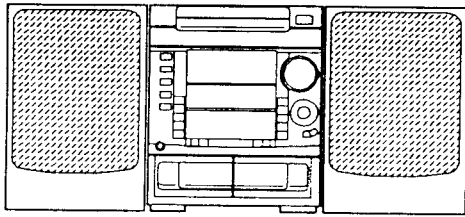


aiwa



NSX-F9



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM-3MK PR4NM
- BASIC CD MECHANISM : 6ZG-1 DFNM

• TYPE : HE, LH

SYSTEM	CD - CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-F9	CX-NF9	SX-NAVF9	RC UNIT, 6AS01

• If requiring information about the Speaker, see Service Manual of SX-NAVF9,
S/M Code No. 09-971-177-4FP.


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SPECIFICATIONS

<FM Tuner section>	
Tuning range	87.5 MHz to 108 MHz
Usable sensitivity(IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)
<MW Tuner section>	
Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 uV/m
Antenna	Loop antenna
<SW Tuner section> (HE)	
Tuning range	5.900 MHz to 17.900 MHz
Antenna	Wire antenna
<Amplifier section>	
Power output	Rated 160 W + 160 W (6 ohms, T.H.D.1%, 1 kHz) Reference: 200 W + 200 W (6 ohms, T.H.D.10%, 1 kHz)
Total harmonic distortion	0.1% (20 W, 1 kHz, 6 ohms, DIN AUDIO) *(without connecting to the SURROUND SPEAKERS)
Inputs	VIDEO/AUX : 150 mV(adjustable) MIC 1, MIC 2: 1mV (10 kohms)
Outputs	LINE OUT: