMH	OUT	Deck mechanism	Tape 2 reel motor high speed output (H: high speed)
13 14	F0 F1	OUT OUT	SYS microprocessor	

Mode	F0	F1	Function
There is tape	1	0	Output when there is a cassette in T1, T2 (output if there is tape in one or the other)
when input	0	1	Output when the mechanism PLAY key is pressed for playback (including the remote controller); PLAY beginsafter output.
REC	1	1	Output when the mechanism enters the REC mode. REC begins after output. However, this is not output during dubbing.
STOP (NOP)	0	0	Output when the mechanism is in the STOP mode and there is no tape.

15 16	S0 S1	OUT OUT	CD microprocessor

Mode	S0	S1	Function
STOP	0	0	Output at times other than those given below.
CCRS	0	1	Output when the CCRS key is pressed, outputting that the CCRS mode has been entered.
Manual REC	1	0	Outputs that manual REC has been entered.
X-FADE	1	1	Outputs that the X-FADE key has been pressed and the X-FADE mode entered.

				N.B.) (0, 0) is output during dubbing (T1 →T2).
17	CD. RV	OUT	CD microprocessor	Reverse signal during CD synchro actuation Side A: (L), Side B: (H)
18	T2RUN	IN	Deck mechanism	Input for detection of tape running mode
19	T1RUN	IN		Pulse generation during running
20	T2REC	OUT		When tape 2 is in the REC mode (H) is output. At other times (L) is output.
21	Soft Bias	OUT		Used for bias rising during X-FADE.
22	T2BOS	OUT		When tape 2 is in the REC mode (L) is output. At other times (H) is output.
23	T2NOR	OUT		Tape 2 NOR output (BIAS oscillation switch)
24	T1NOR	OUT		Tape 1 unused

CIRCUIT DESCRIPTION

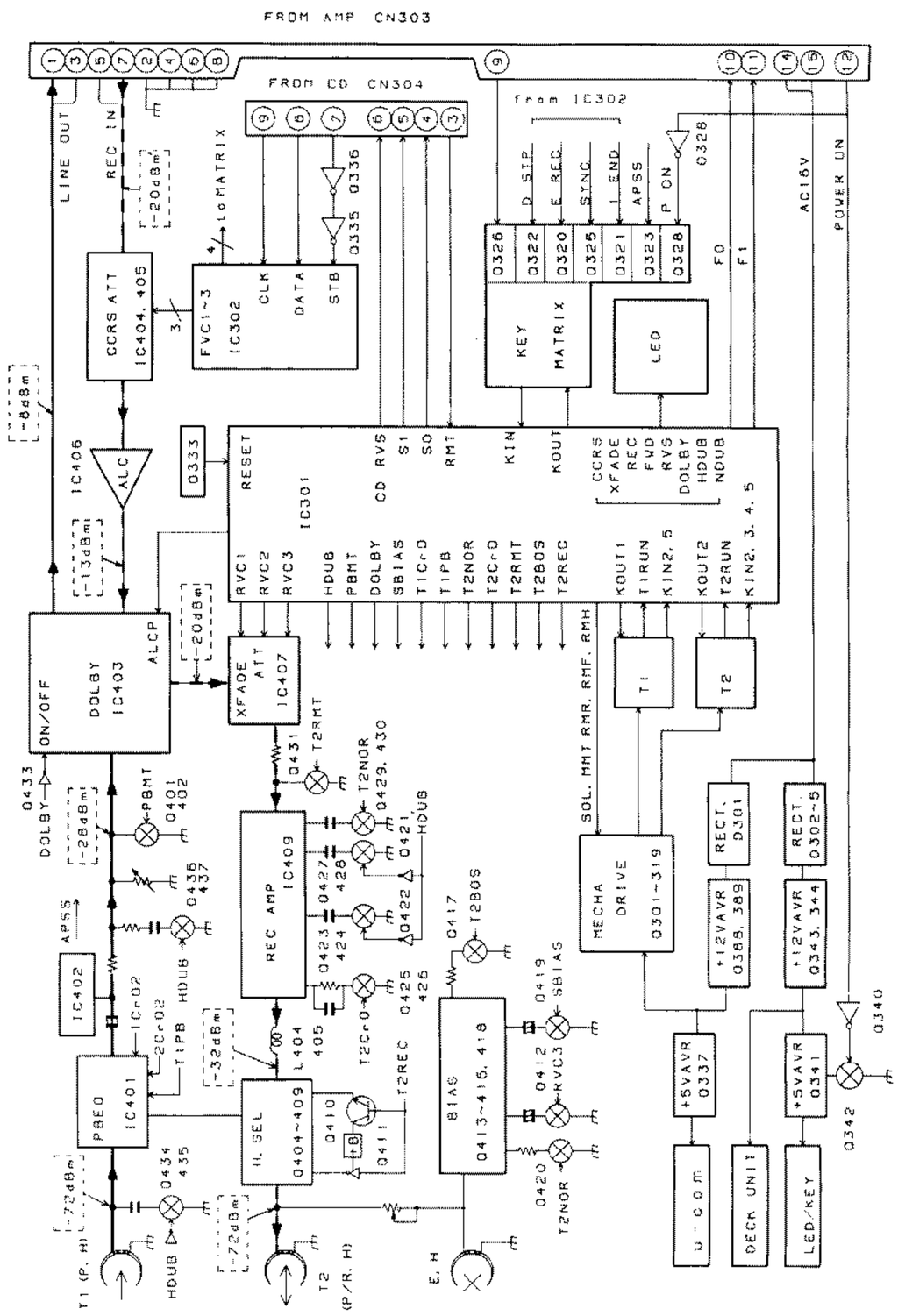
Pin explanation

PIN No.	Pin Name	IN/OUT	Response system	Function
25	Mechanism priority	OUT	Unused	
26	REMT (Edge)	IN	Remote controller send microprocessor	If there is remote control input (fall), serial data isinput.
27	CNVss	IN		Connected to GND
28	RESET	IN		Reset mode with "L" 2㎲S or more at the reset input pin.
29	Xin	IN		Clock input
30	Xout	OUT		Clock output
31	φ	OUT		Timing output
32	Vss	IN		Power supply input 0V applied
33	REMT (Level)	IN	Remote controller send microprocessor	Remote input level determination port
34 ~ 40	KIN1 ~ KIN7	IN		Key scan input (dual use for key matrix, signal matrix)
41 ~ 46	KOUT1 ~ KOUT6	OUT		Key scan output (dual use for key matrix, signal matrix)
47	PAUSE	OUT		(Doubles as LED) outputs (H) during PAUSE, REC-PAUSE
48	REC IND	OUT		REC indicator. Outputs (L) during REC. However, during creation of non-recorded passages, it causes flashing for 4 seconds at 2Hz.
49 50	T2FWD T1FWD	OUT OUT		FWD (▶) / REV (◀) indicator (L) = (▶), (H) = (◀)
51	DOLBY	OUT		DOLBY output (H) when on
52	XFADE	OUT		(Doubles as LED) Flashes during X-FADE. (L) illuminates.
53	H-DUB	OUT		(Doubles as LED) Outputs (H) duringdouble-speed dubbing.
54	N-DUB	OUT		(Doubles as LED) Outputs (L) during regular-speed dubbing.
55	CCRS	OUT		(Doubles as LED) Flashes during CCRS. (L) illuminates.
56	T2CRO	OUT		Tape 2 CRO output. CrO2 (H)
57	T1CRO	OUT		Tape 1 CRO output.
58	T1PB	OUT		Outputs (L) when tape 2 is in the playback mode or DPSS mode; at other times it outputs (H).
59	PLMT	OUT		PLAY MUTE output is (L) during PLAY; at other times (H).
60	ALCP	OUT		(H) is output when TAPE input is (L) during regular-speed dubbing REC-PLAY. At other times (L) is output.
61	T2RMT	OUT		Record MUTE is output. (L) during REC
62 ~ 64	REC. VOL1 ~ REC. VOL3	OUT		Used at fadeout during X-FADE. The record level is raised in succession (0, 0, 0) → (1, 1, 1), in 8increments over 5.2 seconds.

KEY MATRIX

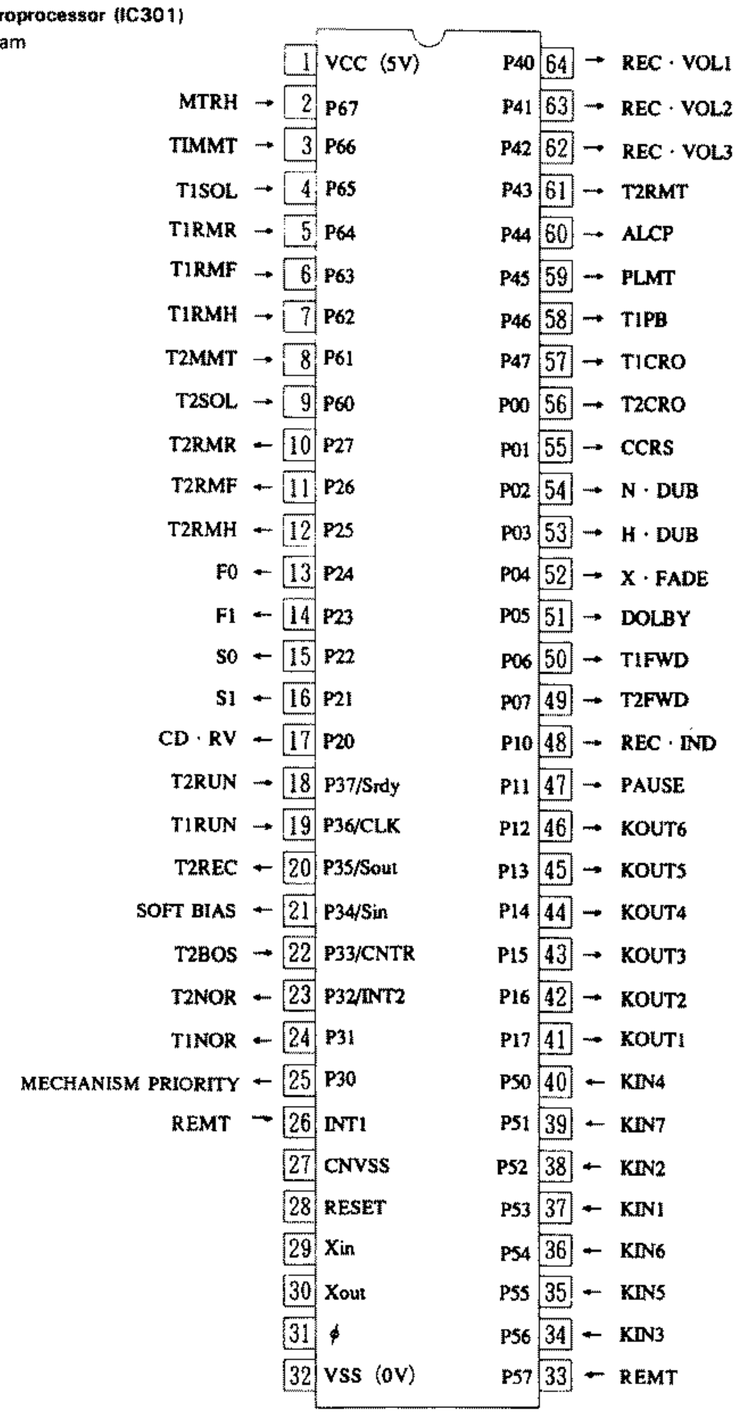
	P50 KIN4	P51 KIN7	P52 KIN2	P53 KIN1	P54 KIN6	P55 KIN5	P56 KIN3
P17 KOOT1	X FADE	SYNC	A HALF	TEST	DUB STOP	A CRO_2	E REC
P16 2	B INH RVS	TAPE	B HALF			B CRO_2	B INH FWD
P15 3	TREC	DPSS	⟲	→ ←	POWER ON		TPLAY
P14 4	A RWD		A STOP	A RVS	A FF		A FWD
P13 5	B RWD	B REC	B STOP	B RVS	B FF	B PAUSE	B FWD
P12 6	DOLBY		X FADE		H-DUB	N-DUB	CCRS

CIRCUIT DESCRIPTION



Mechanism microprocessor (IC301)

Pin layout diagram



CIRCUIT DESCRIPTION

Analog switch : MC14051B (I404,405,407,408)

*Turns SW XO - X7 ON, OFF through control inputs A, B, C, INH. (Normally this means that one SW is ON.)

Pin layout diagram

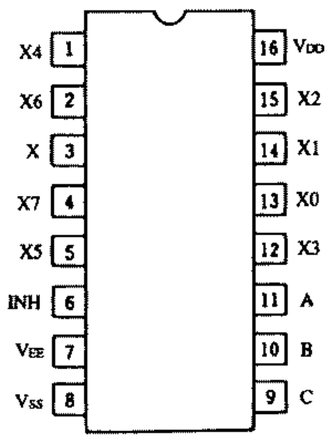


Table of truth values

Control inputs				"ON"
INHIBIT	C	B	A	μPD4051BC
L	L	L	L	X0
L	L	L	H	X1
L	L	H	L	X2
L	L	H	H	X3
L	H	L	L	X4
L	H	L	H	X5
L	H	H	L	X6
L	H	H	H	X7
H	X	X	X	NONE

IC404, 405 (REC input ATT of CCRS)

After completion of CD peak search, FVC1 - 3 are output, controlling REC ATT of the DECK.

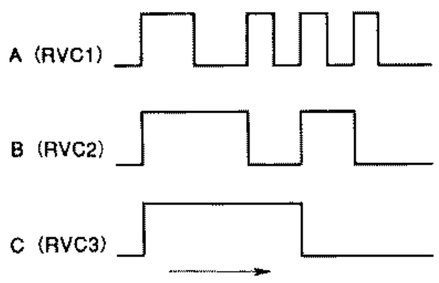
During fade - in the record level is raised in succession (H, H, H) → (L, L, L), setting the level.

The level is determined.

	Level	~0.55	~0.9	~1.25	~1.6	~2.15	~5V	
FVC3	L	H	H	H	H	L	L	(C)
FVC2	L	H	H	L	L	H	H	(B)
FVC1	L	H	L	H	L	H	L	(A)
	OFF	During peak search						

IC407, 408 (REC input ATT of X. FADE)

At X. FADE, fade out occurs at the combinationof A, B, C.



ADJUSTMENT

NO.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGNEMENT METHOD	FIG.
Unless otherwise specified, the individual swithches should be set as follows. SELECTOR: FM MODE: STEREO AUTO/MANUAL: AUTO SLEEP: OFF For the input side signal frequency, select and use a frequency at a location close to the center of the scale where there is no broadcast station.							
1	DISCRIMINATOR	(A) 85.0 MHZ 1 kHz, ± 75 kHz dev 60 dB μ (ANT input)	Connect a DC voltmeter to TP900.	MONO 85.0 MHz	T902	OV	(a)
2	AUTO STOP SENSITIVITY	(A) 85.0 MHz 0 dev 27 dBμ (ANT input)	Between 8 pin of IC900 (LA1265) and GND	85.0 MHz	VR901	Point where voltage has changed from 5V to OV.	(d)
AM SECTION SELECTOR: AM SLEEP: OFF							
3	BAND EDGE	–	Place DC vlotmenter for Q906 collector and GND.	522 kHz	T909 B side core	1V	
				1692 kHz	Check	8V ± 1V	

CIRCUIT DESCRIPTION

Sub microprocessor MC14049B (IC302)

This is controlled by the CD microprocessor and actuates the system.

④ D.STOP : Outputs on completion of CCRS X-FADA and stops mechanism actuation.

⑤ ERASE : Turns off the LED on completion of CCRS X-FADE.

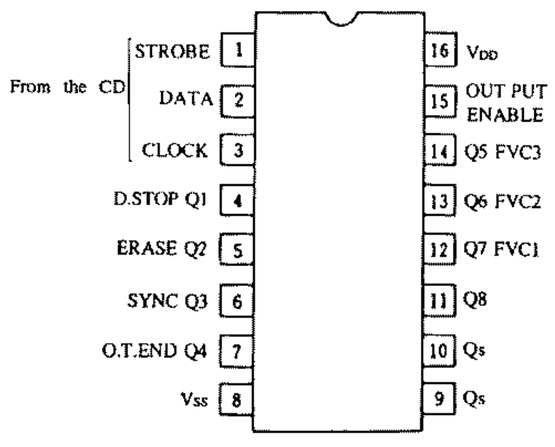
⑥ SYNC : Outputs the synchro REC record control signal.

⑦ O.T. END : Outputs on completion of the track.

⑫ ~ ⑭ FVC 1 ~ 3

Outputs the control signal to input level ATT (IC404,405) on completion of CD peak search at CCRS.

2-1 Pin connection diagram



NO.	I/O	Name	Port Name	Description
4	O	D. STOP	Q1	CCRS, S. FADE, when dubbing of manual REC is completed [H]
5	O	ERASE	Q2	TAPE erase signal during synchro, erase of CCRS display during STOP
6	O	SYNC-OUT	Q3	Synchro output [H] = REC.PLAY/[L] = PAUSE
7	O	End of one music piece	Q4	X. FADE: control of TAPE return, CCRS: TAPE-B surface fade
11	O	TWO-JUMP	Q8	Interval of 10 seconds upon completion of single musiic piece performance during CCRS-PGM synchro
				If at TAPE. REC time [H], tape returns by 2 music pieces and erases
				At this time, CD also returns by 2 music pieces
12	O	REC. LEVEL 1	Q7	level ~ 0.55 ~ 0.9 ~ 1.25 ~ 1.6 ~ 2.15 ~ 5V
13	O	REC. LEVEL 2	Q6	Q7:L H L H L H L
14	O	REC. LEVEL 3	Q5	Q6:L H H L L H H
				Q5:L H H H H L L
				OFF during peak search

CIRCUIT DESCRIPTION

Playback amplifier:BA3416BL (IC401)

Conducts playback amplifier and A, B SELECT.

① ~ ④ IN PUT

⑤ ~ ⑥ NF

⑦ ~ ⑨ 70μs control input

⑬ ~ ⑭ OVT PUT

⑮ ~ ⑯ 70 μsEQ

⑰ ~ ⑱ A/B SELECT Input

*With Cro₂ tape ⑦ , ⑨ — (H)

*TAPE SELECT

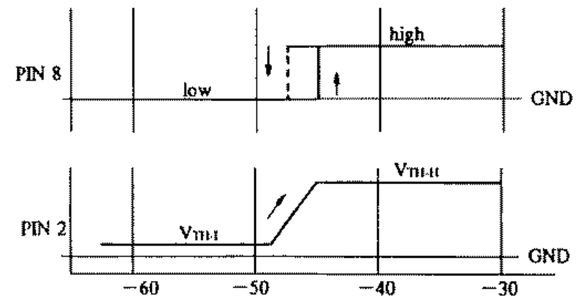
⑰	L	L	H	H
⑱	L	H	L	H
	B	A	B	Indeterminate

Because the actual circuit connects ⑰ to GND, A/B are switched at pin ⑱.

DPSS : LA2000 (IC402)

Output from pin ⑧ is read from Q323 into the microprocessor at the key matrix.

Actuation of each pin



As the input level increases as shown in the diagram, when the voltage of pin ② reaches the level VTH-H of the comparator, pin ⑧ is inverted (VI=45 dBm).

DOLBY : HA12136 (IC403)

④ Vret — 1/2Vcc

⑤ NR ON/OFF control

[H — NR ON L — NR OFF]

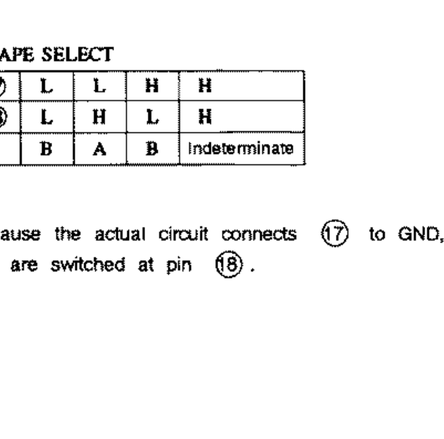
⑦ , ⑩ DET time constant pin

⑫ REC/PB control

[(H — REC (ENCODE) L — PB (DECODE)]

⑬ BIAS (I.REF)

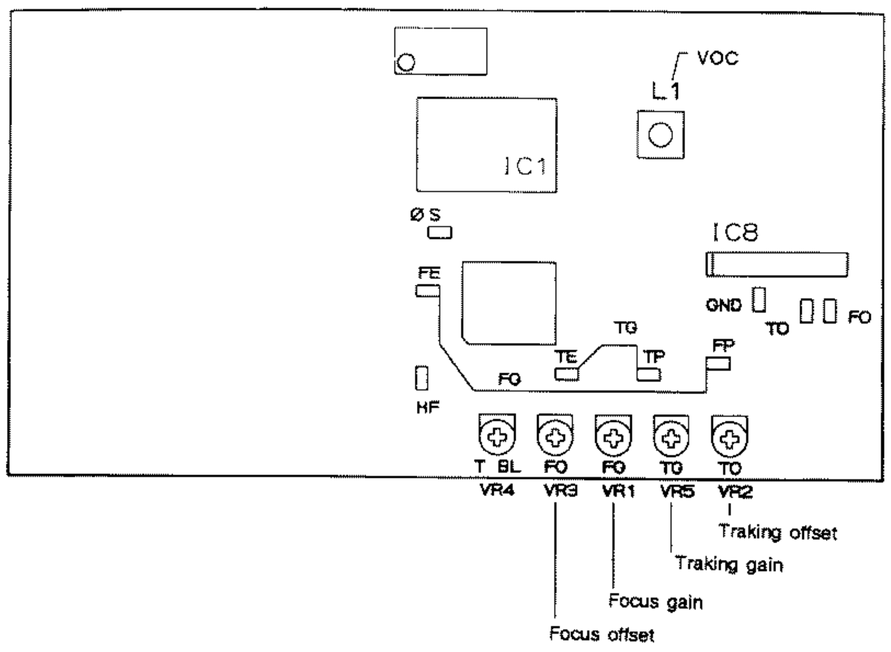
Pin layout diagram



ALC: M51544A (IC406)

The size of signal to DOLBY IN is controlled by DC level added to (5) pin input. (varies within range of 0 to 0.6 V.)

ADJUSTMENT



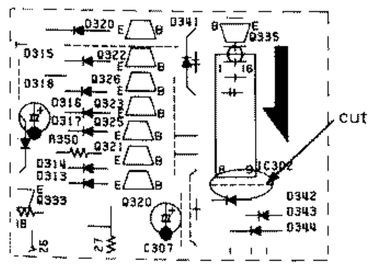
ADJUSTMENT

CSSSETTE DECK

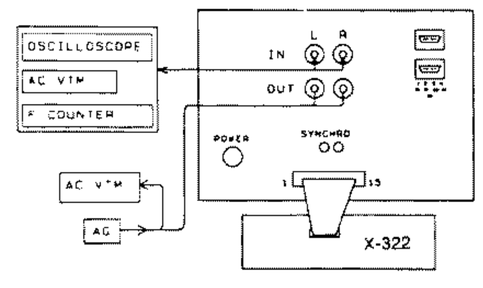
When using the RM 90PS power supply tool, carry out the following.
① Short the POWER ON jumper and turn the power on.
② Note that IN and OUT are in reverse position.

When performing adjustments on the system, heed the following.
① Be sure to always use A-322, T-322, DP-322 and X-322.
② Use INPUT-AUX of A-322 and OUTPUT-TP502 of X-322.

NO.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CASSETTE TAPE DECK SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
CASSETTE DECK SECTION		TAPE: NORMAL, DOLBY: OFF, INPUT: LINE				0dBs = 0.775V	
① REC/PLAY HEAD							
[1]	DEMAGNETIZATION	–	–	POWER: OFF	REC/PLAY head	Demagnetize the REC/PLAY head with a head demagnetizer.	
[2]	CLEANING		–	PLAY	REC/PLAY head erase head, capstan, pinch roller.	Clean the REC/PLAY head erase head, capstan and pinch roller using a cotton swab slightly damped with alchol.	
[3]	AZIMUTH	SCC1727 MTT-114, TCC-153 10kHz, -10dB	(B)	PLAY	Azimuth adjustment screw	Maximum output.	(a)
② PC BOARD							
<1>	TAPE SPEED (NORMAL)	SCC1727 MTT-111, TCC-110 3kHz -4dB	(B)	PLAY	DECK A : 301 DECK B : 303	Adjust the tape speed so that a 3kHz signal is produced at the center of the tape.	(b)
<2>	TAPE SPEED (HI SPEED)	SCC1727 MTT-111, TCC-110 3kHz -4dB	(B)	Short-circuit A-HI B-HI TP 302	DECK A : 302 DECK B : 304	Adjust the tape speed so that a 5kHz signal is produced at the center of the tape.	(b)
<3>	PLAYBACK LEVEL	SCC1727 315Hz (-4dB) / MTT-256 315Hz (-4dB)	(B)	PLAY	VR501(L) VR502(R)	Output level : -6.0dBm / Output level : -6.0dBm	(c)
<4>	BIAS CURRENT **	(A) 1kHz, -28dBm 10kHz, -28dBm (-28dBm = 30mV)	(B)	Adjust AG output so that the SPEAKER output becomes -28dBm at 1kHz, then record and reproduce signal of 1kHz and 10kHz in alternation.	VR503 (L) VR504 (R)	Record 1kHz and 10kHz in alternation and adjust the variable resistors which control the bias current so that the same playback level is obtained.	(d)
<5>	RECORD LEVEL **	AG is adjusted so that the AUDIO ouput of the fixture becomes 1 kHz -20 dBm.	(B)	Record and reproduce a 1kHz signal under the conditions set in <4>.	VR505 (L) VR506 (R)	During playback, VR is adjusted so that the AUDIO Output becomes -20 dBm.	(e)



RM-90PS Connections



When using Power Supply Jig RM-90PS (KENWOOD made,extra charge) for X-322, use the following Procedure to check and repair unit. Connect test equipments and unit to Jig as figure.

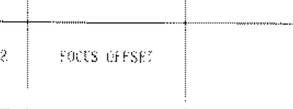
ADJUSTMENT

CD PLAYER

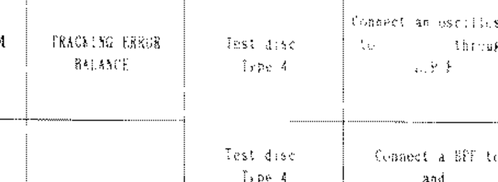
NO	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	PLAYER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
1	VCO		Connect a frequency counter to VCO	STOP	VC		(a)
2	FOCUS OFFSET		Connect DC voltmeter to FOCUS	STOP	VR3	0 ± 50mV	
3	TRACKING OFFSET		Connect DC voltmeter to TRACKING	STOP	VR2	0 ± 50mV	
4	TRACKING ERROR BALANCE	Test disc Type 4	Connect an oscilloscope to through a 10kΩ	Set A 311 to TEST MODE Connect pin 5 of IC8 to GND PLAY	TE BALANCE VR4	Symmetry between upper and lower patterns. or DC 0	(c)
5	FOCUS GAIN	Test disc Type 4 Apply signal of 1kHz, 103mVrms to and	Connect a BPF to and to which connect an oscilloscope or AC voltmeters	PLAY	FOCUS GAIN VR1	Two VTVMs should read the same value	(e)
6	TRACKING GAIN	Test disc Type 4 Apply signal of 1kHz, 103mVrms to and	Connect a BPF to and to which connect an oscilloscope or AC voltmeters	PLAY	TRACKING GAIN VR5	Two VTVMs should read the same value	(e)

TEST MODE: Insert AC plug to wall outlet under pressing REPEAT and TIME DISPLAY knobs

(c) T.E balance L.P.F

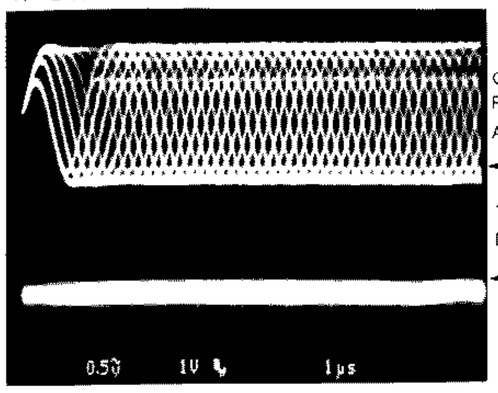


(e) Focus and Tracking gain B.P.F



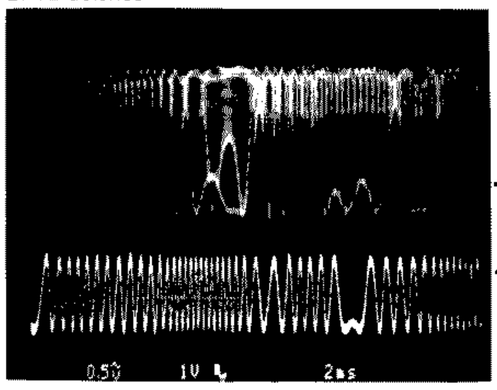
ADJUSTMENT

1. PLAY



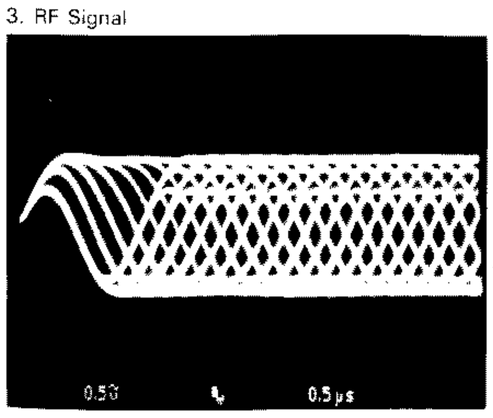
- RF signal and E Spot signal in test mode (PLAY).

2. TE Balance



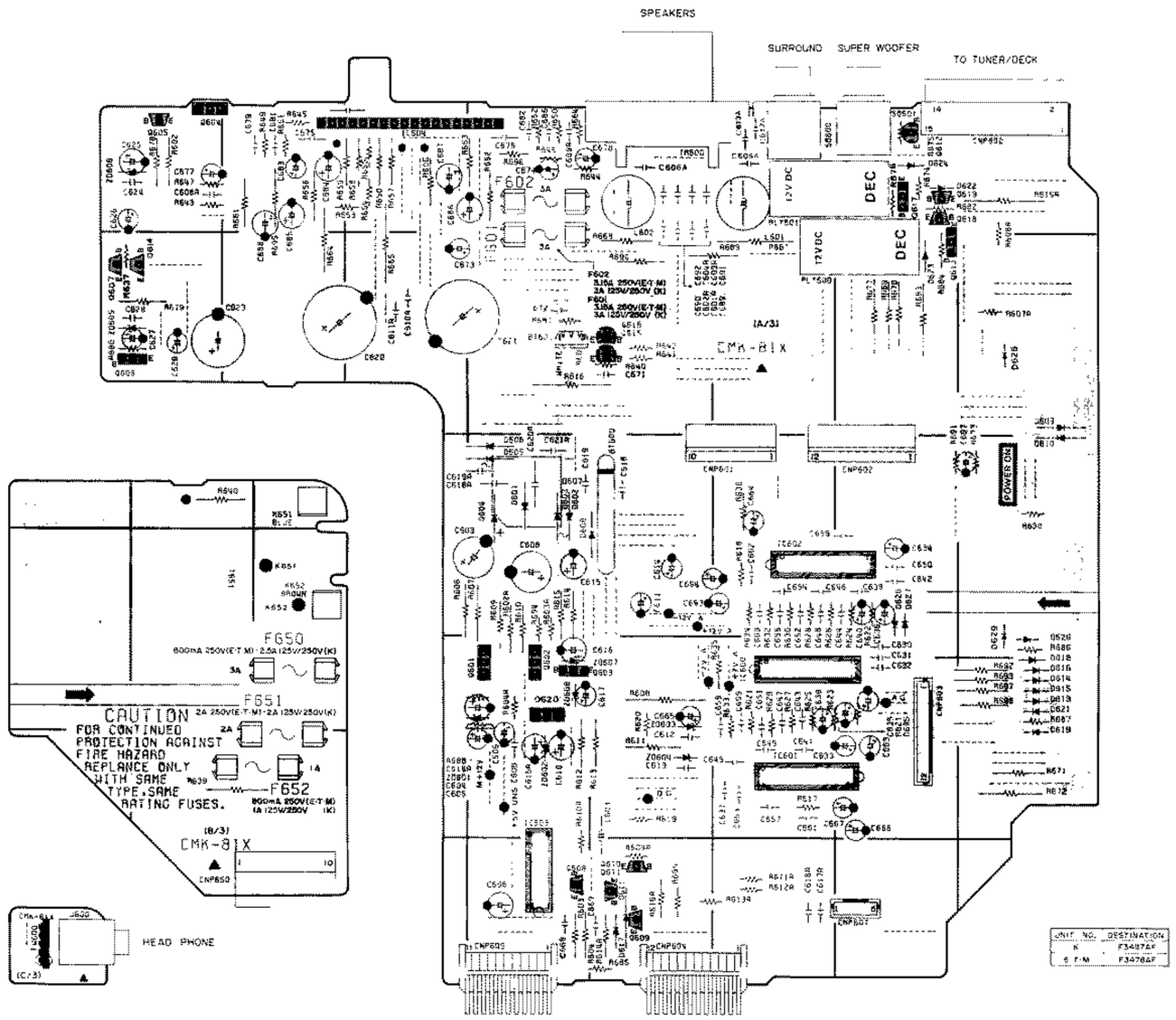
- RF signal and T Error signal in test mode (Focusing ON, TDisc type 4).
- Adjust T Error so that the waveform is symmetrical above and below 0V (VR4).

3. RF Signal



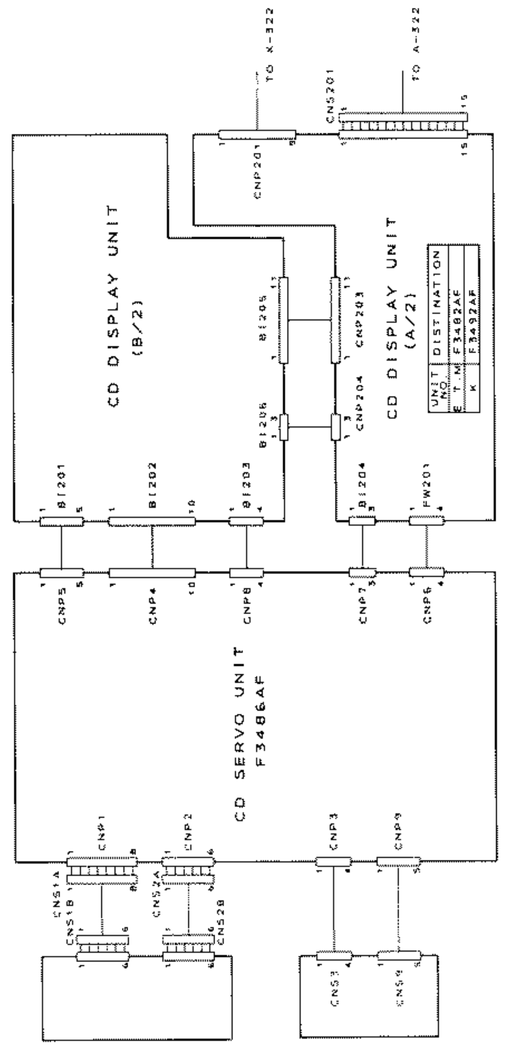
- Perform the tangential and focusing offset adjustments so that each of the center cross points are focused into one point on the display. The crossing points above and below the center shall also be displayed clearly.

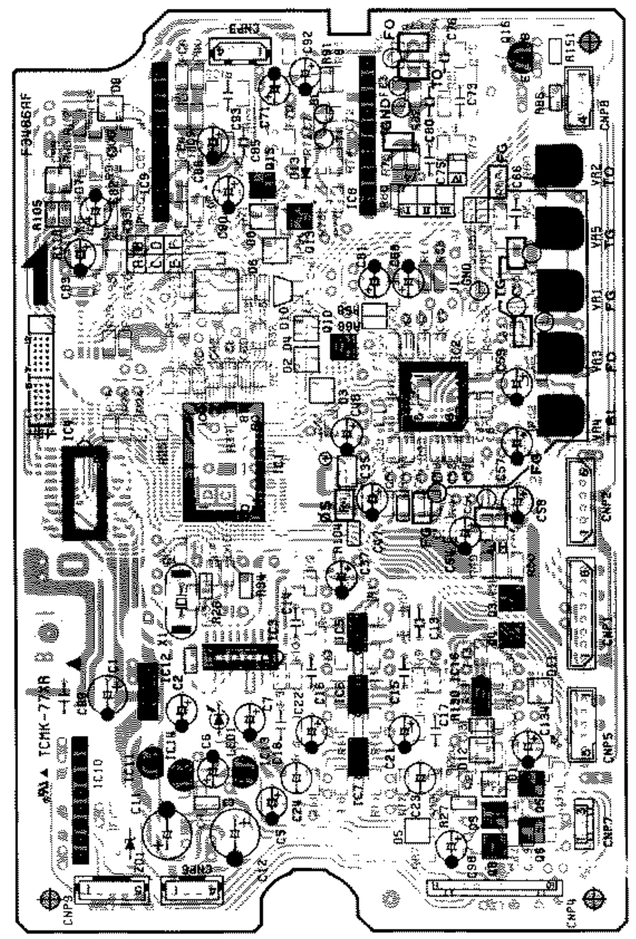
PC BOARD (Component side view) (A-322)



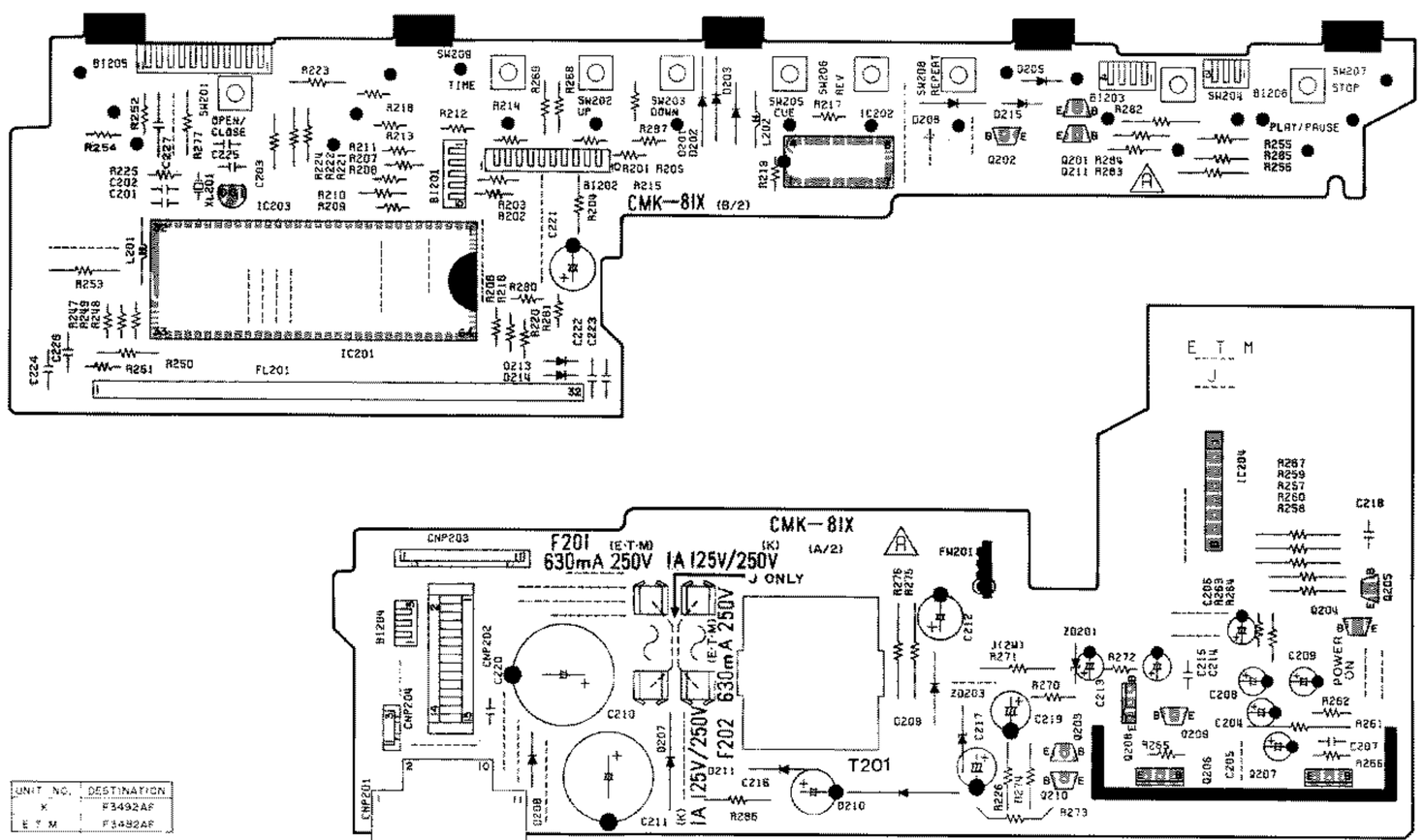
Refer to the schematic diagram for the values of resistors and capacitors

WIRING DIAGRAM (DP-322)

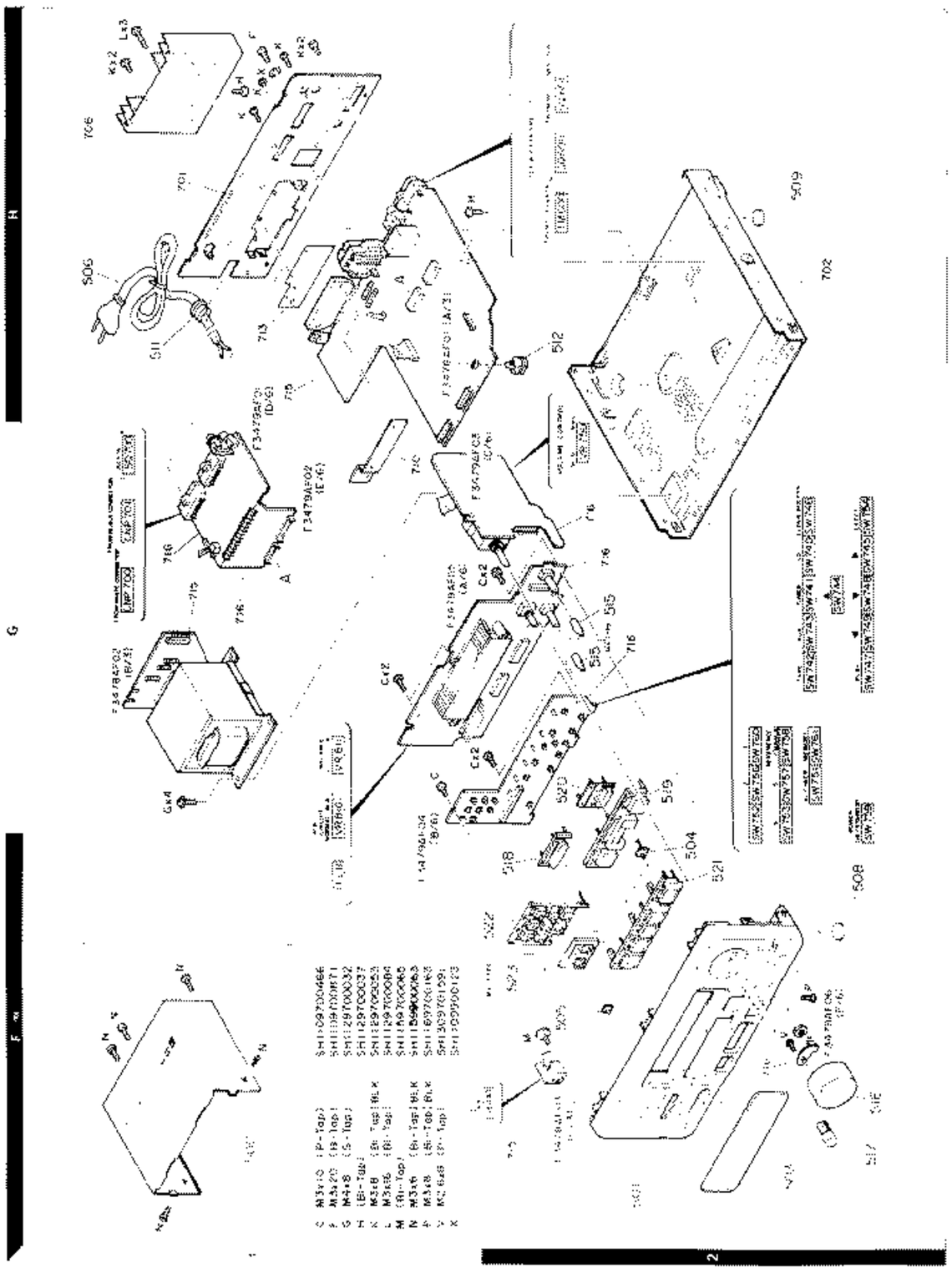




PC BOARD (Component side view) (DP-322)

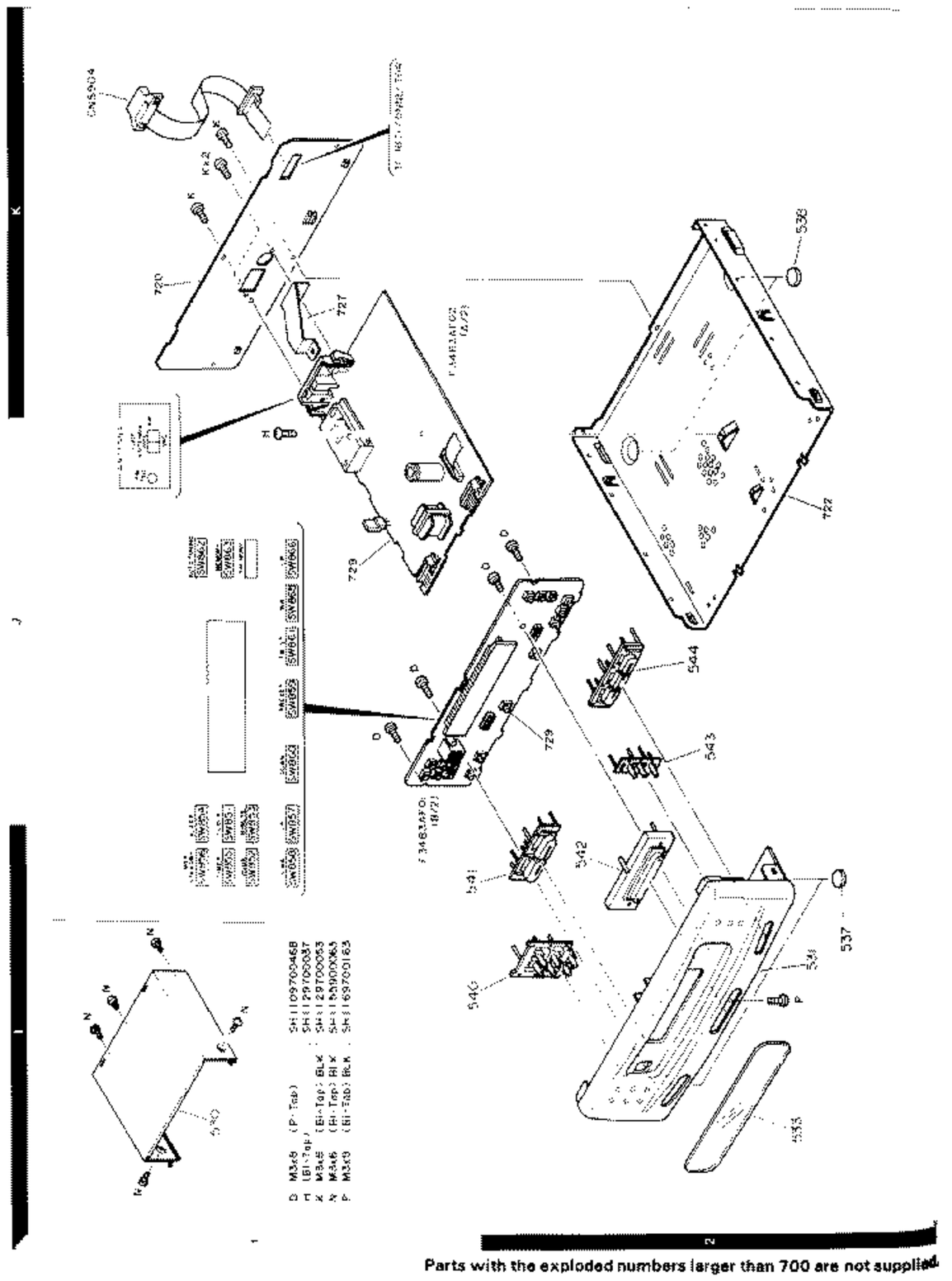


EXPLODED VIEW (A-322)



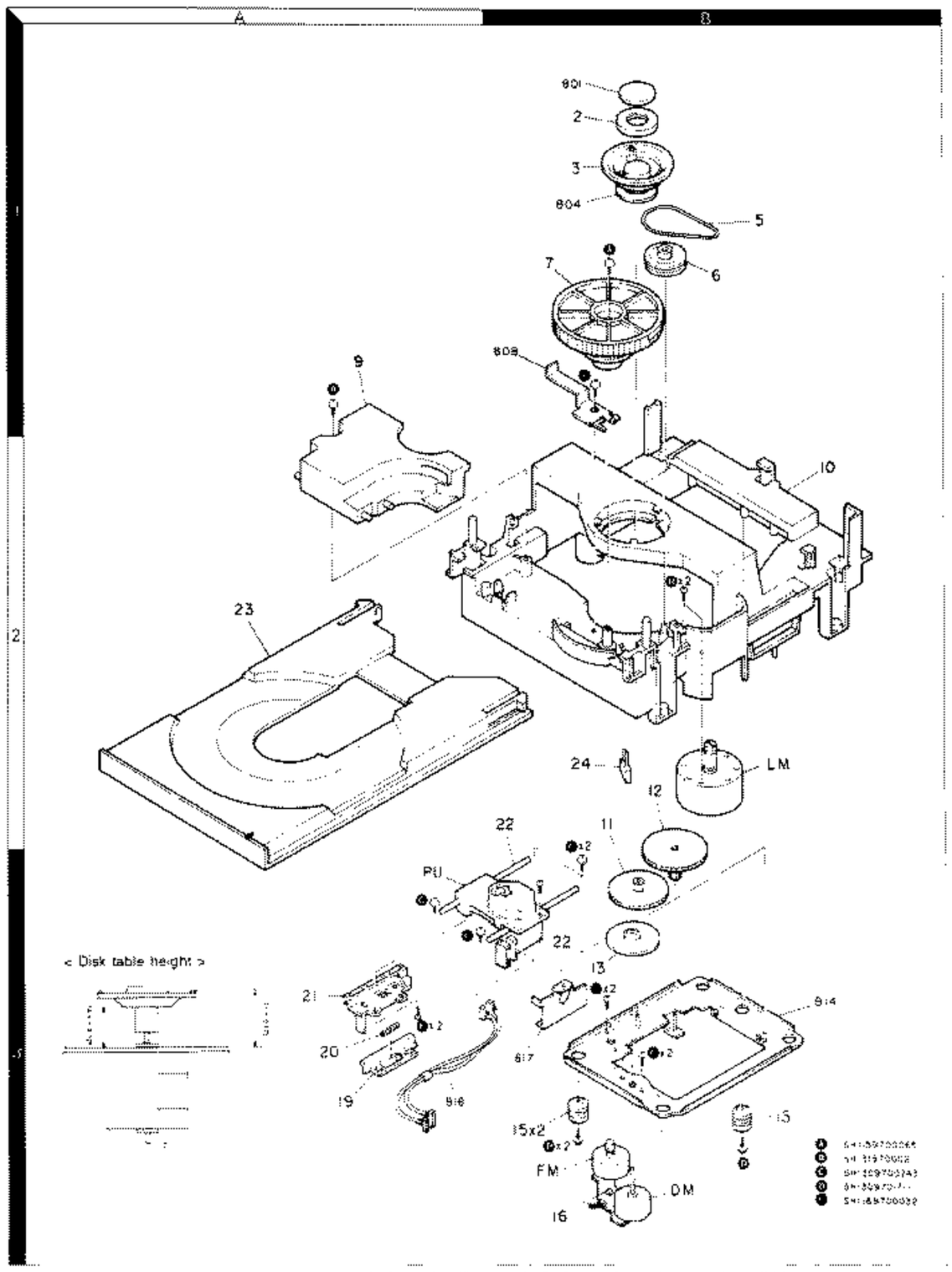
Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (T-322)



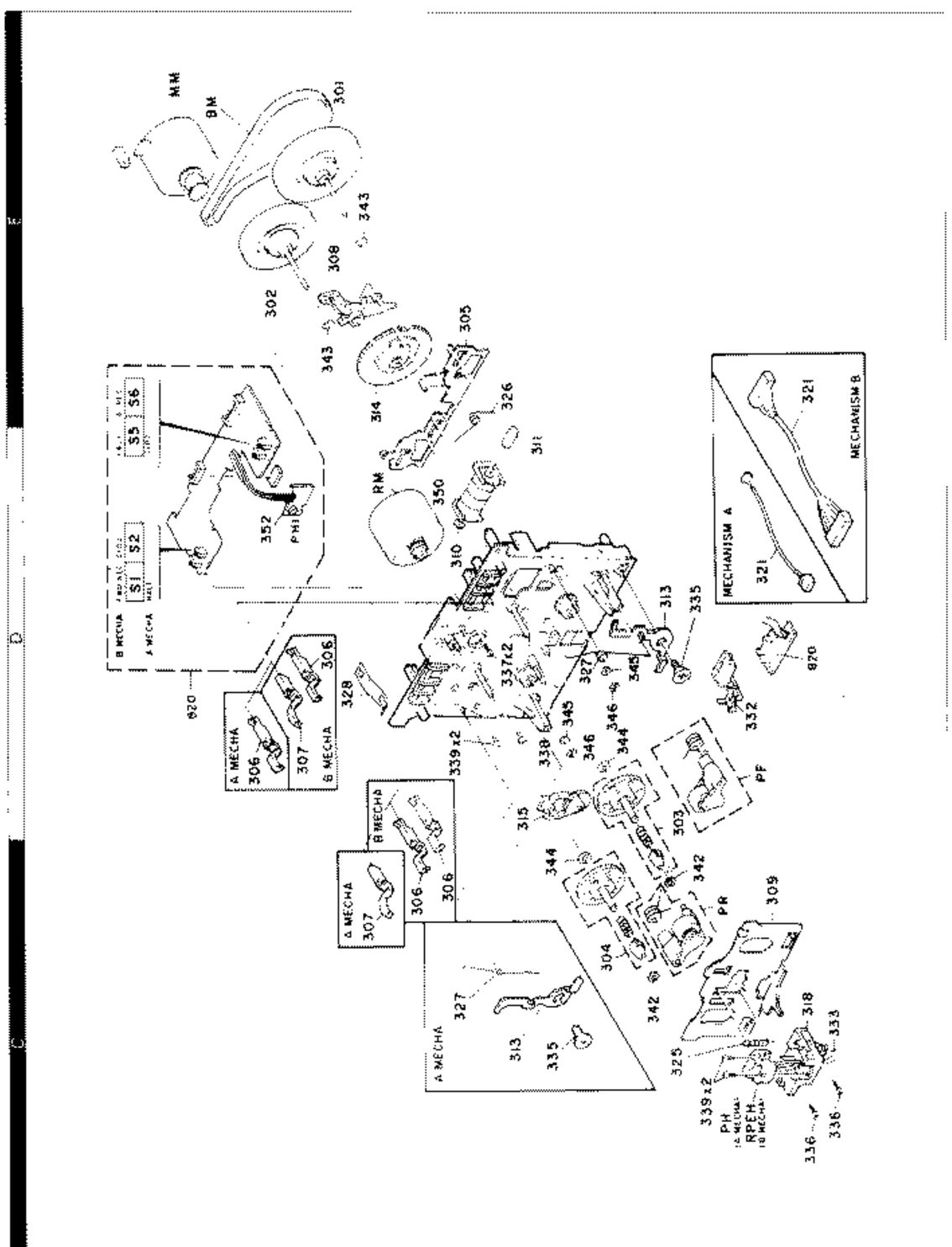
Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (CD MECHANISM)



Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (CASSETTE DECK MECHANISM)



Parts with the exploded numbers larger than 700 are not supplied.

MAIN AMPLIFIER UNIT
F3478AF E.T.M (A/3)
F3487AF K (A/3)

DISPLAY UNIT
F3479AF E.T.M (A/6)
F3489AF K (A/6)

F3478AF E.T.M (D/6)
F3487AF K (D/6)

F3479AF E.T.M (C/6)
F3489AF K (C/6)

IC600
IC601, 60
IC603
IC604
IC70
IC700, 75
IC750
IC751
IC753

POWER ON TEST TERMINAL

Lch POWER AMP

Rch POWER AMP

MIC AMP

HEAD PHONE (C/3)

HIT MASTER

TM600 AD415 E AD416 T.M.K

TO T-322

TO DP-322

TO X-322

IC701

PIN	FUNC	PIN NO	FUNCTION
L		1 12	AUX
H		5 16	TAPE
L		2 15	TUNER
H		4 13	CD

2SC2001-L
2SC2878B
2SC380-0

2SA562
2SA562-Y

DTA114YS
DTC124TS
DTC144ES
2SC1740S

DTA114EK
DTC114YK

DTC114YS

2SB1237
2SD1858

| | | |

IC600	LC7522	IC811	XR1091	Q609, 611, 619, 751	DTA114YS
IC601, 602	M52890	IC812	M50941SP	814, 815	
IC603	BU2040			Q610	A12670R
IC604	STK4122M	Q601, 604	D2061E	Q612, 615, 616	C2878B
IC701	MC14052B	Q602, 620	B1185F	Q607, 614, 618, 813, 816	DTC114YS
IC700, 752, 810	M52184L	Q603	B1237R3	Q750	DTC114ES
IC750	NJM2058	Q605, 613(K), 753, 812	C3199GR	Q811	C3199GF
IC751	TC4066BP	Q606, 613(E, T, M)617	D1858R3	Q812	C3199CR
IC753	LB1641				

D601~606, 608
D607
D609~611, 613~622
628, 629, 701, 702, 740

TYPE	
E	COUNTE
T	EUROP
M	ENGLA
K	OTHER AR
	,54

DISPLAY UNIT
F3479AF E.T.M (A/6)
F3489AF K (A/6)

F3479AF E.T.M (C/6)
F3489AF K (C/6)

DTA114EK
DTC114YK

DTC114YS

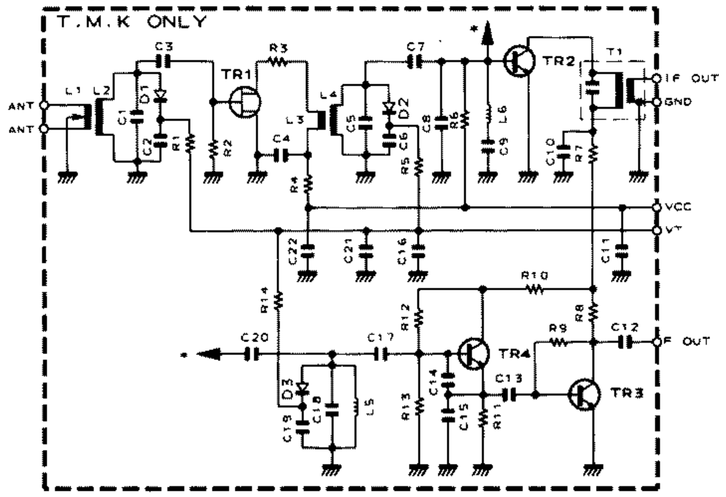
2SB1237
2SD1858

TC4066BP

MC14051B
MC14094B

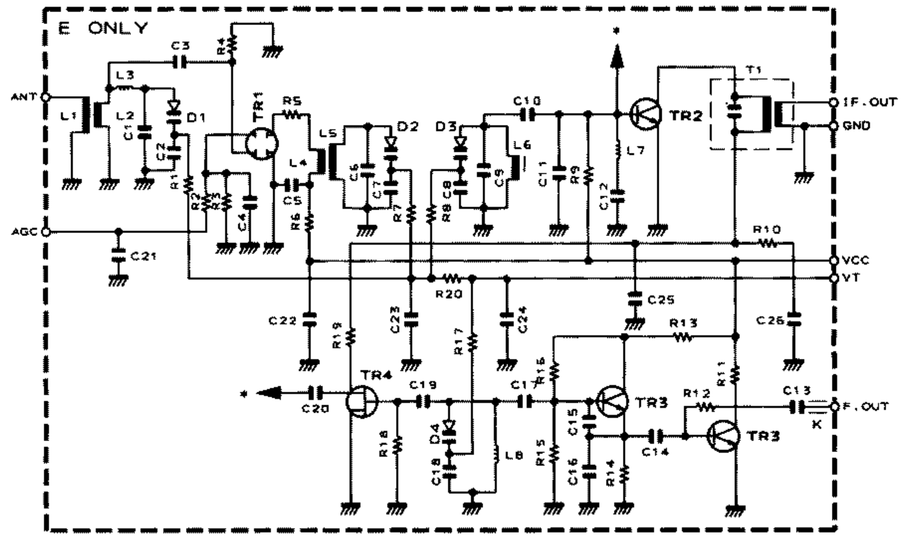
*FRONT END UNIT RYUNS0062AFZZ

T.M.K ONLY

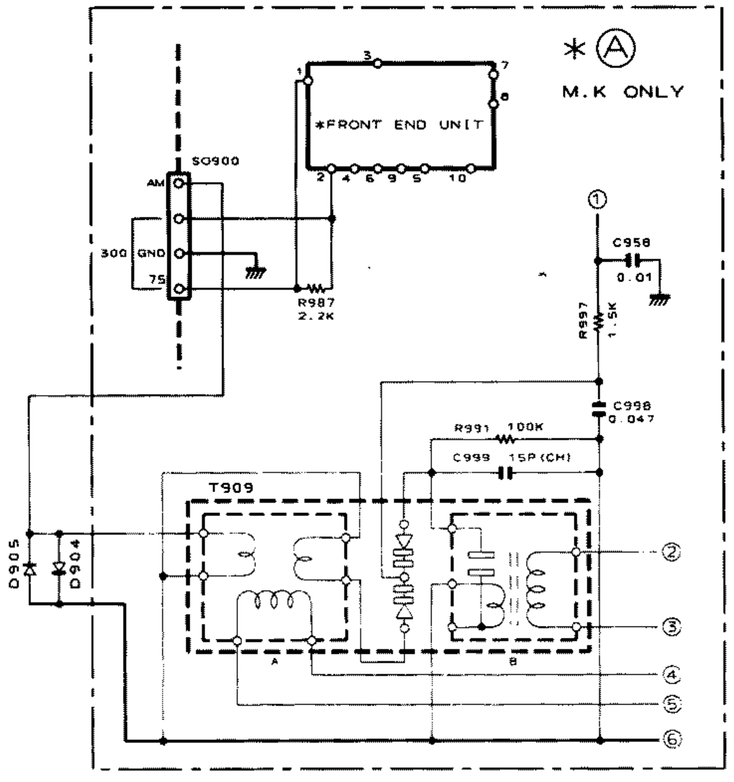


*FRONT END UNIT RTUNS0061AFZZ

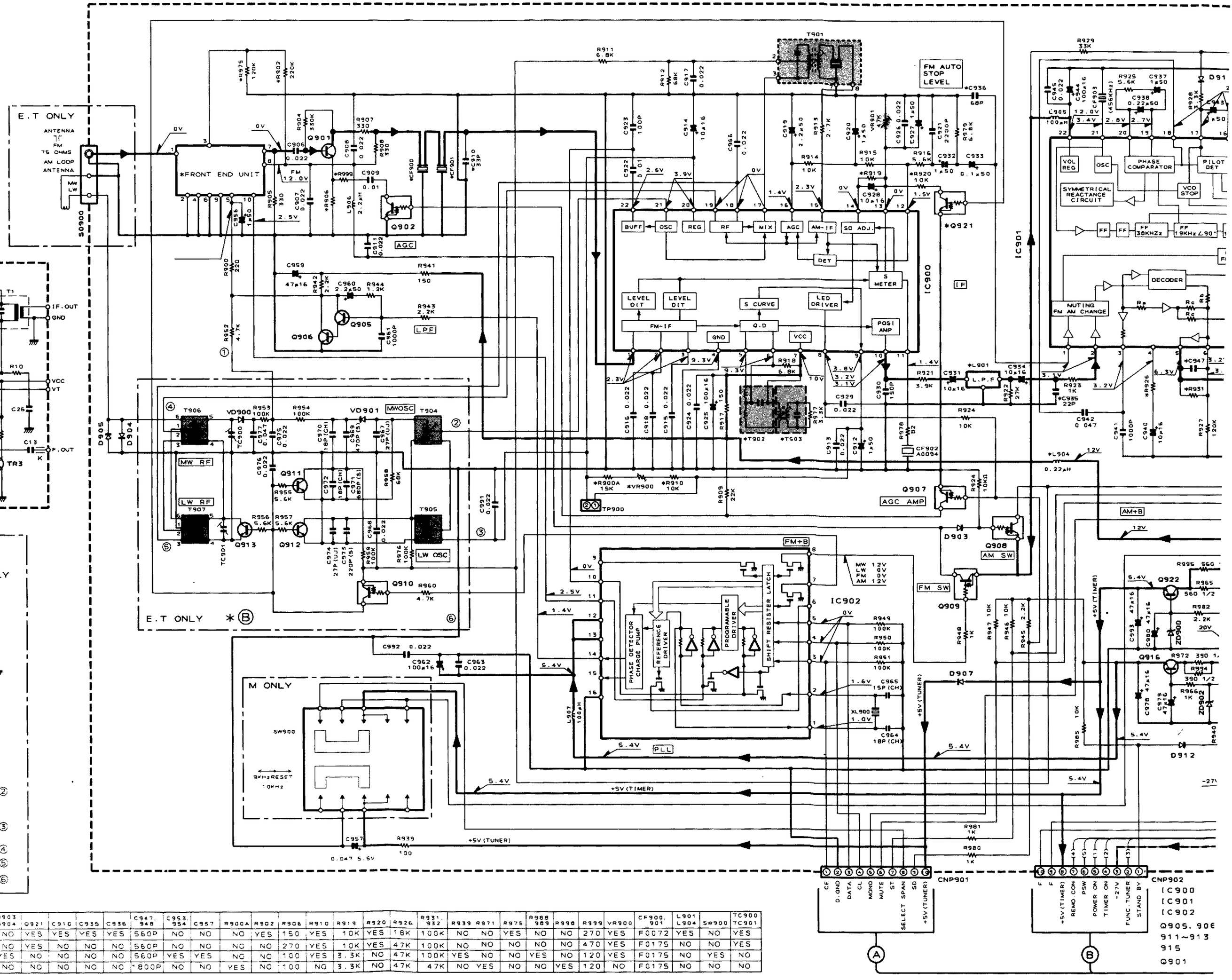
E ONLY



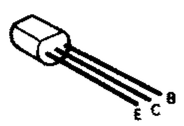
*Ⓐ M.K ONLY



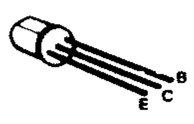
TUNER UNIT F3483AF E.T(A/2) F3494AF M(A/2) F3495AF K(A/2)



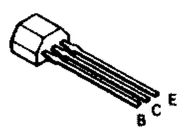
COUNTRY	ABB	FE900	Ⓐ	Ⓑ	Q903 Q904	Q921	C910	C935	C936	C947 948	C953 954	C957	R900A	R902	R906	R910	R919	R920	R926	R931 932	R939	R971	R975	R988 989	R998	R999	VR900	CF900 901	L901 L904	SW900	TC900 TC901
EUROPE	E	RTUNS0061AFZZ	NO	YES	NO	YES	YES	YES	YES	560P	NO	NO	NO	YES	150	YES	10K	YES	18K	100K	NO	NO	YES	NO	NO	270	YES	F0072	YES	NO	YES
ENGLAND	T	RTUNS0062AFZZ	NO	YES	NO	YES	NO	NO	NO	560P	NO	NO	NO	NO	270	YES	10K	YES	47K	100K	NO	NO	NO	NO	NO	470	YES	F0175	NO	NO	YES
OTHER AREAS	M	RTUNS0062AFZZ	YES	NO	YES	NO	NO	NO	NO	560P	YES	YES	NO	NO	100	YES	3.3K	NO	47K	100K	YES	NO	NO	YES	NO	120	YES	F0175	NO	YES	NO
USA	K	RTUNS0062AFZZ	YES	NO	NO	NO	NO	NO	NO	800P	NO	NO	YES	NO	100	NO	3.3K	NO	47K	47K	NO	YES	NO	NO	YES	120	NO	F0175	NO	NO	NO



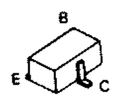
2SC2001-L
2SC2878B
2SC380-0



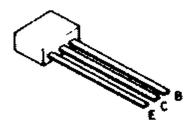
2SA562
2SA562-Y



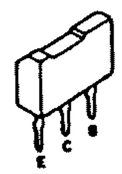
DTA114YS
DTC124TS
DTC144ES
2SC1740S



DTA114EK
DTC114YK

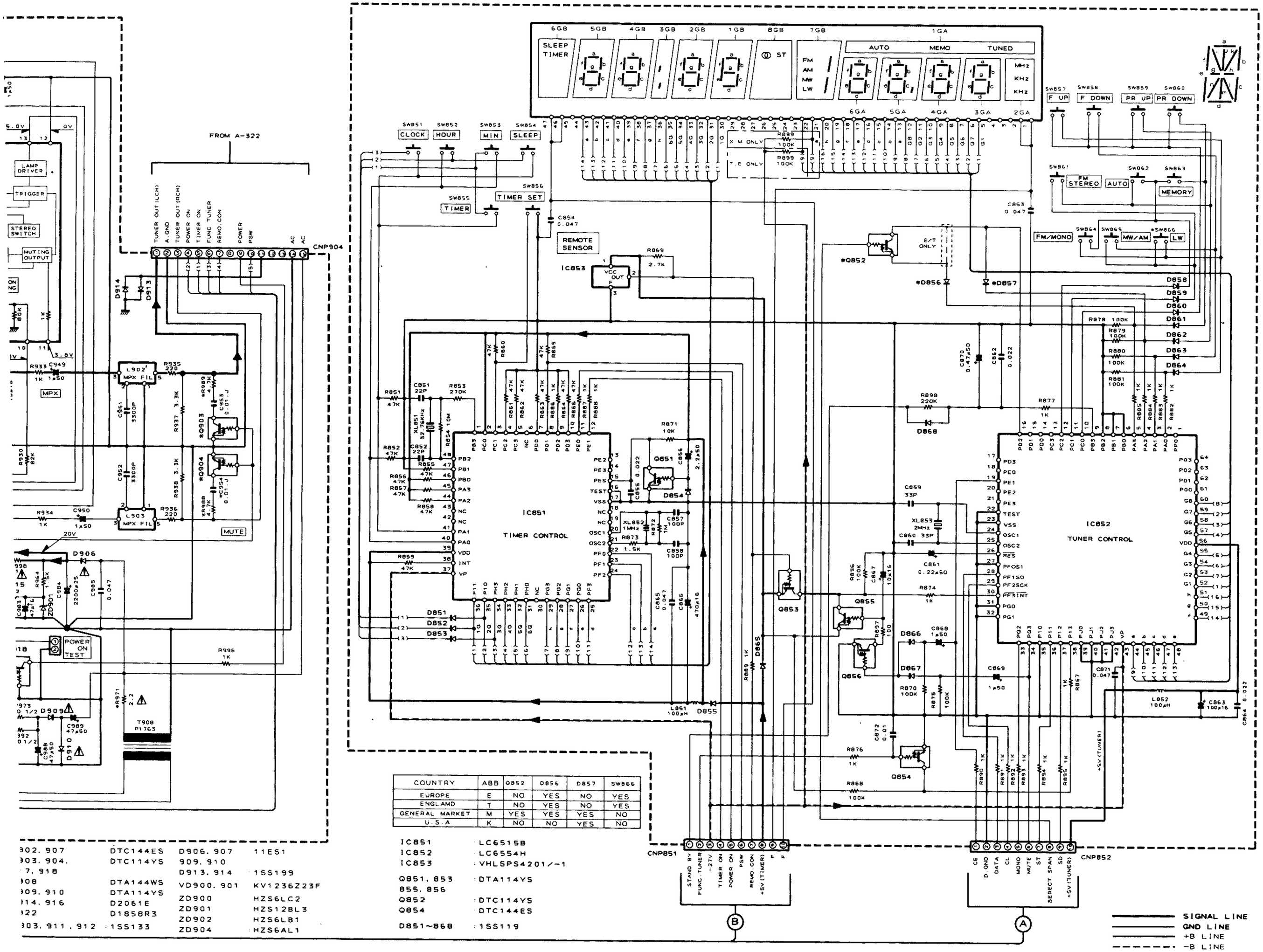


DTC114YS



2SB1237
2SD1858

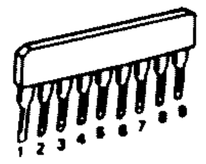
TUNER UNIT F3483AF E, T (B/2) F3494AF M (B/2) F3495AF K (B/2)



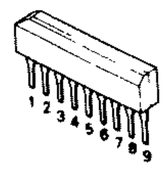
COUNTRY	ABB	Q852	D856	D857	SW866
EUROPE	E	NO	YES	NO	YES
ENGLAMD	T	NO	YES	NO	YES
GENERAL MARKET	M	YES	YES	YES	NO
U.S.A	K	NO	NO	YES	NO

IC851	LC6515B
IC852	LC6554H
IC853	VHLSPS4201/-1
Q851, 853 855, 856	DTA114YS
Q852	DTC114YS
Q854	DTC144ES
D851~868	1SS119

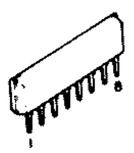
302, 907	DTC144ES	D906, 907	11ES1
303, 904, 907, 918	DTC114YS	909, 910	
		D913, 914	1SS199
308	DTA144WS	VD900, 901	KV1236Z23F
909, 910	DTA114YS		
914, 916	D2061E	ZD900	HZS6LC2
922	D1858R3	ZD901	HZS12BL3
903, 911, 912	1SS133	ZD902	HZS6LB1
		ZD904	HZS6AL1



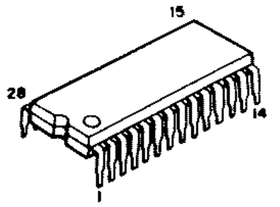
LA2000



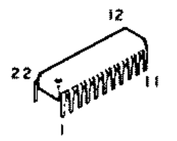
M5218AL



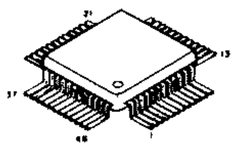
M5230L



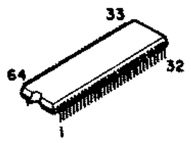
LC7522



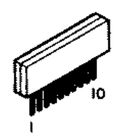
LA1265
LA3401



LA9200M



M50708SP
M50941SP
M50946SP



LB1641
M51544AL

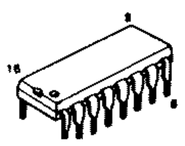
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter during reception of the FM broadcast signal (with a singal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

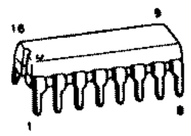
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance pendant la réception d'un signal de programme FM (avec une force de signal de 60 dB à la borne ANT). Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
Les valeurs entre parenthèses doivent être mesurées pendant la réception d'un signal de programme AM avec une force de signal de 60 dB à la borne ANT).

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser bei Empfang eines UKW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig. Die eingeklammerten Gleichspannungswerte wurden bei Empfang eines MW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen.

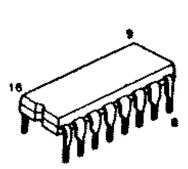
TC4066BP



MC14051B
MC14094B

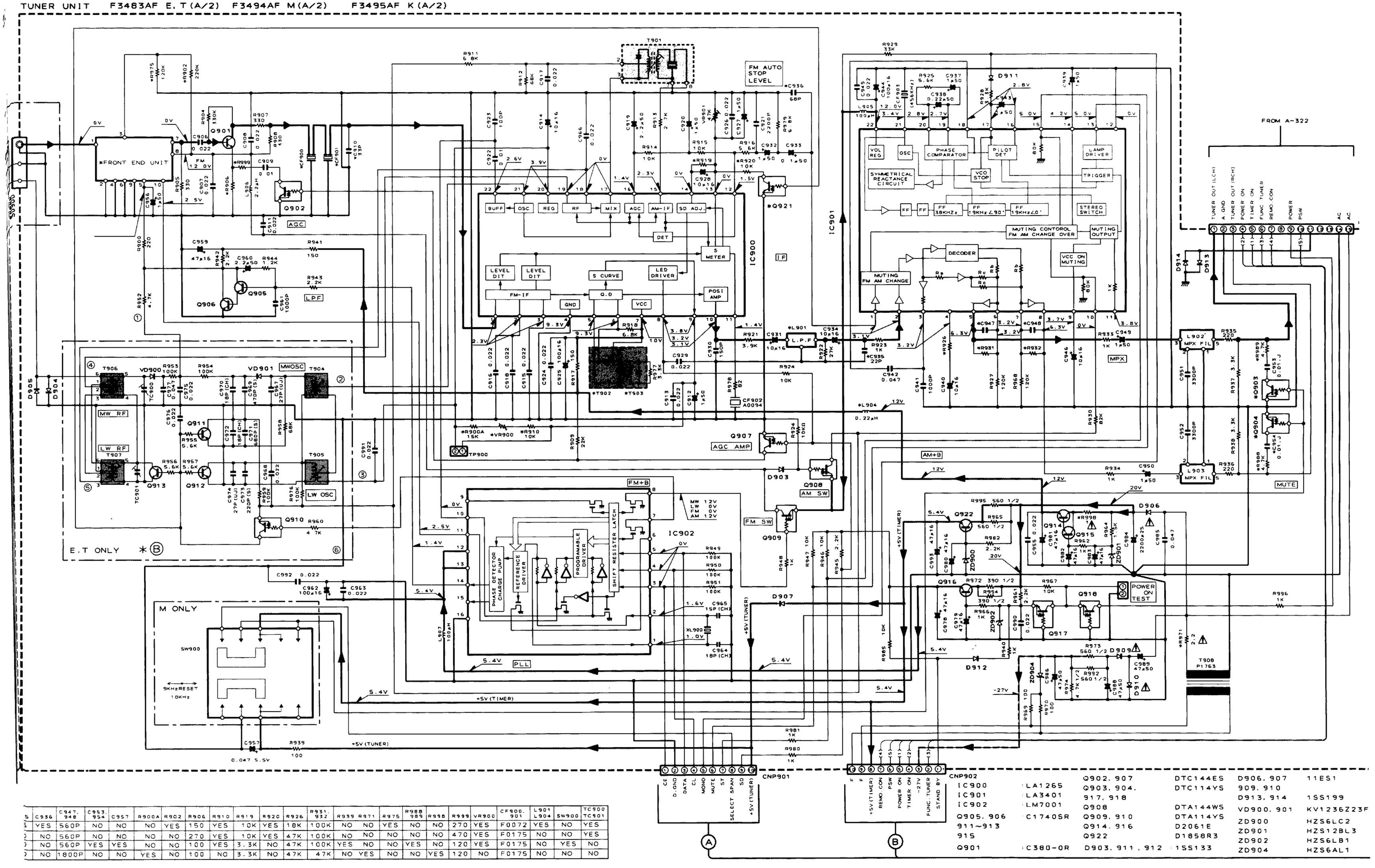


LM7001



HA12136A

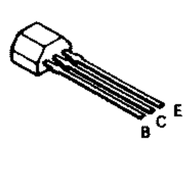
TUNER UNIT F3483AF E, T (A/2) F3494AF M (A/2) F3495AF K (A/2)

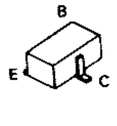


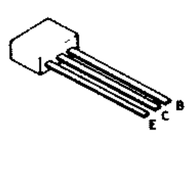
	C936	C947, 948	C953, 954	C957	R900A	R902	R906	R910	R919	R920	R926	R931, 932	R939	R971	R975	R988 989	R998	R999	VR900	CF900, 901	L901 L904	SW900	TC900 TC901
)	YES	560P	NO	NO	NO	YES	150	YES	10K	YES	18K	100K	NO	NO	YES	NO	NO	270	YES	F0072	YES	NO	YES
)	NO	560P	NO	NO	NO	NO	270	YES	10K	YES	47K	100K	NO	NO	NO	NO	NO	470	YES	F0175	NO	NO	YES
)	NO	560P	YES	YES	NO	NO	100	YES	3.3K	NO	47K	100K	YES	NO	NO	YES	NO	120	YES	F0175	NO	YES	NO
)	NO	1800P	NO	NO	YES	NO	100	NO	3.3K	NO	47K	47K	NO	YES	NO	NO	YES	120	NO	F0175	NO	NO	NO

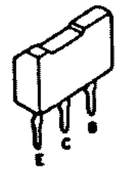
IC900	LA1265	Q902, 907	DTC144ES
IC901	LA3401	Q903, 904, 917, 918	DTC114YS
IC902	LM7001	Q908	DTA144WS
Q905, 906	C1740SR	Q909, 910	DTA114YS
911~913		Q914, 916	D2061E
915		Q922	D1858R3
Q901	C380-0R	D903, 911, 912	1SS133

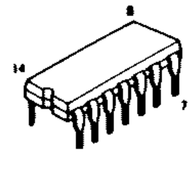
D906, 907	11ES1	
909, 910		
D913, 914	1SS199	
VD900, 901	KV1236Z23F	
ZD900	HZS6LC2	
ZD901	HZS12BL3	
ZD902	HZS6LB1	
ZD904	HZS6AL1	


DTA114YS
DTC124TS
DTC144ES
2SC1740S


DTA114EK
DTC114YK


DTC114YS


2SB1237
2SD1858

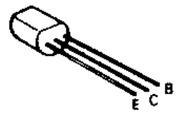

TC4066BP

CD SERVO UNIT F3486AF

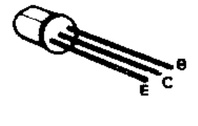
IC1 SERVO/DIGTAL SIGNAL PROCESSOR

IC2 RFSERVO IC

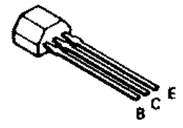
IC1	LR37632	IC8, 9	LA6515	Q3, Q4, Q8, Q9, Q13, Q15	DTC114YK	D1, D2	1SS181
IC2	LA9200M	IC10	M54641L	Q5, Q6	DTC363TK	D5~D9, D11	1SS184
IC3	LC9600A	IC11, 14	INJM79L05A1	Q16	2SA562-Y	D10	SVC203113F
IC4	LH5116N-20	IC12	L78N05			D13	1SS133
IC5~7	NJM4560M	IC13	INJM78L05A1			ZD1	MZJ3RA(RD)



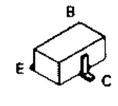
2SC2001-L
2SC2878B
2SC380-0



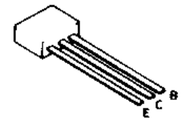
2SA562
2SA562-Y



DTA114YS
DTC124TS
DTC144ES
2SC1740S

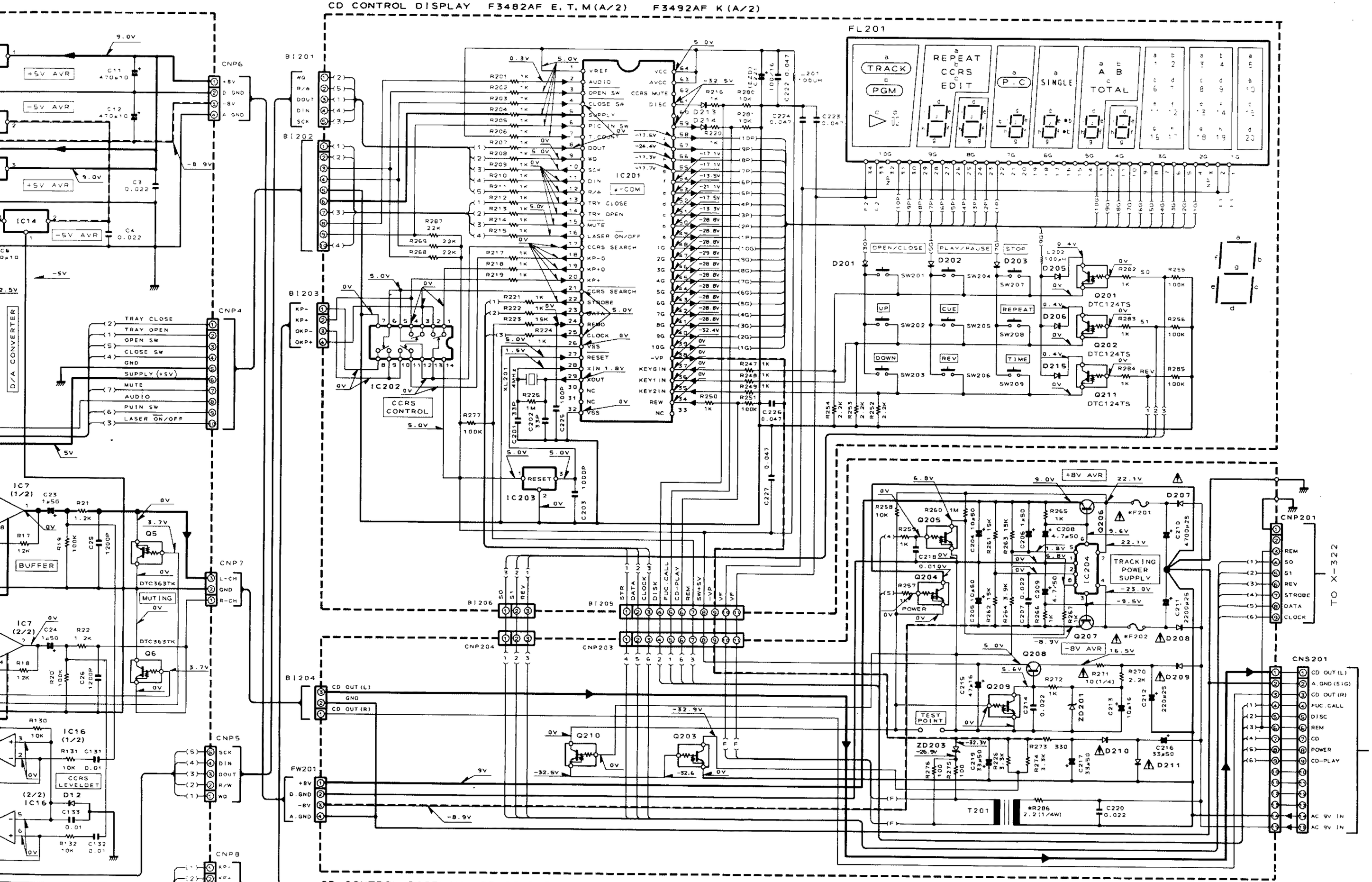


DTA114EK
DTC114YK



DTC114YS

CD CONTROL DISPLAY F3482AF E.T.M(A/2) F3492AF K(A/2)

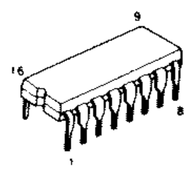


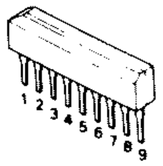
CD CONTROL DISPLAY F3482AF E.T.M(B/2) F3492AF K(B/2)

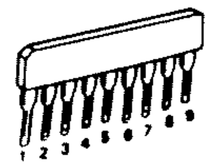
IC201	M50946SP	Q201. 202. 211	DTC124TS	D201~206. 215	1SS133
IC202	TC4066BP	Q204. Q209	DTC114YS	D207~211	11ES1
IC203	M51951ASL	Q205	DTC114ES		
IC204	M5230L	Q206	D2061E		
		Q207	B1185E	ZD201	HZS6LB1
		Q208	D1858R3	ZD203	HZS6AL1

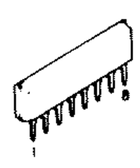
COUNTRY	ABB	FUSE F201. 202	R286
EUROPE	E	T630mA	NO
ENGLAND	T	T630mA	NO
OTHER AREAS	M	T630mA	NO
USA	K	T1A	YES

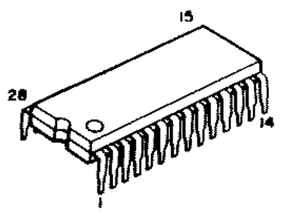
SIGNAL LINE
GND LINE
+B LINE
-B LINE

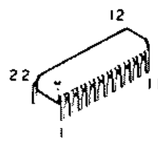

HA12136A

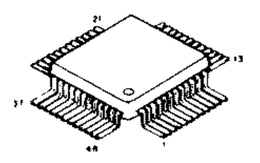

LA2000

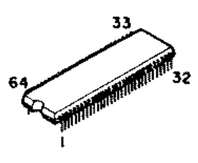

M5218AL

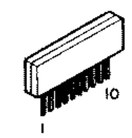

M5230L

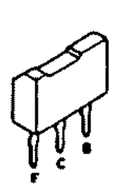

LC7522

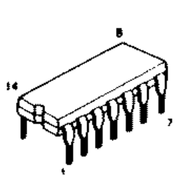

LA1265
LA3401

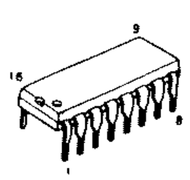

LA9200M

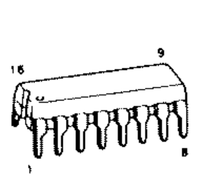

M50708SP
M50941SP
M50946SP


LB1641
M51544AL


2SB1237
2SD1858


TC4066BP


MC14051B
MC14094B


LM7001

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

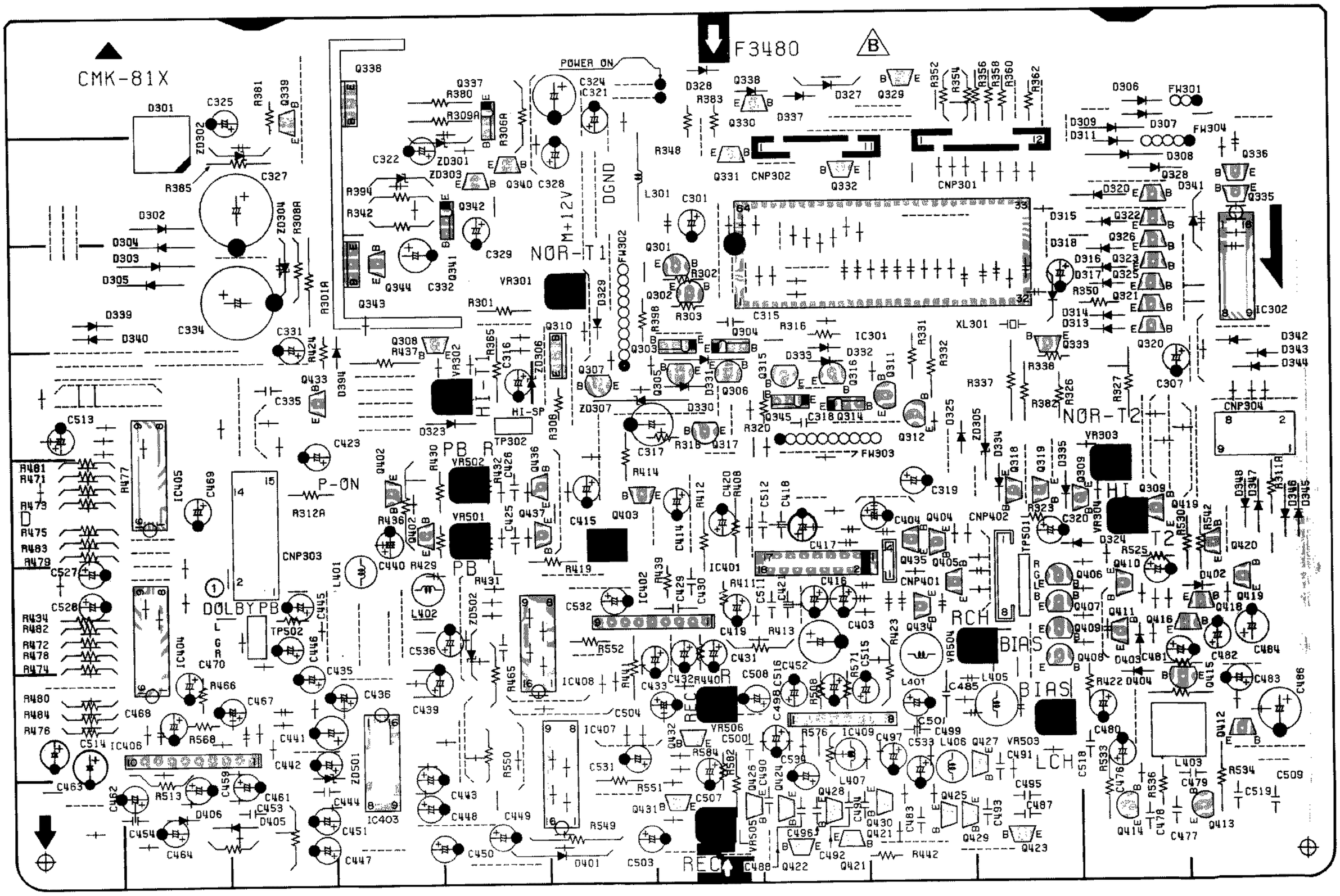
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

Y22-2742-70

DP-322

C BOARD (Component side view) (X-322)


CMK-81X
F3480
POWER ON
DGND
M+12V
NOR-T1
NOR-T2
HI-T1
HI-SP
PB R
PB L
P-ON
DOLBY PB
RCH BIAS
LCH BIAS
REC R
REC L
HI T2
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CNP304
CNP301
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CNP401
CNP402
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DECK UNIT F3480

DECK T1

DECK T2

CCRS LEVEL

PB EQ

HIGH-DUB

DOLBY NR

DOLBY

ALC AMP

REC AMP

SWITCHING

APSS

BIAS OSC

X-FADE

IC401	BA3416BL
IC402	LA2000
IC403	HA12136A
IC404.405 407.408	MC14051B
IC406	M51544AL
IC409	M5218AL
Q401.402 404.405.416	C1740SR
Q406~408	C2240BL
Q410.431.432	C3199GR
Q411	DTA114YS
Q413~415	C2001-L
Q417.419.412 420~430.434~437	DTC114YS
Q418	A933SR
Q420.433	DTC144ES
D401~406	1SS119
ZD501	RD100JS2
ZD502	HZS78L2

TYPE	COUNTRY	R301A
E	EUROPE	1.0
T	ENGLAND	1.0
M	OTHER AREAS	1.0
K	U.S.A	2.2

SIGNAL LINE
REC LINE
GND LINE
+B LINE

2SC2001-L
2SC2878B
2SC380-0

2SA562
2SA562-Y

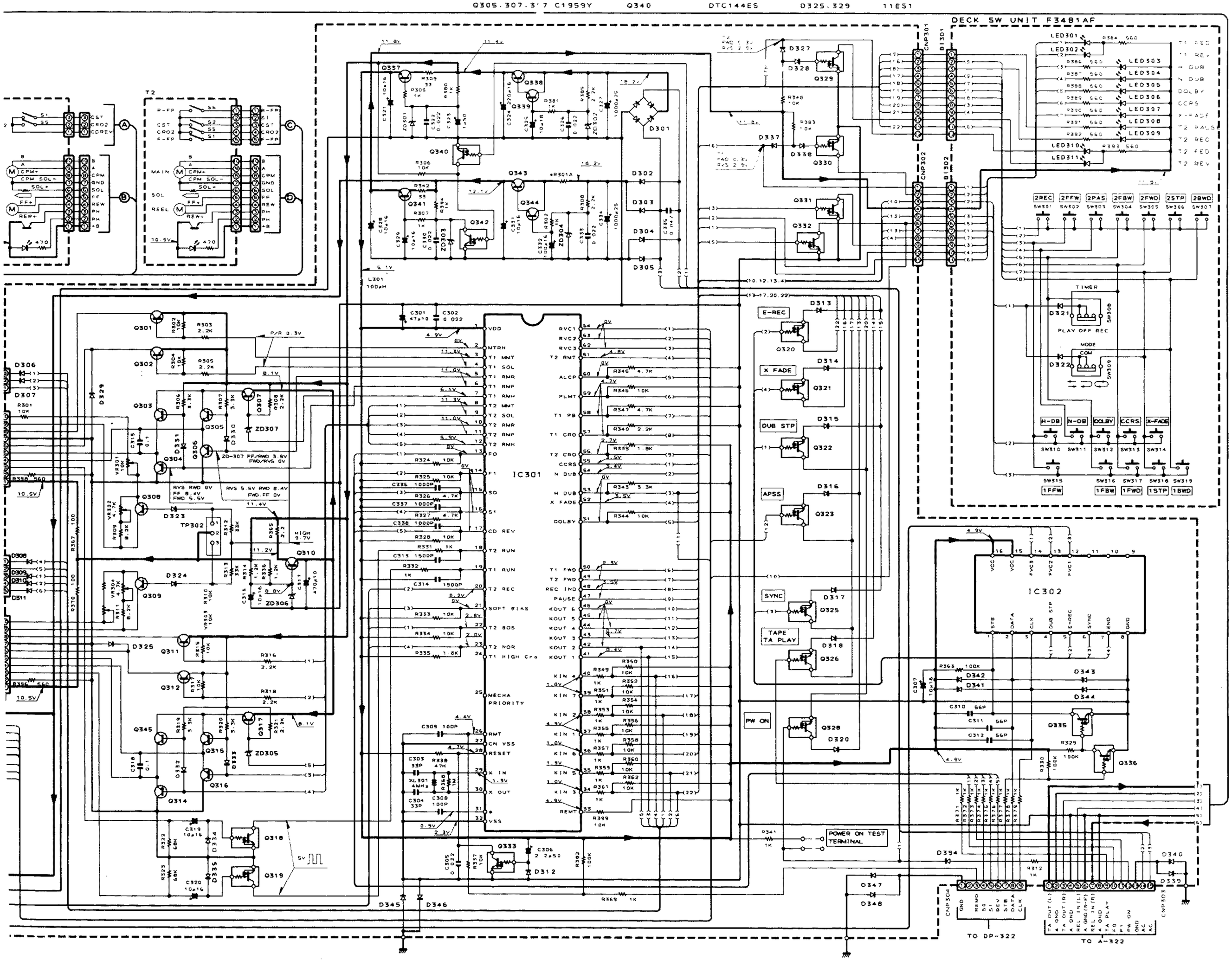
DTA114YS
DTC124TS
DTC144ES
2SC1740S

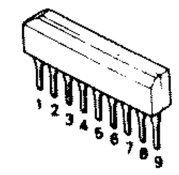
DTA114EK
DTC114YK

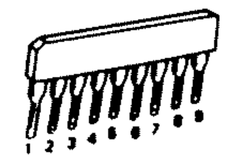
DTC114YS

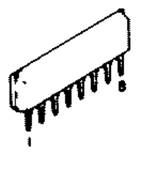
2SB1237
2SD1858

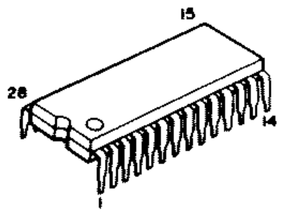
IC301	M50708SP	Q301.302.306	A562-Y	Q309	A933SR	D301	S2VB40F	ZD301.303	HZS6LB1	LED301~311	LT3P8D
IC302	MC14094B	311.312.316		Q310.338.343	D2061F	D302~305	11E4TA2	ZD302. 04	HZS12BL3		
		Q303.341.345	D1858R3	Q318~337.342	DTC114YS	D306~324	ISS119	ZD305~ 07	HZ6B2L		
		Q304.308.314	B1237R3	Q339.344	C3199GR	327~328.330~348.394					
		Q305.307.3'7	C1959Y	Q340	DTC144ES	D325.329	11ES1				

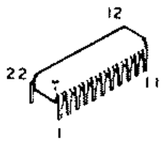


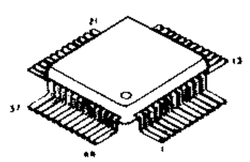

LA2000

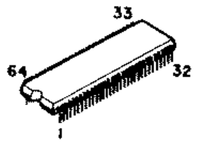

M5218AL

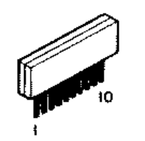

M5230L


LC7522


LA1265
LA3401


LA9200M


M50708SP
M50941SP
M50946SP


LB1641
M51544AL

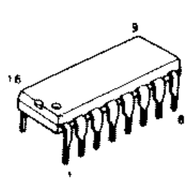
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

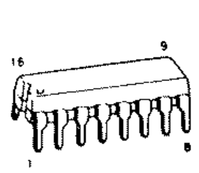
DC voltages are as measured with a high impedance voltmeter with a cassette loaded at playback mode. Values may vary slightly due to variations between individual instruments or/and units. Bias circuit DC voltages are as measured while in the record mode.

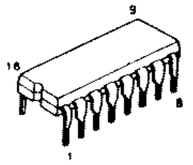
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance, une cassette étant insérée en mode du lecture. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
Les tensions c.c. du circuit de polarité doivent être mesurées, l'appareil étant en mode d'enregistrement.

Die angegebenen Gleichspannungswerte wurden bei eingesetzter Cassette in der Wiedergabe mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig. Die angegebenen Gleichspannungswerte der Vormagnetisierungsschaltung wurden in der Aufnahme-Betriebsart gemessen.

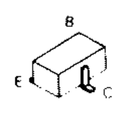

TC4066BP


MC14051B
MC14094B

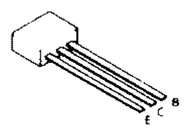

LM7001


HA12136A

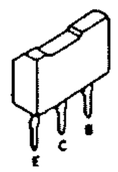
DTA114YS
DTC124TS
DTC144ES
2SC1740S



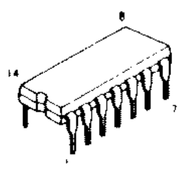
DTA114EK
DTC114YK



DTC114YS

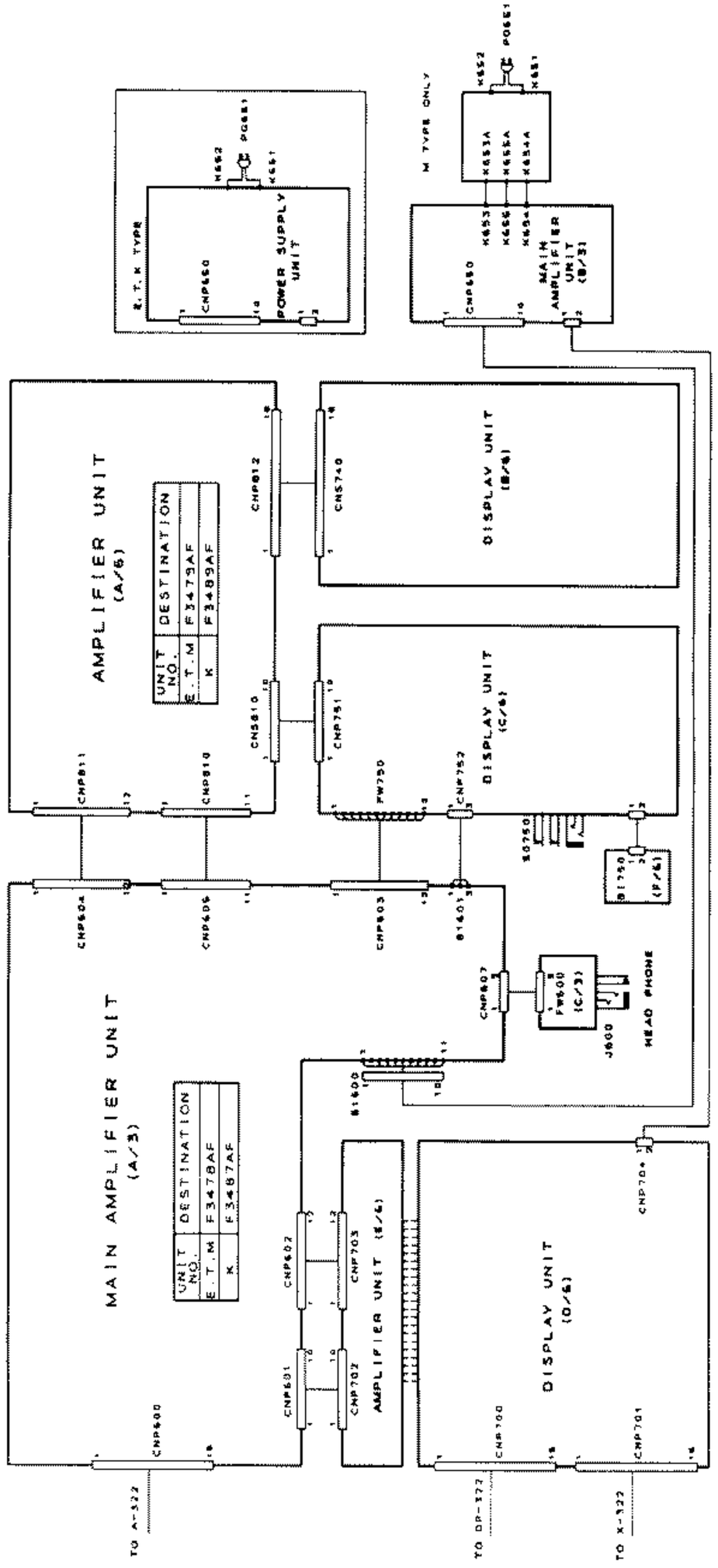


2SB1237
2SD1858

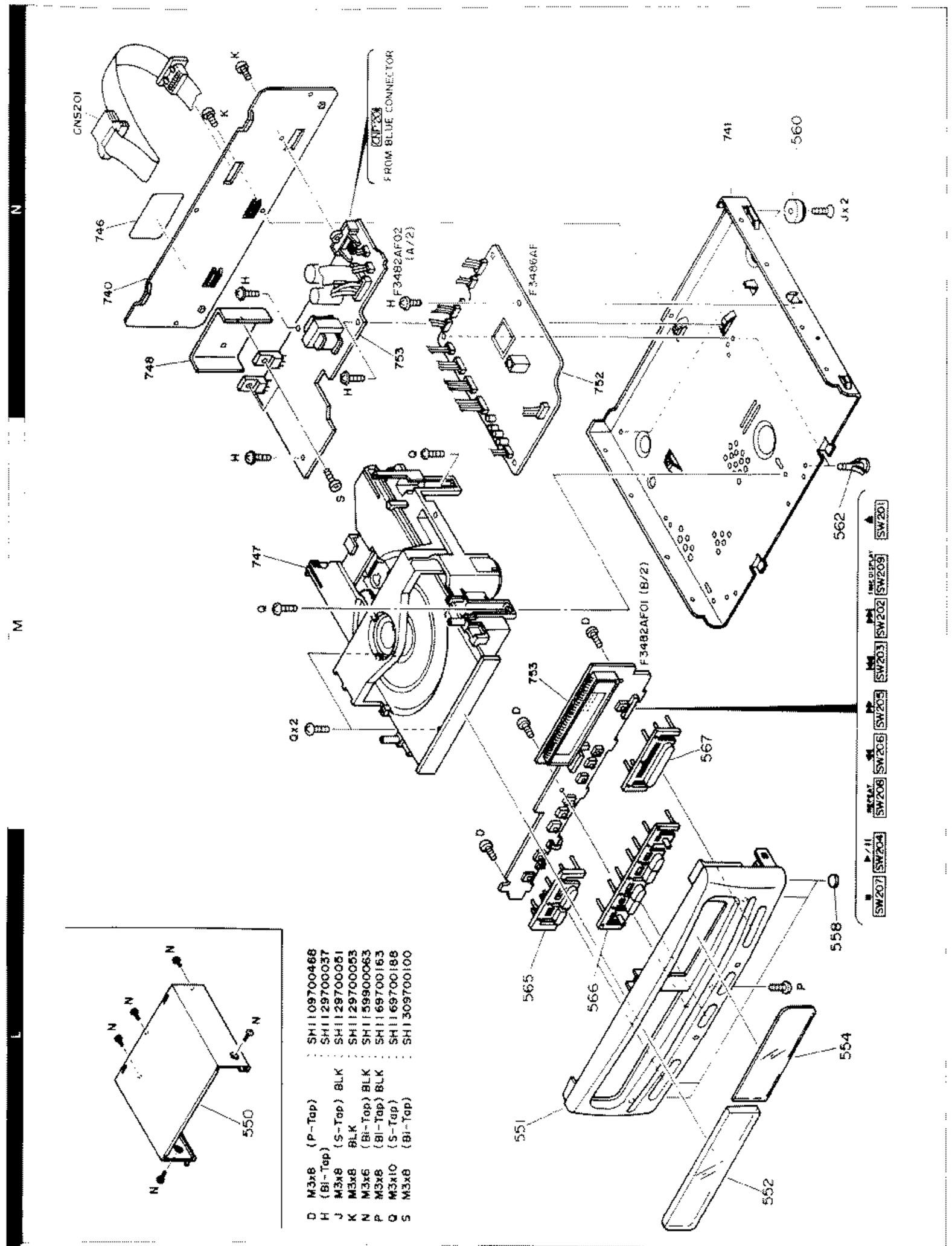


TC4066BP

WIRING DIAGRAM

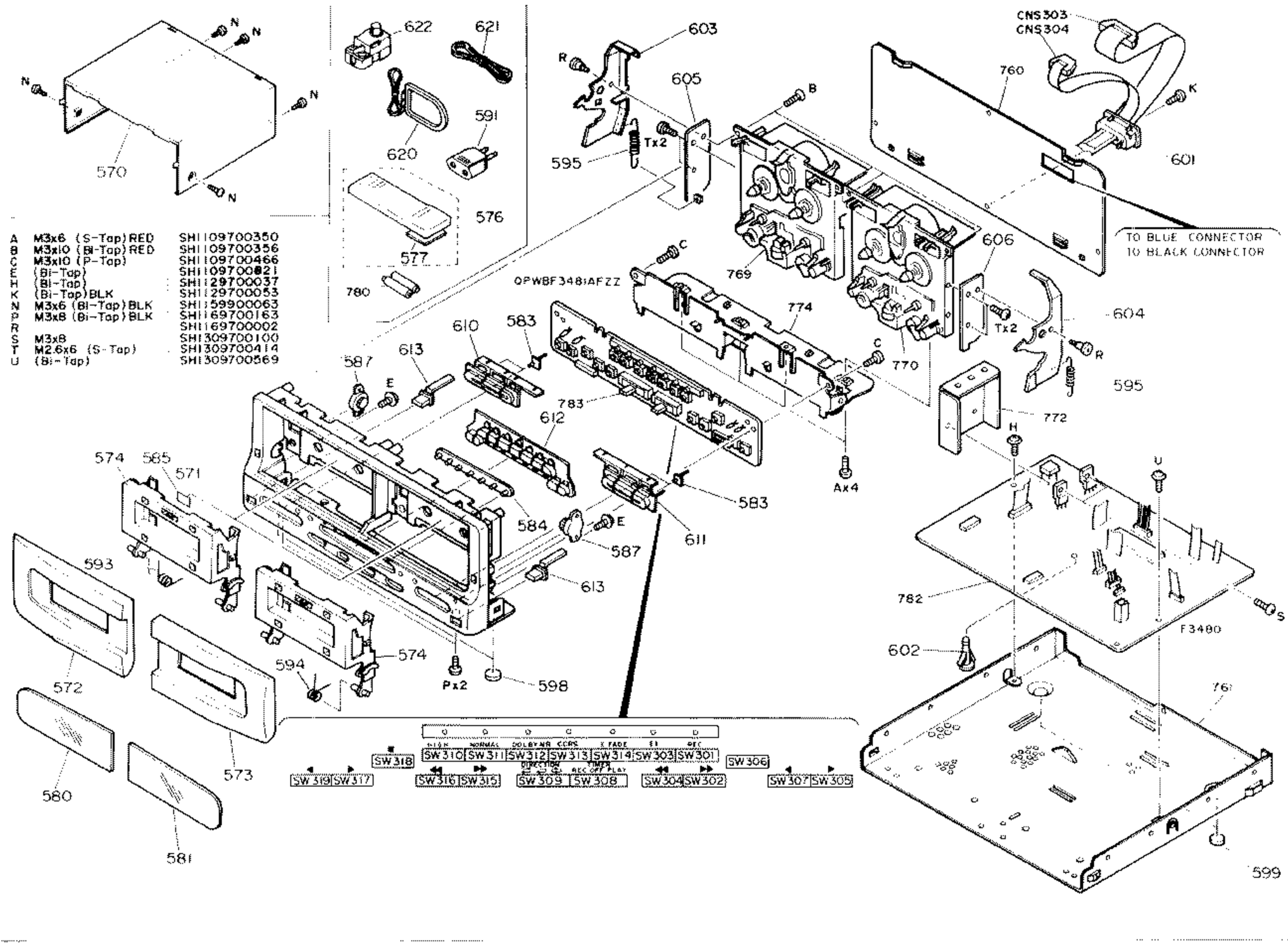


EXPLODED VIEW (DP-322)



Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (X-322)



A	M3x6 (S-Tap)RED	SHI109700350
B	M3x10 (Bi-Tap)RED	SHI109700356
C	M3x10 (P-Tap)	SHI109700466
E	(Bi-Tap)	SHI109700821
H	(Bi-Tap)	SHI129700037
K	(Bi-Tap)BLK	SHI129700053
N	M3x6 (Bi-Tap)BLK	SHI159900063
P	M3x8 (Bi-Tap)BLK	SHI169700163
R		SHI169700002
S	M3x8	SHI309700100
T	M2.6x6 (S-Tap)	SHI309700414
U	(Bi-Tap)	SHI309700569

Parts with the exploded numbers larger than 700 are not supplied.

PARTS LIST

UD-50

Unit Name	Unit No.	Order code	Ref. start No.	Destindion
AMP A-322				
MAIN	QPWBF3478AFZZ	SH1105210387	600~	E,T,M,X
POWER SUPPLY	QPWBF3487AFZZ	SH1105210555		K
DISPLAY	QPWBF3485AFZZ	SH1105210524		M
DISPLAY	QPWBF3479AFZZ	SH1105210516	700~	E,T,M,X
	QPWBF3489AFZZ	SH1105210556		K
TUNER T-322				
TUNER	QPWBF3483AFZZ	SH1105210520	851~	E,T
	QPWBF3494AFZZ	SH1105210525		M,X
	QPWBF3495AFZZ	SH1105210558		K
DISPLAY	QPWBF3482AFZZ	SH1105210519	200~	E,T,M,X
	QPWBF3492AFZZ	SH1105210557		K
SERVO	QPWBF3486AFZZ	SH1105210521	1~	E,T,M,X,K
CD DP-322				
DECK	QPWBF3480AFZZ	SH1105210517	300~	E,T,M,X,K
DECK X-322				
SWITCH	QPWBF3481AFZZ	SH1105210518	400~	E,T,M,X,K

NO.1

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
			A-322			
500	1C	*	SH1101070189	METALLIC CABINET		
501	2F	*	SH1101580655	FRONT PANEL	KTE	
501	2F	*	SH1101580660	FRONT PANEL	MX	
503	2F	*	SH1101240160	FRONT GLASS		
504	2F	*	SH1101540828	INDICATOR LED		
505	2F	*	SH1101540831	INDICATOR SURROUND	MX	
506	1H		SH1125000036	AC CORD	K	
506	1H	*	SH1165000002	AC CORD	ME	
506	1H	*	SH1165000031	AC CORD	XT	
506	1H	*	SH1205000026	AC CORD		
508	2F	*	SH1103260160	CUSHION FOOT (FRONT)		
509	2H	*	SH1103400098	CUSHION FOOT (REAR)		
		*	SH1109010542	ITEM CARTON CASE A-322	TE	
		*	SH1109020512	POLYSTYRENE FOAMED FIXTURE (L)	KTE	
		*	SH1109020513	POLYSTYRENE FOAMED FIXTURE (R)	KTE	
		*	SH1109020518	POLYSTYRENE FOAMED FIXTURE (L)	MX	
		*	SH1109020519	POLYSTYRENE FORMED FIXTURE (R)	MX	
		*	SH1109050097	PROTECTION COVER		
511	1H	*	SH1102040086	POWER CORD BUSHING		
512	2H	*	SH1104130198	UNIT HOLDER		
		*	SH1112140028	WIRE BAND		
515	2G		SH1101741087	KNOB BALANCE	KTE	
515	2G		SH1101741087	KNOB BALANCE,MIC MIXING	MX	
516	2F	*	SH1101741217	KNOB MASTER VOLUME		
517	2F	*	SH1101741218	KNOB N.B CIRCUIT		
518	2F	*	SH1101741219	KNOB POWER		
519	2G	*	SH1101741220	KNOB CE CONTROL (A)		
520	2G	*	SH1101741221	KNOB CE CONTROL (B)		
521	2F	*	SH1101741222	KNOB FUNCTION		
522	2F	*	SH1101741223	KNOB CE MEMOLY		
523	2F	*	SH1101741236	KNOB SURROUND	MX	
C	1C,2G	*	SH1109700466	SCREW M3X10		
F	1H	*	SH1109700871	SCREW M3X20		
G	1G	*	SH1129700032	SCREW M4X8		
M	1H		SH1129700037	SCREW		
N	1F		SH1129700053	SCREW M3X8		
L	1H	*	SH1129700084	SCREW M3X16		
M	2F		SH1159700065	SCREW		
N	1F	*	SH1159900063	SCREW M3X6		
P	2F		SH1169700163	SCREW M3X8		
V	2F	*	SH1309701591	SCREW M2.6X8		
X	1F	*	SH1109900123	WASHER		
			T-322			
530	1I	*	SH1101070191	METALLIC CABINET		
531	2I	*	SH1101580659	FRONT PANEL	TE	
531	2I	*	SH1101580662	FRONT PANEL	KMX	
533	2I	*	SH1101240162	FRONT GLASS		
537	2I	*	SH1103260160	CUSHION FOOT (FRONT)		
538	2K	*	SH1103260219	CUSHION FOOT (REAR)		

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis
Teile ohne Parts No. werden nicht geliefert.

NO.2

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
		*	SH1109010545	ITEM CARTON CASE T-322	TE	
		*	SH1109020516	POLYSTYRENE FOAMED FIXTURE (L)	KTE	
		*	SH1109020517	POLYSTYRENE FOAMED FIXTURE (R)	KTE	
		*	SH1109020522	POLYSTYRENE FORMED FIXTURE (L)	MX	
		*	SH1109020523	POLYSTYRENE FORMED FIXTURE (R)	MX	
		*	SH1109050098	PROTECTION COVER		
540	2I	*	SH1101741224	KNOB TIMER		
541	2I	*	SH1101741225	KNOB TUNING		
542	2I	*	SH1101741226	KNOB PRESET		
543	2J	*	SH1101741227	KNOB MODE		
544	2J	*	SH1101741228	KNOB BAND		
D	1J,2J		SH1109700468	SCREW M3X8		
H	1J		SH1129700037	SCREW		
X	1K		SH1129700053	SCREW M3X8		
N	1L	*	SH1159900063	SCREW M3X6		
P	2P		SH1169700163	SCREW M3X8		
DP-322						
550	1L	*	SH1101070191	METALLIC CABINET		
551	2L	*	SH1101580657	FRONT PANEL		
552	2L	*	SH1101580658	DRESSING PANEL		
554	2L	*	SH1101240161	FRONT GLASS		
558	2L	*	SH1103260232	CUSHION FOOT (FRONT)		
		*	SH1109010544	ITEM CARTON CASE DP-322	TE	
		*	SH1109020516	POLYSTYRENE FOAMED FIXTURE (L)	KTE	
		*	SH1109020517	POLYSTYRENE FOAMED FIXTURE (R)	KTE	
		*	SH1109020522	POLYSTYRENE FORMED FIXTURE (L)	MX	
		*	SH1109020523	POLYSTYRENE FORMED FIXTURE (R)	MX	
		*	SH1109050098	PROTECTION COVER		
560	2N	*	SH1101230054	FOOT (REAR)		
562	2M	*	SH1102140169	UNIT HOLDER		
-		*	SH1112140028	WIRE BAND		
565	2L	*	SH1101741232	KNOB OPEN/CLOSE		
566	2L	*	SH1101741233	KNOB CONTROL		
567	2M	*	SH1101741234	KNOB PLAY		
D	2L,2M		SH1109700468	SCREW M3X8		
H	1M,1N		SH1129700037	SCREW		
J	2N		SH1129700051	SCREW M3X8		
K	1N		SH1129700053	SCREW M3X8		
N	1L	*	SH1159900063	SCREW M3X6		
P	2L		SH1169700163	SCREW M3X8		
Q	1M	*	SH1169700188	SCREW M3X10		
S	1M		SH0309700100	SCREW M3X8		
X-322						
570	1Q	*	SH1101070190	METALLIC CABINET		
571	2Q	*	SH1101580656	FRONT PANEL		A
572	2Q	*	SH1101100485	CASSETTE LID		B
573	2Q	*	SH1101100486	CASSETTE LID		
574	2Q	*	SH1101170549	CASSETTE HOLDER		
576	1Q	*	SH1106380084	REMOTE CONTROL ASSY	KTE	
576	1Q	*	SH1106380085	REMOTE CONTROL ASSY	MX	
577	1Q	*	SH1101170548	BATTERY COVER		

L:Scandinavia K:USA P:Canada
Y:PX(Far East, Hawaii) T:England E:Europe
Y:AAFES(Europe) X:Australia M:Other Areas

⚠ indicates safety critical components

* New Parts
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Les articles non mentionnés dans le Parts No. ne sont pas fournis
Teile ohne Parts No. werden nicht geliefert.

NO.3

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
		*	B60-0660-00	INSTRUCTION MANUAL (ENGLISH)		
		*	B60-0661-00	INSTRUCTION MANUAL (FRE,GER)	E	
		*	B60-0662-00	INSTRUCTION MANUAL (DUT,ITA)	E	
		*	B60-0664-00	INSTRUCTION MANUAL (CHI,SPA)	M	
580	2Q	*	SH1101240158	FRONT GLASS		A
581	2Q	*	SH1101240159	FRONT GLASS		B
583	1P	*	SH1101540829	INDICATOR DECK LED		
584	2P	*	SH1101540830	INDICATOR DUBBING LED		
585	2Q	*	SH1101560239	ESCUTCHEON TAPE		
587	1Q,2P		SH1302500023	DAMPER		
591	1P		SH1165240007	AC PLUG ADAPTER	M	
593	2Q	*	SH1102580764	SPRING (L)		
594	2Q	*	SH1102580765	SPRING (R)		
595	1P,1Q		SH1202580393	SPRING EJECT		
598	2P	*	SH1103260160	CUSHION FOOT (FRONT)		
599	2P	*	SH1103400098	CUSHION FOOT (REAR)		
		*	SH1109010543	ITEM CARTON CASE X-322	TE	
		*	SH1109010547	OUTER CARTON CASE UD-50	MX	
		*	SH1109010562	OUTER CARTON CASE UD-50	K	
		*	SH1109020514	POLYSTYRENE FOAMED FIXTURE (L)	KTE	
		*	SH1109020515	POLYSTYRENE FOAMED FIXTURE (R)	KTE	
		*	SH1109020520	POLYSTYRENE FORMED FIXTURE (L)	MX	
		*	SH1109020521	POLYSTYRENE FORMED FIXTURE (R)	MX	
		*	SH1109050097	PROTECTION COVER		
		*	SH1129060021	PROTECTION BAG (ACCESSORIES)		
601	1Q		SH1102040087	BUSHING		
602	2Q	*	SH1102140169	UNIT HOLDER		A
603	1P	*	SH1102520018	EJECT LEVER		B
604	1Q	*	SH1102520019	EJECT LEVER		A
605	2P	*	SH1102000982	EJECT LEVER MOUNTING HARDWARE		B
606	2Q	*	SH1102000983	EJECT LEVER MOUNTING HARDWARE		A
610	1P	*	SH1101741229	KNOB DECK CONTROL		B
611	2P	*	SH1101741230	KNOB DECK CONTROL		
612	1P	*	SH1101741231	KNOB DUBBING,FF/REW		
613	1Q,2P	*	SH1101741235	KNOB EJECT		
A	2P		SH1109700350	SCREW M3X6		
B	1P		SH1109700356	SCREW M3X10		
C	1P,1Q	*	SH1109700466	SCREW M3X10		
E	1Q,2P	*	SH1109700821	SCREW		
H	1Q		SH1129700037	SCREW		
K	1Q		SH1129700053	SCREW		
N	1Q	*	SH1159900063	SCREW M3X6		
P	2P		SH1169700163	SCREW		
R	1P,1Q	*	SH1169720002	SCREW		
S	2Q		SH1309700100	SCREW M3X8		
T	1P,1Q	*	SH1309700414	SCREW M2.6X6		
U	2Q		SH1309700569	SCREW		
620	1Q		SH1105020013	LOOP ANTENNA		
621	1P	*	SH1105040007	WIRE ANTENNA	MX	
621	1P		SH1125040004	WIRE ANTENNER	KTE	
622	1Q	*	SH1105240049	ANTENNA ADAPTOR	TE	

L:Scandinavia K:USA P:Canada
Y:PX(Far East, Hawaii) T:England E:Europe
Y:AAFES(Europe) X:Australia M:Other Areas

⚠ indicates safety critical components

* New Parts
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Teile ohne Parts No. werden nicht geliefert.

NO.4

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
ELECTRONIC CIRCUIT						
C1			CE04KW0J331M	ELECTRO 330UF 6.3WV		
C2			CE04KW1A101M	ELECTRO 100UF 10WV		
C3			CK73FF1E223Z	CHIP C 0.022UF Z		
C4		*	SH1305900689	CERAMIC 0.022UF 25WV		
C5 -7			CE04KW1A101M	ELECTRO 100UF 10WV		
C11 ,12			CE04KW1A471M	ELECTRO 470UF 10WV		
C13 ,14			CF92FV1H823J	MF 0.082UF J		
C15 ,16			CQ92FM1H272J	MYLAR 2700PF J		
C17 ,18			CF92FV1H123J	MF 0.012UF J		
C21 ,22			CE04KW1C100M	ELECTRO 10UF 16WV		
C23 ,24		*	SH1305940087	ELECTRO 1.0UF 50WV		
C25 ,26		*	SH1305900707	CERAMIC 1200PF 16WV		
C35		*	SH1105920049	ELECTRO 0.47UF 35WV		
C37			CE04KW1HR47M	ELECTRO 0.47UF 50WV		
C38			CK45FB1H101K	CERAMIC 100PF K		
C40 ,41			CC45CH1H180J	CERAMIC 18PF J		
C42			CK45FB1H101K	CERAMIC 100PF K		
C44 ,45		*	SH1305900680	CERAMIC 0.01UF 16WV		
C46			CK45FB1H471K	CERAMIC 470PF K		
C47 ,48			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C49		*	SH1305900686	CERAMIC 2700PF 16WV		
C50		*	SH1305900672	CERAMIC 0.015UF 6.3WV		
C51 ,52			CC45SL1H220J	CERAMIC 22PF J		
C53		*	SH1305900674	CERAMIC 1500PF 16WV		
C54			CE04KW1E4R7M	ELECTRO 4.7UF 25WV		
C55		*	CC45SL1H1R0J	CERAMIC 1.0PF J		
C56			CC45SL1H180J	CERAMIC 18PF J		
C57 -59			CE04KW1C470M	ELECTRO 47UF 16WV		
C60		*	SH1305900689	CERAMIC 0.022UF 25WV		
C61 ,62			CC45SL1H390J	CERAMIC 39PF J		
C63		*	SH1305900680	CERAMIC 0.01UF 16WV		
C64			CK45FB1H102K	CERAMIC 1000PF K		
C65		*	SH1305900679	CERAMIC 6800PF 16WV		
C66			CF92FV1H823J	MF 0.082UF J		
C68			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C69			CK45FB1H471K	CERAMIC 470PF K		
C71			CE04KW1C220M	ELECTRO 22UF 16WV		
C72			CK45FB1H101K	CERAMIC 100PF K		
C73		*	SH1165900064	CERAMIC 0.022UF 25WV		
C74			CC45SL1H220J	CERAMIC 22PF J		
C75		*	SH1105910101	CERAMIC 0.033UF 25WV		
C76		*	SH1425900032	CERAMIC 0.1UF 16WV		
C77			CC45SL1H680J	CERAMIC 68PF J		
C78			CC45SL1H270J	CERAMIC 27PF J		
C80		*	SH1425900032	CERAMIC 0.1UF 16WV		
C81		*	SH1165900160	CERAMIC 27PF J		
C82			CE04KW0J221M	ELECTRO 220UF 6.3WV		
C83			CE04KW1E4R7M	ELECTRO 4.7UF 25WV		
C84			CK45FB1H102K	CERAMIC 1000PF K		
C85		*	SH1425900032	CERAMIC 0.1UF 16WV		
C86			CE04KW1E4R7M	ELECTRO 4.7UF 25WV		
C87 ,88		*	SH1305900350	CERAMIC 0.012UF 25WV		
C89		*	SH1305900685	CERAMIC 2200PF 16WV		

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NO.5

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
C90			CE04KW1A101M	ELECTRO 100UF 10WV		
C91		*	SH1305900685	CERAMIC 2200PF 16WV		
C92			CE04KW1A101M	ELECTRO 100UF 10WV		
C93		*	SH1425900032	CERAMIC 0.1UF 16WV		
C95		*	SH1305900689	CERAMIC 0.022UF 25WV		
C98			CE04KW1C470M	ELECTRO 47UF 16WV		
C100			CK45FF1H223Z	CERAMIC 0.022UF Z		
C131-133		*	SH1305900680	CERAMIC 0.01UF 16WV		
C134			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C201,202			CC45SL1H330J	CERAMIC 33PF J		
C203		*	SH1125900143	CERAMIC 1000PF 25WV		
C204,205			CE04KW1H100M	ELECTRO 10UF 50WV		
C206			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C207			CK45FF1H223Z	CERAMIC 0.022UF Z		
C208,209			CE04KW1H4R7M	ELECTRO 4.7UF 50WV		
C210			CE04KW1E472M	ELECTRO 4700UF 25WV		
C211			CE04KW1E222M	ELECTRO 2200UF 25WV		
C212			CE04KW1E221M	ELECTRO 220UF 25WV		
C213			CE04KW1C100M	ELECTRO 10UF 16WV		
C214			CK45FF1H223Z	CERAMIC 0.022UF Z		
C215			CE04KW1C470M	ELECTRO 47UF 16WV		
C216,217			CE04KW1H330M	ELECTRO 33UF 50WV		
C218			CK45FF1H103Z	CERAMIC 0.010UF Z		
C219			CE04KW1H330M	ELECTRO 33UF 50WV		
C220			CK45FF1H223Z	CERAMIC 0.022UF Z		
C221			CE04JW1C101M	ELECTRO 100UF 16WV		
C222-224		*	SH1425800092	CERAMIC 0.047UF Z		
C225			CC45SL1H101J	CERAMIC 100PF J		
C226,227		*	SH1425800092	CERAMIC 0.047UF Z		
C301			CE04KW1A470M	ELECTRO 47UF 10WV		
C302		*	SH1305900689	CERAMIC 0.022UF 25WV		
C303,304			CC45SL1H330J	CERAMIC 33PF J		
C305		*	SH1305900689	CERAMIC 0.022UF 25WV		
C306			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C307			CE04KW1C100M	ELECTRO 10UF 16WV		
C308			CK45FB1H101K	CERAMIC 100PF K		
C309			CC45SL1H101J	CERAMIC 100PF J		
C310-312			CC45SL1H560J	CERAMIC 56PF J		
C313,314		*	SH1305900674	CERAMIC 1500PF 16WV		
C315		*	SH1255900079	CERAMIC 0.1UF J		
C316			CE04KW1C100M	ELECTRO 10UF 16WV		
C317			CE04KW1A471M	ELECTRO 470UF 10WV		
C318			CF92FV1H104J	MF 0.10UF J		
C319-321			CE04KW1C100M	ELECTRO 10UF 16WV		
C322		*	SH1305900689	CERAMIC 0.022UF 25WV		
C323			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C324			CE04KW1C221M	ELECTRO 220UF 16WV		
C325			CE04KW1C100M	ELECTRO 10UF 16WV		
C326		*	SH1305900689	CERAMIC 0.022UF 25WV		
C327			CE04KW1E102M	ELECTRO 1000UF 25WV		
C328,329			CE04KW1C100M	ELECTRO 10UF 16WV		
C330		*	SH1305900689	CERAMIC 0.022UF 25WV		
C331			CE04KW1C100M	ELECTRO 10UF 16WV		
C332			CE04KW1C101M	ELECTRO 100UF 16WV		
C333		*	SH1305900689	CERAMIC 0.022UF 25WV		

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
C334			CE04KW1E102M	ELECTRO	1000UF	25WV		
C335			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C336-338		*	SH1105910099	CERAMIC	1000PF	16WV		
C401,402			CK45FB1H271K	CERAMIC	270PF	K		
C403,404			CE04KW1A101M	ELECTRO	100UF	10WV		
C405,406			CK45FB1H221K	CERAMIC	220PF	K		
C407,408			CK45FB1H561K	CERAMIC	560PF	K		
C409,410			CK45FB1H221K	CERAMIC	220PF	K		
C411,412			CK45FB1H821K	CERAMIC	820PF	K		
C413			CE04KW1C221M	ELECTRO	220UF	16WV		
C414,415			CE04KW1C100M	ELECTRO	10UF	16WV		
C416			CE04KW1C220M	ELECTRO	22UF	16WV		
C417			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C418			CE04KW1E222M	ELECTRO	2200UF	25WV		
C419,420			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C421			CE04KW1E222M	ELECTRO	2200UF	25WV		
C422			CE04KW1C470M	ELECTRO	47UF	16WV		
C425,426		*	SH1205900108	CERAMIC	0.01UF	25WV		
C427,428			CK45FB1H391K	CERAMIC	390PF	K		
C429			CK45B1H222K	CERAMIC	2200PF	K		
C430			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C431			CE04KW1HR22M	ELECTRO	0.22UF	50WV		
C432			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C433			CE04KW1C470M	ELECTRO	47UF	16WV		
C435,436			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C439,440			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C441			CE04KW1C101M	ELECTRO	100UF	16WV		
C442,443			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C444			CE04KW1C220M	ELECTRO	22UF	16WV		
C445,446			CE04KW1C100M	ELECTRO	10UF	16WV		
C447,448			CE04KW1HR22M	ELECTRO	0.22UF	50WV		
C449,450			CE04KW1C100M	ELECTRO	10UF	16WV		
C451			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C452			CE04KW1C470M	ELECTRO	47UF	16WV		
C453,454		*	SH1205900094	CERAMIC	0.047UF	25WV		
C459			CE04KW1C470M	ELECTRO	47UF	16WV		
C461,462			CE04KW1C100M	ELECTRO	10UF	16WV		
C463			CE04KW1C101M	ELECTRO	100UF	16WV		
C464			CE04KW1C100M	ELECTRO	10UF	16WV		
C465,466			CK45FB1H221K	CERAMIC	220PF	K		
C467,468			CE04KW1A470M	ELECTRO	47UF	10WV		
C469,470			CE04KW1C100M	ELECTRO	10UF	16WV		
C471			CE04KW1HR22M	ELECTRO	0.22UF	50WV		
C472		*	SH1305900689	CERAMIC	0.022UF	25WV		
C473,474			CK45FB1H221K	CERAMIC	220PF	K		
C476			CE04KW1C470M	ELECTRO	47UF	16WV		
C477,478			CQ92FM1H222J	MYLAR	2200PF	J		
C479			CQ92FM1H332J	MYLAR	3300PF	J		
C480			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C481			CE04KW1HR47M	ELECTRO	0.47UF	50WV		
C482			CE04KW1C100M	ELECTRO	10UF	16WV		
C483			CE04JW1H2R2M	ELECTRO	2.2UF	50WV		
C484			CE04KW1C101M	ELECTRO	100UF	16WV		
C485			CK45FB1H561K	CERAMIC	560PF	K		
C486			CE04KW1C331M	ELECTRO	330UF	16WV		

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NO.7

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
C487,488		*	SH1205900104	CERAMIC	8200PF	25WV		
C489,490		*	SH1205900090	CERAMIC	0.015UF	25WV		
C491,492		*	SH1205900095	CERAMIC	5600PF	25WV		
C493,494			CC45SL1H561J	CERAMIC	560PF	J		
C495,496		*	SH1205900095	CERAMIC	5600PF	25WV		
C497,498			CE04KW1HR33M	ELECTRO	0.33UF	50WV		
C499,500		*	SH1305900215	CERAMIC	1500PF	25WV		
C501			CE04KW1C100M	ELECTRO	10UF	16WV		
C503,504			CE04KW1C100M	ELECTRO	10UF	16WV		
C507,508			CE04KW1C100M	ELECTRO	10UF	16WV		
C509			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C511,512		*	SH1205900090	CERAMIC	0.015UF	25WV		
C513-516			CE04KW1C100M	ELECTRO	10UF	16WV		
C517			CK45FB1H561K	CERAMIC	560PF	K		
C518			CQ93HP2A682J	MYLAR	6800PF	J		
C519			CQ92FM1H153J	MYLAR	0.015UF	J		
C527,528			CE04KW1C100M	ELECTRO	10UF	16WV		
C531,532			CE04KW1C100M	ELECTRO	10UF	16WV		
C533,534			CE04KW1C470M	ELECTRO	47UF	16WV		
C536			CE04KW1C100M	ELECTRO	10UF	16WV		
C537			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C601A-604	A		CE04JW1C101M	ELECTRO	100UF	16WV	E	
C603			CE04KW1V471M	ELECTRO	470UF	35WV		
C604		*	SH1305900596	CERAMIC	0.022UF	25WV		
C605			CE04KW1H470M	ELECTRO	47UF	50WV		
C605A,606	A		CK45B1H682K	CERAMIC	6800PF	K	E	
C606			CE04KW1V330M	ELECTRO	33UF	35WV		
C608			CE04KW1V471M	ELECTRO	470UF	35WV		
C609		*	SH1305900596	CERAMIC	0.022UF	25WV		
C610			CE04KW1H470M	ELECTRO	47UF	50WV		
C610A,611	A		CK45FF1H223Z	CERAMIC	0.022UF	Z		
C611			CE04KW1V330M	ELECTRO	33UF	35WV		
C612,613			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C612A,613	A		CC45SL1H102J	CERAMIC	1000PF	J	E	
C614			CE04KW1H100M	ELECTRO	10UF	50WV	MX	
C614A,615	A		CE04KW1H470M	ELECTRO	47UF	50WV		
C615			CE04KW1H470M	ELECTRO	47UF	50WV		
C616			CE04KW1H220M	ELECTRO	22UF	50WV		
C616A,617	A		CK45FF1H223Z	CERAMIC	0.022UF	Z		
C617			CE04KW1H100M	ELECTRO	10UF	50WV		
C618,619			CF92FV1H224J	MF	0.22UF	J		
C618A-622	A	*	SH1425800092	CERAMIC	0.047UF	Z	E	
C620,621			CE04KW1V332M	ELECTRO	3300UF	35WV		
C623			CE04KW1V102M	ELECTRO	1000UF	35WV		
C623A,624	A		CK45FF1H102Z	CERAMIC	1000PF	Z	E	
C624			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C625			CE04KW1H470M	ELECTRO	47UF	50WV		
C626,627			CE04KW1V330M	ELECTRO	33UF	35WV		
C628			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C629			CE04KW1C470M	ELECTRO	47UF	16WV		
C630			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C631,632			CC45SL1H151J	CERAMIC	150PF	J		
C633,634			CE04KW1HR22M	ELECTRO	0.22UF	50WV		
C635,636			SH1255900061	ELECTRO	0.47UF	5.5WV		
C637,638		*	SH1165900142	CERAMIC	0.068UF	25WV		

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NO.8

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
C639,640			CE04KW1HR22M	ELECTRO	0.22UF	50WV		
C641,642		*	SH1205900091	CERAMIC	0.027UF	25WV		
C643,644		*	SH1165900142	CERAMIC	0.068UF	25WV		
C645,646		*	SH1205900109	CERAMIC	0.01UF	25WV		
C647,648		*	SH1205900091	CERAMIC	0.027UF	25WV		
C649		*	SH1205900093	CERAMIC	4700PF	25WV		
C651,652		*	SH1125900162	CERAMIC	0.012UF	25WV		
C653,654		*	SH1165900120	CERAMIC	1800PF	25WV		
C655,656		*	SH1205900093	CERAMIC	4700PF	25WV		
C657,658			CC45SL1H561J	CERAMIC	560PF	J		
C659,660		*	SH1165900120	CERAMIC	1800PF	25WV		
C661,662			CC45SL1H151J	CERAMIC	150PF	J		
C663,664			CE04KW1H100M	ELECTRO	10UF	50WV		
C665			CE04KW1C470M	ELECTRO	47UF	16WV		
C666,667			CE04KW1V330M	ELECTRO	33UF	35WV		
C668,669		*	SH1125900161	CERAMIC	1000PF	25WV		
C671,672			CC45SL1H561J	CERAMIC	560PF	J		
C673,674			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C675,676			CK45B1H681K	CERAMIC	680PF	K		
C677,678			CE04KW1V220M	ELECTRO	22UF	35WV		
C679,680			CF92FV1H823J	MF	0.082UF	J		
C681,682			CC45SL1H470J	CERAMIC	47PF	J		
C683			CE04KW1H100M	ELECTRO	10UF	50WV		
C684-688			CE04KW1H470M	ELECTRO	47UF	50WV		
C689-692			CF92FV1H104J	MF	0.10UF	J		
C693,694			CE04KW1V330M	ELECTRO	33UF	35WV		
C695,696			CE04KW1C470M	ELECTRO	47UF	16WV		
C697			CE04KW1H100M	ELECTRO	10UF	50WV		
C701,702			CE04KW1C100M	ELECTRO	10UF	16WV		
C703,704			CC45SL1H151J	CERAMIC	150PF	J		
C705,706			CC45SL1H331J	CERAMIC	330PF	J		
C707,708			CC45SL1H151J	CERAMIC	150PF	J		
C709,710			CE04KW1C100M	ELECTRO	10UF	16WV		
C711,712			CE04KW1C470M	ELECTRO	47UF	16WV		
C713,714			CC45SL1H101J	CERAMIC	100PF	J	E	
C715,716			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C717		*	SH1125900143	CERAMIC	1000PF	25WV		
C719-724		*	SH1205930032	CERAMIC	0.022UF	Z	E	
C751,752		*	SH1105910098	CERAMIC	8800PF	K	MX	
C753,754		*	SH1125900145	CERAMIC	2200PF	25WV	MX	
C755,756			CE04KW1C100M	ELECTRO	10UF	16WV	MX	
C757,758			CE04KW1V330M	ELECTRO	33UF	35WV	MX	
C759			CK45FF1H223Z	CERAMIC	0.022UF	Z	MX	
C760			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C761			CE04KW1V330M	ELECTRO	33UF	35WV		
C762			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C763		*	SH1305900596	CERAMIC	0.022UF	25WV	MX	
C764,765		*	SH1205900088	CERAMIC	0.033UF	25WV		
C766			CE04JW1C100M	ELECTRO	10UF	16WV	MX	
C767-769			CC45SL1H151J	CERAMIC	150PF	J	MX	
C770			CC45SL1H391J	CERAMIC	390PF	J	MX	
C771			CE04KW1C100M	ELECTRO	10UF	16WV	MX	
C772,773			CC45SL1H151J	CERAMIC	150PF	J	MX	
C774,775			CE04KW1V330M	ELECTRO	33UF	35WV	MX	
C776			CE04KW1C100M	ELECTRO	10UF	16WV	MX	

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NO.9

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
C777		*	SH1205900093	CERAMIC	4700PF	25WV	MX	
C778		*	SH1105900119	CERAMIC	0.01UF	25WV	MX	
C779			CE04KW1C100M	ELECTRO	10UF	16WV	MX	
C781,782			CE04KW1C100M	ELECTRO	10UF	16WV	MX	
C811,812			CE04KW1V330M	ELECTRO	33UF	35WV		
C813,814			CF92FV1H823J	MF	0.082UF	J		
C815,816		*	CE04JW1HR68M	ELECTRO	0.68UF	50WV		
C817,818			CC45SL1H221J	CERAMIC	220PF	J		
C819,820			CC45SL1H151J	CERAMIC	150PF	J		
C821,822		*	SH1165900124	CERAMIC	2200PF	25WV		
C823,824			CE04JW1V220M	ELECTRO	22UF	35WV		
C825,826			CE04KW1C100M	ELECTRO	10UF	16WV		
C827,828			CE04JW1C100M	ELECTRO	10UF	16WV		
C829			CE04KW1C100M	ELECTRO	10UF	16WV	MX	
C830			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C831,832			CC45SL1H101J	CERAMIC	100PF	J		
C833,834			CE04JW1C470M	ELECTRO	47UF	16WV		
C835,836			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C837,838		*	SH1125900143	CERAMIC	1000PF	25WV		
C839			CE04JW1H2R2M	ELECTRO	2.2UF	50WV		
C840			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C841,842			CC45FSL1H330J	CERAMIC	33PF	J		
C843,844			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C845			CE04KW1C470M	ELECTRO	47UF	16WV		
C846			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C847,848			CK45B1H471J	CERAMIC	470PF	J		
C849		*	SH1305900596	CERAMIC	0.022UF	25WV		
C851,852			CC45SL1H220J	CERAMIC	22PF	J		
C853,854			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C855		*	SH1305900689	CERAMIC	0.022UF	25WV		
C856			CE04JW1H2R2M	ELECTRO	2.2UF	50WV		
C857,858			CK45FB1H101K	CERAMIC	100PF	K		
C859,860			CC45SL1H330J	CERAMIC	33PF	J		
C861			CE04JW1HR22M	ELECTRO	0.22UF	50WV		
C862		*	SH1305900689	CERAMIC	0.022UF	25WV		
C863			CE04KW1C101M	ELECTRO	100UF	16WV		
C864		*	SH1305900689	CERAMIC	0.022UF	25WV		
C865			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C866			CE04KW1C471M	ELECTRO	470UF	16WV		
C867			CE04JW1C100M	ELECTRO	10UF	16WV		
C868			CE04JW1H010M	ELECTRO	1.0UF	50WV		
C869			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C870			CE04KW1HR47M	ELECTRO	0.47UF	50WV		
C871			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C872			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C906-908		*	SH1305900689	CERAMIC	0.022UF	25WV		
C909		*	SH1305900680	CERAMIC	0.01UF	16WV		
C910		*	SH1305900532	ELECTRO	0.47UF	50WV	E	
C911		*	SH1305900689	CERAMIC	0.022UF	25WV		
C912			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C913		*	SH1305900689	CERAMIC	0.022UF	25WV		
C914			CE04KW1C100M	ELECTRO	10UF	16WV		
C915-918		*	SH1305900689	CERAMIC	0.022UF	25WV		
C919			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C920			CE04KW1H010M	ELECTRO	1.0UF	50WV		

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NO.10

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
C921		*	SH1305900685	CERAMIC	2200PF	16WV		
C922		*	SH1305900681	CERAMIC	0.01UF	16WV		
C923			CK45FB1H101K	CERAMIC	100PF	K		
C924		*	SH1305900689	CERAMIC	0.022UF	25WV		
C925			CE04KW1C101M	ELECTRO	100UF	16WV		
C926		*	SH1305900689	CERAMIC	0.022UF	25WV		
C927			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C928			CE04KW1C100M	ELECTRO	10UF	16WV		
C929		*	SH1305900689	CERAMIC	0.022UF	25WV		
C930			CK45FB1H151K	CERAMIC	150PF	K		
C931			CE04KW1C100M	ELECTRO	10UF	16WV		
C932			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C933		*	CE04KW1HR10M	ELECTRO	0.10UF	50WV		
C934			CE04KW1C100M	ELECTRO	10UF	16WV		
C935			CC45SL1H220J	CERAMIC	22PF	J	E	
C936			CC45FSL1H680J	CERAMIC	68PF	J	E	
C937			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C938			CE04KW1HR22M	ELECTRO	0.22UF	50WV		
C939			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C940			CE04KW1C100M	ELECTRO	10UF	16WV		
C941			CK45FB1H102K	CERAMIC	1000PF	K		
C942		*	SH1305900648	CERAMIC	0.047UF	16WV		
C943			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C944			CE04KW1C101M	ELECTRO	100UF	16WV		
C945		*	SH1305900689	CERAMIC	0.022UF	25WV		
C946			CE04KW1C100M	ELECTRO	10UF	16WV		
C947,948			CC45FSL1H561J	CERAMIC	560PF	J	MTEX	
C947,948		*	SH1165900120	CERAMIC	1800PF	25WV	K	
C950			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C951,952		*	SH1165900176	CERAMIC	3300PF	16WV		
C953,954		*	SH1105910100	CERAMIC	0.010UF	16WV	MX	
C955		*	SH1305900689	CERAMIC	0.022UF	25WV		
C956			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C957		*	SH1425900127	ELECTRO	0.047F	5.5WV		
C958			CK45FF1H103Z	CERAMIC	0.010UF	Z	KMX	
C959			CE04KW1C470M	ELECTRO	47UF	16WV		
C959			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C960			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C961			CK45FB1H102K	CERAMIC	1000PF	K		
C962			CE04KW1C101M	ELECTRO	100UF	16WV		
C963		*	SH1305900689	CERAMIC	0.022UF	25WV		
C964			CC45CH1H180J	CERAMIC	18PF	J		
C965			CC45CH1H150J	CERAMIC	15PF	J		
C966		*	SH1305900689	CERAMIC	0.022UF	25WV		
C967			CC45CH1H270J	CERAMIC	27PF	J	TE	
C968		*	SH1305900689	CERAMIC	0.022UF	25WV	TE	
C969			CQ09FS1H471J	POLYSTY	470PF	J	TE	
C970			CC45FCH1H180J	CERAMIC	18PF	J	TE	
C971			CQ09FS1H681J	POLYSTY	680PF	J	TE	
C972			CC45FCH1H180J	CERAMIC	18PF	J	TE	
C973			CQ09FS1H221J	POLYSTY	220PF	J	TE	
C974			CC45FCH1H270J	CERAMIC	27PF	J	TE	
C975,976		*	SH1305900689	CERAMIC	0.022UF	25WV	TE	
C977			CK45FF1H473Z	CERAMIC	0.047UF	Z	TE	
C978-983			CE04KW1C470M	ELECTRO	47UF	16WV		

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NO.11

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
C984			CE04KW1E222M	ELECTRO	2200UF	25WV		
C985			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C986			CE04KW1H470M	ELECTRO	47UF	50WV		
C988,989			CE04KW1H470M	ELECTRO	47UF	50WV		
C990-992		*	SH1305900689	CERAMIC	0.022UF	25WV		
C993			CE04KW1C470M	ELECTRO	47UF	16WV		
C998			CK45FF1H473Z	CERAMIC	0.047UF	Z	KMX	
C999			CC45CH1H150J	CERAMIC	15PF	J	KMX	
TC900			SH1106450005	TRIMMER			TE	
TC901			SH1106450052	TRIMMER			TE	
CNS9		*	SH1105121974	CORD WITH CONNECTOR	LOADING			
CNS201		*	SH1105121958	CORD WITH CONNECTOR	WHITE			
CNS303		*	SH1105120959	CORD WITH CONNECTOR	BLACK			
CNS304		*	SH1105121961	CORD WITH CONNECTOR	BLUE			
CNS740		*	SH1105100536	CORD WITH CONNECTOR				
CNS904		*	SH1105121960	CORD WITH CONNECTOR	RED			
J600			SH1305170468	PHONE JACK	HEAD PHONE			
K651,652		*	SH1125200026	TERMINAL			MTEX	
S0600		*	SH1105270116	PHONE JACK	SURROUND		MX	
S0601			SH1105270108	PHONE JACK	SUPERWOOFER			
S0700		*	SH1105270115	AUX TERMINAL				
S0750			SH1305170468	PHONE JACK	MIC		MX	
S0900		*	SH1105320081	ANTENNA TERMINAL			TE	
S0900		*	SH1205320029	ANTENNA TERMINAL			KMX	
TM600		*	SH1105320080	SPEAKER TERMINAL			E	
TM600		*	SH1105320082	SPEAKER TERMINAL			KMTX	
F201,202		*	SH1105150070	FUSE	1A		K	
F201,202		*	SH1125150098	FUSE	630mA		MTEX	
F601,602		*	SH1105150066	FUSE	3A		K	
F601,602			SH1305150046	FUSE	3.15A		MTEX	
F650		*	SH1105150072	FUSE	2.5A		K	
F650		*	SH1165150028	FUSE	800MA		TE	
F650			SH1305150057	FUSE	1A		MX	
F651		*	SH1105150071	FUSE	2A		K	
F651		*	SH1125150103	FUSE	2A		MTEX	
F652		*	SH1105150070	FUSE	1A		K	
F652		*	SH1165150028	FUSE	800mA		MTEX	
F653		*	SH1125150103	FUSE	2A		MX	
F701		*	SH1105150071	FUSE	2A		K	
F701		*	SH1125150103	FUSE	2A		MTEX	
FH201-204		*	SH1105160009	FUSE HOLDER				
FH601-604		*	SH1105160009	FUSE HOLDER				
FH651-656		*	SH1105160009	FUSE HOLDER				
FH701-702		*	SH1105160009	FUSE HOLDER				
CF900,901			SH1106210043	CERAMIC FILTER			KMTX	
CF900,901		*	SH1136210024	CERAMIC FILTER			G	
CF902			SH1136210035	FILTER	AM AUTO STOP			
CF903		*	SH1126160005	FILTER	MPX PLL			
L1			SH1256070016	OSCILLATION COIL				
L201,202			SH1305850009	SMALL FIXED INDUCTOR (100UH)				
L301			SH1305850009	SMALL FIXED INDUCTOR (100UH)				
L401,402			SH1306140201	COIL				
L403			SH1106070062	OSCILLATION COIL				
L404,405			SH1106140060	COIL	47mH			

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NO.12

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格				Destination 仕向	Remarks 備考
L406,407			SH1105850038	SMALL FIXED INDUCTOR (6.8mH)					
L601,602		*	SH1126140028	COIL				E	
L603			SH1305850009	SMALL FIXED INDUCTOR (100UH)					
L810,812			SH1305850009	SMALL FIXED INDUCTOR (100UH)					
L851,852			SH1305850009	SMALL FIXED INDUCTOR (100UH)					
L901		*	SH1206210010	COIL				E	
L902,903			SH1256140011	MPX FILTER					
L904		*	SH1105850031	MPX FILTER				E	
L905			SH1305850009	SMALL FIXED INDUCTOR (100UH)					
L906			SH1105850008	SMALL FIXED INDUCTOR (2.2UH)					
L907,908			SH1305850009	SMALL FIXED INDUCTOR (100UH)					
T201		*	SH1106540262	TRANS					
T651		*	SH1106540260	POWER TRANS				E	
T651		*	SH1106540264	POWER TRANS				MX	
T651		*	SH1106540265	POWER TRANS				T	
T651		*	SH1106540281	POWER TRANS				K	
T901		*	SH1105210042	IFT	AM				
T902		*	SH1106080016	IFT	FM DISCRI			MTEX	
T902			SH1106080018	IFT	FM DISCRI			K	
T903		*	SH1106080017	TRANS				MTEX	
T904			SH1106070081	TRANS				TE	
T905			SH1106070080	TRANS				TE	
T906			SH1106060094	TRANS				TE	
T907			SH1106060093	TRANS				TE	
T908		*	SH1106540261	TRANS					
T909		*	SH1106140128	TRANS				KM	
X1			SH1106160004	CRYSTAL	8.64MHz				
XL201			SH1125790001	RESONATOR	4 MHz				
XL301			SH1125790001	RESONATOR	4 MHz				
XL810			SH1125790001	RESONATOR	4 MHz				
XL851			SH1116160002	CRYSTAL	32.76KHz				
XL852		*	SH1105790001	RESONATOR	1 MHz				
XL853		*	SH1105790006	RESONATOR	2 MHz				
XL900			SH1106160005	CRYSTAL	7.4MHz				
R226		*	RD14BB2H332J	RD	3.3K	J	1/2W		
R271		*	SH1105800181	RN	330	D	2W		
R273		*	SH1105800181	RN	330	D	2W		
R274		*	RD14BB2H332J	RD	3.3K	J	1/2W		
R286			SH1105810568	FUSE RESIST	2.2	J	1/4W	K	
R301A			SH1105810568	FUSE RESIST	2.2	J	1/4W	K	
R301A			SH1255810085	FUSE RESIST	1.0	J	1/4W	MTEX	
R309A			SH1305810426	FUSE RESIST	33	J	1/4W		
R342			SH1305810426	FUSE RESIST	33	J	1/4W		
R365			SH1105810568	FUSE RESIST	2.2	J	1/4W		
R533,534			SH1105810600	FUSE RESIST	5.6	J	1/4W		
R537			SH1305810835	FUSE RESIST	4.7	J	1/4W		
R602			SH1255810085	FUSE RESIST	1.0	J	1/4W	MTEX	
R602			SH1305810835	FUSE RESIST	4.7	J	1/4W	K	
R602A			SH1125810214	FUSE RESIST	100	J	1/4W		
R606			RD14BB2H222J	RD	2.2K	J	1/2W		
R607		*	SH1125810207	FUSE RESIST	68	J	1/4W		
R609			RD14BB2H222J	RD	2.2K	J	1/2W		
R610			SH1125810214	FUSE RESIST	100	J	1/4W		
R612,613			RD14BB2H121J	RD	120	J	1/2W		

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NO.13

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格				Destination 仕向	Remarks 備考
R614		*	RD14BB2H680J	RD	68	J	1/2W		
R615A			SH1305810835	FUSE RESIST	4.7	J	1/4W	MTEX	
R639			SH1105810475	FUSE RESIST	1.0	J	1/2W		
R640			RD14BB2H475J	RD	4.7M	J	1/2W	K	
R656			RD14BB2H102J	RD	1.0K	J	1/2W		
R660			SH1125810214	FUSE RESIST	100	J	1/4W		
R666			SH1125810214	FUSE RESIST	100	J	1/4W		
R667,668			RD14BB2H4R7J	RD	4.7	J	1/2W		
R671,672			RD14BB2H221J	RD	220	J	1/2W		
R678			RD14BB2H222J	RD	2.2K	J	1/2W		
R679			SH1305810407	FUSE RESIST	10	J	1/4W		
R793			SH1305810408	FUSE RESIST	22	J	1/4W		
R832			RD14BB2H271J	RD	270	J	1/2W		
R965			RD14BB2H561J	RD	560	J	1/2W		
R971			SH1105810568	FUSE RESIST	2.2	J	1/4W	K	
R972			RD14BB2H391J	RD	390	J	1/2W		
R973			RD14BB2H561J	RD	560	J	1/2W		
R974			RD14BB2H472J	RD	4.7K	J	1/2W		
R992			RD14BB2H561J	RD	560	J	1/2W		
R994			RD14BB2H391J	RD	390	J	1/2W		
R995			RD14BB2H561J	RD	560	J	1/2W		
R998			SH1255810085	FUSE RESIST	1.0	J	1/4W	K	
VR1			SH1206700185	TRIM POT					
VR2			SH1306700640	TRIM POT					
VR3 ,4			SH1256700081	TRIM POT					
VR5			SH1206700185	TRIM POT					
VR301			SH1206700185	TRIM POT					
VR302			SH1306700651	TRIM POT					
VR303			SH1206700185	TRIM POT					
VR304			SH1306700651	TRIM POT					
VR501-506			SH1306700640	TRIM POT					
VR750		*	SH1106700303	MASTER VOLUME					
VR810			SH1106700283	N.B VOLUME					
VR811		*	SH1106720065	BALANCE VOLUME					
VR812		*	SH1106720066	MIC VOLUME				MX	
VR900,901			SH1306700640	MIC VOLUME				MTEX	
RLY600		*	SH1126370041	SPEAKER RELAY					
RLY601		*	SH1126370041	SURROUND RELAY				MX	
SW1		*	SH1255300101	SWITCH					
SW2			SH1155300098	SWITCH					
SW201-209		*	SH1105300368	TACT SWITCH					
SW301-307		*	SH1105300368	TACT SWITCH					
SW308,309		*	SH1105300481	SLIDE SW					
SW310-319		*	SH1105300368	TACT SWITCH					
SW650		*	SH1105300482	SLIDE SW	(VOLTAGE SELECTOR)			MX	
SW740-747		*	SH1105300368	TACT SW					
SW748			SH1305301178	SWITCHW					
SW749		*	SH1105300368	TACT SW					
SW750		*	SH1105300368	TACT SW				MX	
SW751-754		*	SH1105300368	TACT SW					
SW755		*	SH1105300368	TACT SW				MX	
SW756-761		*	SH1105300368	TACT SW					
SW851-865		*	SH1105300368	TACT SW					
SW866		*	SH1105300368	TACT SW				TE	

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NO.14

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SW900		*	SH1105300483	TACT SW	MX	
D1			1SS181	DIODE		
D2 -9			1SS184	DIODE		
D10			SVC203	DIODE		
D11			1SS184	DIODE		
D12			1SS181	DIODE		
D13			1SS133	DIODE		
D201-203			1SS199	DIODE		
D205-211			11ES1	DIODE		
D213,214			1SS119	DIODE		
D215			11ES1	DIODE		
D301			S2VB40F	DIODE		
D302-305		*	11E4TA2	DIODE		
D306-318			1SS119	DIODE		
D320-324			1SS119	DIODE		
D325			11ES1	DIODE		
D327,328			1SS119	DIODE		
D329			11ES1	DIODE		
D330-335			1SS119	DIODE		
D337-349			1SS119	DIODE		
D394			1SS119	DIODE		
D401-406			1SS119	DIODE		
D601-606		*	11E4TA2	DIODE		
D607			S4VB20	DIODE		
D608		*	11E4TA2	DIODE		
D609-611			1SS119	DIODE		
D613-622			1SS119	DIODE		
D623			11ES1	DIODE		
D624			11ES1	DIODE	MX	
D626-629			1SS119	DIODE		
D701,702			1SS119	DIODE		
D740,745			1SS119	DIODE		
D810			1SS119	DIODE		
D851-855			1SS119	DIODE		
D856			1SS119	DIODE	MTEX	
D857			1SS119	DIODE	KMX	
D858-868			1SS119	DIODE		
D903-905			1SS119	DIODE		
D906-910			11ES1	DIODE		
D911-914			1SS119	DIODE		
FL201		*	FV525G	FL TUBE		
FL810		*	FV524G	FL TUBE		
FL851		*	FV523G	FL TUBE		
IC1			LR37632	IC(SERVO CONTROL)		
IC2			LA9200M	IC(ANALOG SIGNAL PROCESSOR)		
IC3		*	LC9600AM	IC		
IC4		*	LH5116N-20	IC		
IC5 -7		*	RC4560M	IC		
IC8 ,9			LA6515	IC		
IC10			M54641L	IC		
IC11		*	RC79L05A	IC(VOLTAGE REGULATOR/ -5V)		
IC12			L78N05	IC(VOLTAGE REGULATOR/ +5V)		
IC13		*	RC78L05A	IC		
IC14		*	RC79L05A	IC(VOLTAGE REGULATOR/ -5V)		

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* New Parts
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NO.15

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
IC16		*	RC4560M	IC		
IC201		*	M50946SP	IC(MICROPROCESSOR)		
IC202			TC4066BP	IC(ANALOG/ DIGITAL SW)		
IC203		*	M51951AS1	IC		
IC204			M5230L	IC(VOLTAGE REGULATOR)		
IC302		*	MC14094B	IC(8ST SHIFT/STORE REGISTER)		
IC303		*	M50708SP	IC(MICROPROCESSOR)		
IC401			LA2000	IC(AUDIO LEVEL SENSOR)		
IC402			BA3416BL	IC		
IC403			HA12136A	IC(DOLBY B NR SYSTEM)		
IC404,405		*	MC14051B	IC(ANALOG SWITCH)		
IC406			M51544AL	IC(REC AMP)		
IC407,408		*	MC14051B	IC(ANALOG SWITCH)		
IC409			M5218AL	IC(OP AMP X2)		
IC600			LC7522	IC(7CH GRAPHIC EQUALIZER)		
IC601,602			M5289P	IC		
IC603		*	BU2040	IC		
IC604			STK4122M	IC(AF POWER AMP)		
IC700			M5218AL	IC(OP AMP X2)		
IC701		*	MC14052B	IC		
IC750			NJM2058	IC	MX	
IC751			TC4066BP	IC(ANALOG/ DIGITAL SW)	MX	
IC752			M5218AL	IC(OP AMP X2)	MX	
IC753			LB1641	IC(MOTOR DRIVER)		
IC810			M5218AL	IC(OP AMP X2)		
IC811			XR1091	IC		
IC812		*	M50941SP	IC(MICROPROCESSOR)		
IC851		*	LC65158	IC(4BIT MICROPROCESSOR)		
IC852		*	LC6554H	IC(4BIT MICROPROCESSOR)		
IC853		*	SPS4201	IC		
IC900			LA1265	IC(FM/AM TUNER)		
IC901			LA3401	IC(FM MPX)		
IC902			LM7001	IC(PLL FREQUENCY SYNTHESIZER)		
LED1			LT3P8D	LED		
LED301-31	1		LT3P8D	LED		
LED740-74	3		LT3P8D	LED		
LED744			LT3P8D	LED	MX	
LED745			LT3P8D	LED		
LED751			GL2PR7	LED		
Q3 ,4			DTC114YK	DGITAL TRANSISTOR		
Q5 ,6			DTC363TK	DGITAL TRANSISTOR		
Q8			DTA114EK	DGITAL TRANSISTOR		
Q9 ,10			DTC114YK	DGITAL TRANSISTOR		
Q13			DTC114YK	DGITAL TRANSISTOR		
Q15			DTC114YK	DGITAL TRANSISTOR		
Q16			2SA562(Y)	TRANSISTOR		
Q201,202			DTC124TS	DIGITAL TRANSISTOR		
Q203,204			DTC114YS	DIGITAL TRANSISTOR		
Q205			DTC144ES	DIGITAL TRANSISTOR		
Q206			2SD2061E	TRANSISTOR		
Q207			2SB1105E	TRANSISTOR		
Q208			2SD1858(Q,R)	TRANSISTOR		
Q209			DTC114YS	DIGITAL TRANSISTOR		
Q210			DTA114YS	DIGITAL TRANSISTOR		
Q211			DTC124TS	DIGITAL TRANSISTOR		

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NO.16

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
Q301,302			2SA562(Y)	TRANSISTOR		
Q303			2SD1858(Q,R)	TRANSISTOR		
Q304			2SB1237(Q,R)	TRANSISTOR		
Q305			2SC1959Y	TRANSISTOR		
Q306			2SA562(Y)	TRANSISTOR		
Q307			2SC1959Y	TRANSISTOR		
Q308,309			2SA933SR	TRANSISTOR		
Q310			2SD2061F	TRANSISTOR		
Q311,312			2SA562(Y)	TRANSISTOR		
Q314			2SB1237(Q,R)	TRANSISTOR		
Q315			2SC1959Y	TRANSISTOR		
Q316			2SA562(Y)	TRANSISTOR		
Q317			2SC1959Y	TRANSISTOR		
Q318-323			DTC114YS	DIGITAL TRANSISTOR		
Q325,326			DTC114YS	DIGITAL TRANSISTOR		
Q328-333			DTC114YS	DIGITAL TRANSISTOR		
Q335,336			DTC114YS	DIGITAL TRANSISTOR		
Q337			2SD1858(Q,R)	TRANSISTOR		
Q338			2SD2061F	TRANSISTOR		
Q339		*	2SC3199GR	TRANSISTOR		
Q340			DTC144ES	DIGITAL TRANSISTOR		
Q341			2SD1858(Q,R)	TRANSISTOR		
Q342			DTC114YS	DIGITAL TRANSISTOR		
Q343			2SD2061F	TRANSISTOR		
Q344		*	2SC3199GR	TRANSISTOR		
Q345			2SD1858(Q,R)	TRANSISTOR		
Q401,402			2SC1740S(Q,R)	TRANSISTOR		
Q403			DTC114YS	DIGITAL TRANSISTOR		
Q404,405			2SC1740S(Q,R)	TRANSISTOR		
Q406-409			2SC2240BL	TRANSISTOR		
Q410		*	2SC3199GR	TRANSISTOR		
Q411			DTA114YS	DIGITAL TRANSISTOR		
Q412			DTC114YS	DIGITAL TRANSISTOR		
Q413-415			2SC2001-L	TRANSISTOR		
Q416			2SC1740S(Q,R)	TRANSISTOR		
Q417			DTC114YS	DIGITAL TRANSISTOR		
Q418			2SA933SR	TRANSISTOR		
Q419			DTC114YS	DIGITAL TRANSISTOR		
Q420			DTC144ES	DIGITAL TRANSISTOR		
Q421-430			DTC114YS	DIGITAL TRANSISTOR		
Q431,432		*	2SC3199GR	TRANSISTOR		
Q433			DTC144ES	DIGITAL TRANSISTOR		
Q434-437			DTC114YS	DIGITAL TRANSISTOR		
Q601			2SD2061E	TRANSISTOR		
Q602			2SB1185F	TRANSISTOR		
Q603			2SB1237(Q,R)	TRANSISTOR		
Q604			2SD2061E	TRANSISTOR		
Q605		*	2SC3199GR	TRANSISTOR		
Q606			2SD1858(Q,R)	TRANSISTOR		
Q607			DTC114YS	DIGITAL TRANSISTOR		
Q608			DTA114YS	DIGITAL TRANSISTOR	MX	
Q609			DTA114YS	DIGITAL TRANSISTOR		
Q610		*	2SA1267GR	TRANSISTOR		
Q611			DTA114YS	DIGITAL TRANSISTOR		
Q612			2SC2878B	TRANSISTOR		

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NO.17

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
Q613		*	2SC3199GR	TRANSISTOR	K	
Q613			2SD1858(Q,R)	TRANSISTOR	MTEX	
Q614			DTC114YS	DIGITAL TRANSISTOR		
Q615,616			2SC2878B	TRANSISTOR		
Q617			2SD1858(Q,R)	TRANSISTOR	MX	
Q618			DTC114YS	DIGITAL TRANSISTOR		
Q619			DTA114YS	DIGITAL TRANSISTOR		
Q620		*	2SB1185F	TRANSISTOR		
Q750			DTC144ES	DIGITAL TRANSISTOR		
Q751			DTA114YS	DIGITAL TRANSISTOR	MX	
Q752			DTC114YS	DIGITAL TRANSISTOR	MX	
Q753		*	2SC3199GR	TRANSISTOR	MX	
Q811		*	2SC3199GR	TRANSISTOR		
Q812		*	2SC3199GR	TRANSISTOR		
Q813			DTC114YS	DIGITAL TRANSISTOR		
Q814,815			DTA114YS	DIGITAL TRANSISTOR		
Q816			DTC114YS	DIGITAL TRANSISTOR		
Q851,852			DTC114YS	DIGITAL TRANSISTOR		
Q853			DTA114YS	DIGITAL TRANSISTOR		
Q854			DTC144ES	DIGITAL TRANSISTOR		
Q855,856			DTA114YS	DIGITAL TRANSISTOR		
Q901			2SC380-6	TRANSISTOR		
Q902			DTC144ES	DIGITAL TRANSISTOR		
Q903,904			DTC114YS	DIGITAL TRANSISTOR	MX	
Q905,906		*	2SC1740SR	TRANSISTOR		
Q907			DTC144ES	DIGITAL TRANSISTOR		
Q908			DTA144WS	DIGITAL TRANSISTOR		
Q909			DTA114YS	DIGITAL TRANSISTOR		
Q910			DTA114YS	DIGITAL TRANSISTOR	TE	
Q911-913		*	2SC1740SR	TRANSISTOR	TE	
Q914			2SD2061E	TRANSISTOR		
Q915		*	2SC1740SR	TRANSISTOR		
Q916			2SD2061E	TRANSISTOR		
Q917,918			DTC114YS	DIGITAL TRANSISTOR		
Q921			DTC144ES	DIGITAL TRANSISTOR	TE	
Q922			2SD2061E	TRANSISTOR		
VD900			KV1236Z	VARIABLE CAPACITANCE DIODE	TE	
ZD1			MTZJ3R9A	ZENER DIODE		
ZD201		*	HZS6LB1	ZENER DIODE		
ZD203			HZS6AL1	ZENER DIODE		
ZD301		*	HZS6LB1	ZENER DIODE		
ZD302			HZS12AL3	ZENER DIODE		
ZD303		*	HZS6LB1	ZENER DIODE		
ZD304			HZS12BL3	ZENER DIODE		
ZD305			HZ6B2L	ZENER DIODE		
ZD306			HZ9B2	ZENER DIODE		
ZD307			HZ6B2L	ZENER DIODE		
ZD501			RD100JS2	ZENER DIODE		
ZD502			HZS7BL2	ZENER DIODE		
ZD601,602			HZS12CL1	ZENER DIODE		
ZD603,604			HZS7BL2	ZENER DIODE		
ZD605		*	HZS6LB1	ZENER DIODE		
ZD606			HZS12BL3	ZENER DIODE		
ZD607		*	HZS3DL1	ZENER DIODE		
ZD608			HZS6AL1	ZENER DIODE		

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PARTS LIST

NO.19

Ref. No. 参照番号	位置	New parts 新	Parts No. 部品番号	Description 部品名/規格	Destination 仕向	Remarks 備考
	2D		D10-2226-08	EJECT PREVENT ARM		
X313	1E		D13-0812-08	GEAR ASSY		
X314	2D		D14-0304-08	IDLER ASSY		
X315	2C		D40-0928-08	HEAD BASE		
X318	2D		J25-6284-08	LEAD WIRE (PLAY)		A
X321	2E		J25-6285-08	LEAD WIRE (REC/PLAY/ERASE)		B
X325	2C		G01-2398-08	EXTENSION SPRING		
X326	2E		G01-2400-08	TORSION COIL SPRING		
X327	1C		G01-2422-08	EJECT PREVENT SPRING		A
X327	2D		G01-2439-08	EJECT PREVENT SPRING		B
X328	1D		G02-0947-08	FLAT SPRING		
X332	2D		J19-3253-08	LEAD HOLDER		
X333	2C		J25-6284-08	HEAD WIRE (PLAY)		A
X333	2C		J25-6285-08	HEAD WIRE (PLAY/REC/ERASE)		B
X335	2C,2D		N09-1864-08	STEPPED SCREW		
X336	2C		N09-2585-08	MACHINE SCREW (M2X5)		
X337	2D		N09-2700-08	MACHINE SCREW (M2.6X5)		
X338	2D		N09-2701-08	MACHINE SCREW (M3X8)		
X339	1D,2C		N09-2710-08	MACHINE SCREW (M1.6X4)		
X342	2C		N19-0904-08	FLAT WASHER (1.7X0.25)		
X343	1E		N19-0905-08	FLAT WASHER (2.6X0.25)		
X344	2C,2D		N19-1095-08	FLAT WASHER (2.7X0.25)		
X345	2C		N19-1214-08	FLAT WASHER (2.6X0.5)		
X346	2D	*	N09-0205-08	E-RING		
X350	1D		T94-0216-08	SOLENOID COIL		
X352	1D		T95-0120-08	OPTO REFLECTOR		
BM	1E		D16-0287-08	BELT		
MM	1E		T42-0535-08	DC MOTOR ASSY (MAIN)		
PP	2D		D14-0311-08	PINCH ROLLER ASSY		
PH	2C		T31-0056-08	PLAYBACK HEAD		A
PH1	1D		GP2S04B	PHOTO SENSOR		
PH1	1D		SPI-335-358	PHOTO SENSOR		
PR	2C		D14-0312-08	PINCH ROLLER ASSY		
RM	1D		T42-0534-08	DC MOTOR ASSY (REEL)		
RPEH	2C		T39-0010-08	RECORD/PLAYBACK/ERASE HEAD		B
S1 ,2	1D		S90-0105-08	PUSH SWITCH		
S5 ,6	1D,1E		S90-0105-08	PUSH SWITCH		

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NO.18

Ref. No. 参照番号	位置	New parts 新	Parts No. 部品番号	Description 部品名/規格	Destination 仕向	Remarks 備考
ZD750		*	HZS9AL3	ZENER DIODE	MX	
ZD751		*	HZ3B3	ZENER DIODE		
ZD752		*	HZS9AL3	ZENER DIODE	MX	
ZD810		*	HZS7LA3	ZENER DIODE		
ZD900		*	HZS6LC2	ZENER DIODE		
ZD901		*	HZS12BL3	ZENER DIODE		
ZD902		*	HZS6LB3	ZENER DIODE		
ZD904		*	HZS6AL1	ZENER DIODE		
						E
FE900		*	SHI1068S1023	FRONT END	E	F
FE900		*	SHI1125D00003	FRONT END	E	
FE900		*	SHI1125S00004	FRONT END	KMTX	

CD MECHANISM

	1B		SHI1597000045	SCREW		
A	2B		SHI1197000021	SCREW MOTOR		
B	3B	*	SHI1097000243	SCREW		
C	3B		SHI1097001711	SCREW		
D	3A		SHI1697000032	SCREW		
E						
2	1B	*	SHI1022101130	MAGNET PLATE		
3	1B		SHI2512300083	DISC STOPPER		
4	1B	*	SHI1032600212	DISC STOPPER CUSHION		
5	1B		SHI1027100085	BELT		
6	1B		SHI1028400110	PULLEY DISK		
7	1B		SHI1028100081	PINION GEAR		
9	1A		SHI1028400517	SHIFT LEVER		
10	2B		SHI1020700168	LOAD CHASSIS		
11	2B		SHI1028100278	INTERMEDIATE GEAR		
12	2B		SHI1028100229	DRIVE GEAR		
13	3B		SHI1029300015	TURNTABLE ASSY		
15	3B		SHI1003600448	INSULATING RUBBER		
16	3B		SHI1005301248	LEAD IN SWITCH		
19	3A		SHI1028100232	LACK		
23	3A		SHI1025300244	LACK SPRING		
21	3A		SHI1028100231	FIXING LACK		
22	2B,3B		SHI1029000394	GUIDE SHAFT		
23	2A		SHI1011100378	TRAY		
24	2B		SHI1553000088	LEAF SWITCH		
DM	3D		SHI1063000392	DISC MOTOR		
FM	3B		SHI1063000393	FEED MOTOR ASSY		
LM	2B		SHI1063000144	LOAD MOTOR		
PU	3A		SHI1061700095	PICKUP WITHOUT AMP		

CASSETTE MECHANISM

X01	1E		D01-0118-08	FLYWHEEL ASSY	
X02	1E		D01-0119-08	FLYWHEEL ASSY	
X03	2D		D03-0231-08	REEL DISK ASSY	
X04	2C		D03-0232-08	REEL DISK ASSY	
X05	1E		D10-2334-08	SLIDER ASSY	
X06	1C,1D		D10-2335-08	LEVER(CrO2,F.REC/R.REC)	B
X07	1C,1D		D10-2335-08	LEVER(CrO2)	A
X08	1C,1D		D10-0336-08	LEVER(HALF)	
X09	1E		D10-2338-08	PLAY ARM	
X09	2C		D10-2339-08	SLIDER	
X10	1D		D10-2340-08	ROD(SOLENOID)	
X11	2D		D10-2341-08	ROD	
X13	2C		D10-2057-08	EJECT PREVENT ARM	

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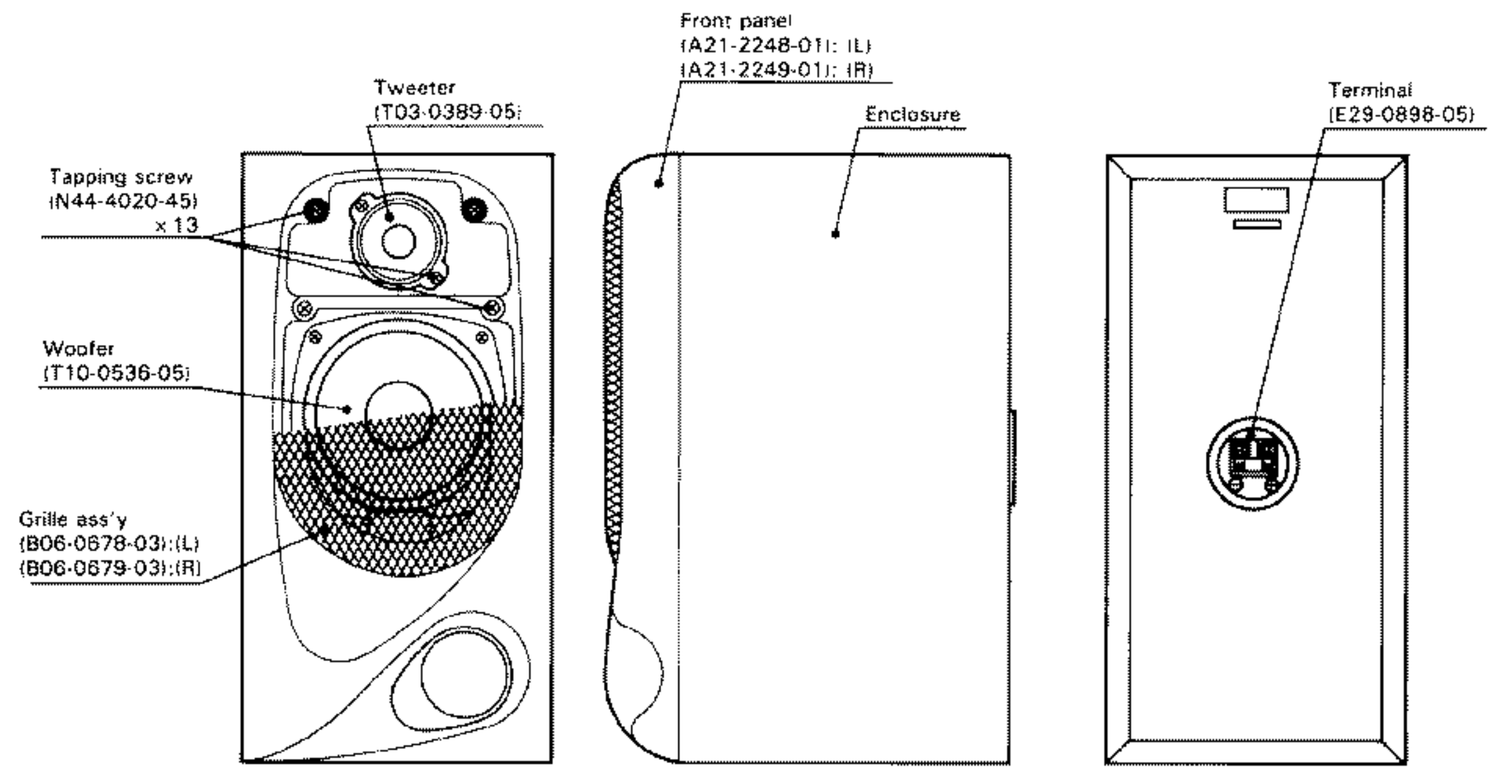
SPEAKERS SYSTEM

EXTERNAL VIEW



SPECIFICATIONS

System	2-Way 2-Speaker System
Enclosure	Bass-Reflex, Bookshelf Type
Loudspeakers	
Woofer	120 mm (4-3/4 in) Cone Type
Tweeter	50 mm (2 in) Cone Type
Nominal Impedance	6 ohms
Maximum Input Power	60 Watts
Rated Input Power	30 Watts
Sensitivity	88 dB/W at 1 m
Frequency Response	50 Hz to 20,000 Hz
Crossover Frequency	5,000 Hz
Terminals	Push-Lever Type
Dimensions	Width: 190 mm (7-1/2 in) Height: 380 mm (14-15/16 in) Depth: 255 mm (10-1/16 in)
Net Weight	5.0 kg (11.0 lbs)
Enclosure Finish	High density particle board laminated with simulated wood grain vinyl.
Accessories	Speaker Wire

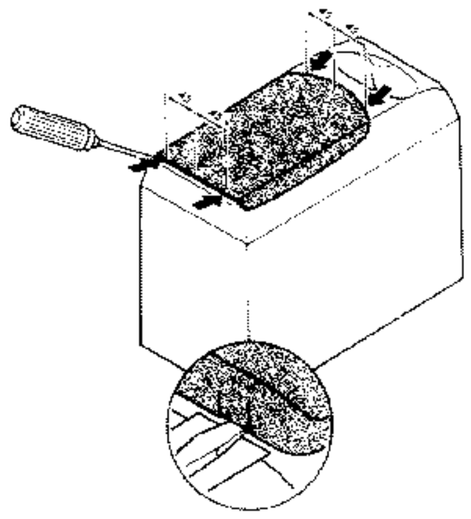
Note:

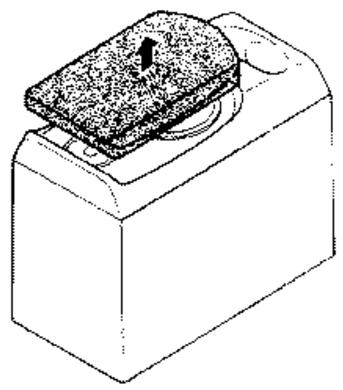
KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

SPEAKERS SYSTEM
DISASSEMBLY FOR REPAIR

HOW TO REMOVE THE GRILLE ASS'Y

Insert the tip of ⊖ driver into the four ditches located on the upper and lower sides of the net and widen the space between the net and speaker.
In doing this, attach a cloth to the speaker cabinet so as not to damage it.

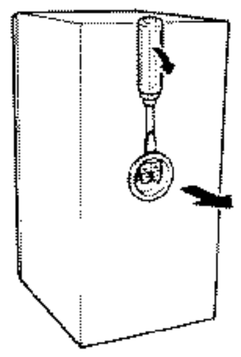


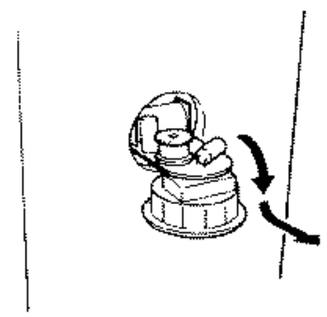


HOW TO REMOVE TERMINAL ASS'Y

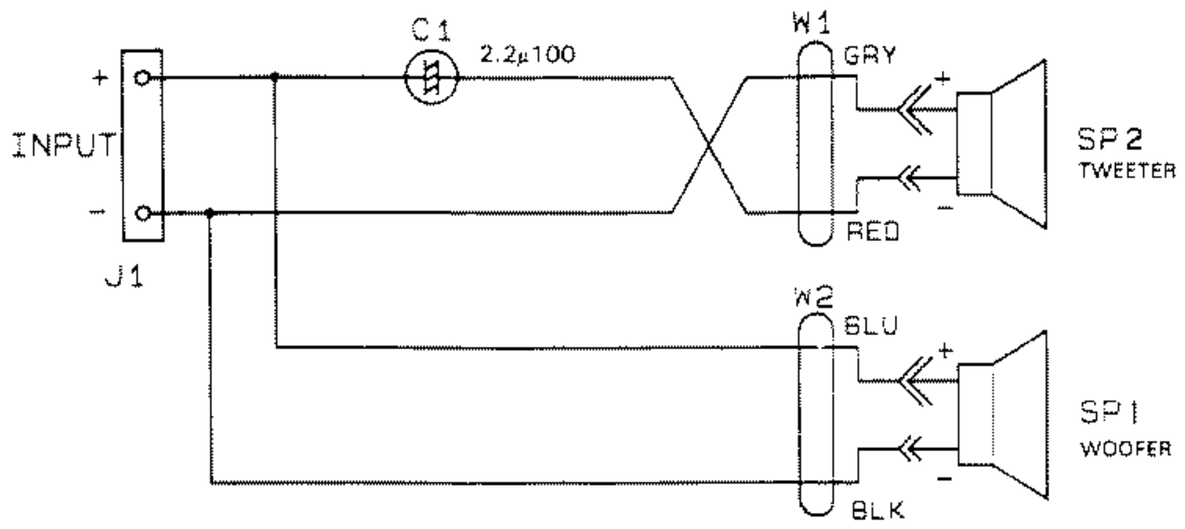
Insert ⊖ screwdriver to slit of terminal ass'y (top or bottom). Be care of not damage speaker cabinet.

Remove terminal ass'y from speaker cabinet.





SCHEMATIC DIAGRAM/PARTS LIST



SPEAKERS SYSTEM

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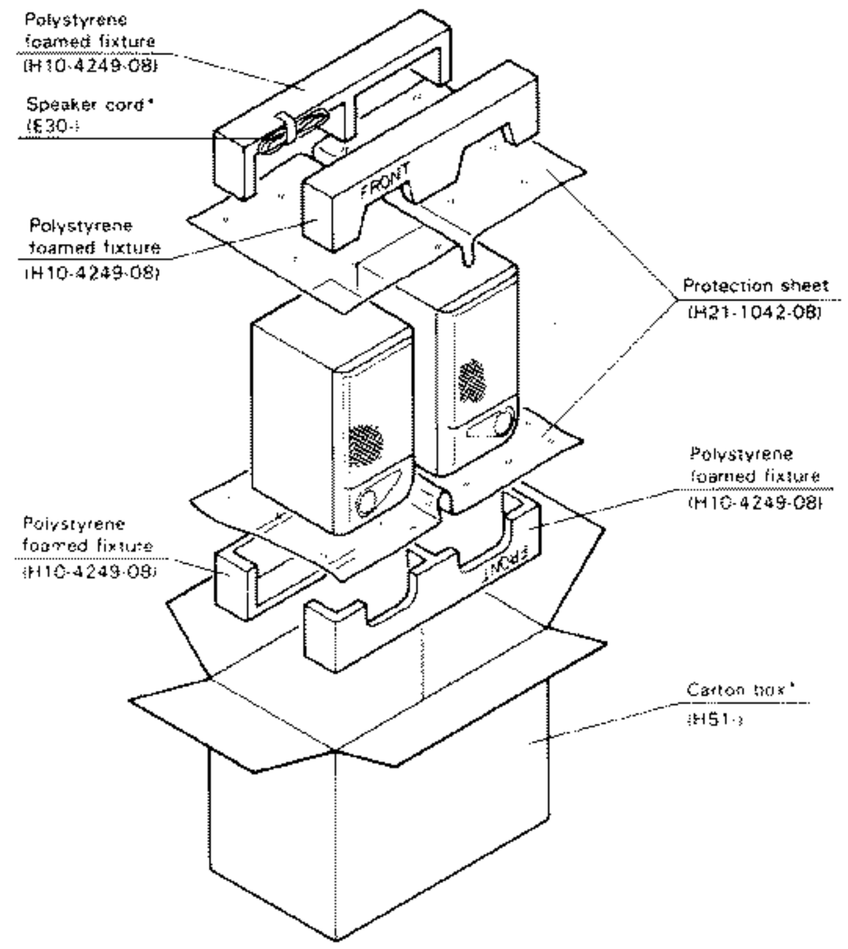
LS-322						
-		*	A21-2248-01	FRONT PANEL (L)		
-		*	A21-2249-01	FRONT PANEL (R)		
-		*	B06-0678-03	GRILLE ASSY (L)		
-		*	B06-0679-03	GRILLE ASSY (R)		
-			E30-1297-05	SPEAKER CORD	MTXPEY	
-			E30-5072-05	SPEAKER CORD	K	
-		*	H10-4249-08	POLYSTYRENE FOAMED FIXTURE		
-		*	H21-1042-08	PROTECTION SHEET		
-		*	H51-0029-08	CARTON BOX	KTE	
-		*	H51-0030-08	CARTON BOX	MXPY	
-			N44-4020-45	TAPPING SCREW		
SP1		*	T10-0536-05	WOOFER		
SP2		*	T03-0389-05	TWEETER		
NETWORK ASS'Y (X21-5980-00)						
C1			C90-1097-05	NP-ELEC 2.2UF 100WV		
J1		*	E29-0898-05	TERMINAL		

L:Scandinavia K:USA P:Canada
Y:PX(Far East, Hawaii) T:England E:Europe
Y:AAFES(Europe) X:Australia M:Other Areas

⚠ indicates safety critical components

PACKING



* Refer to parts list on page 3.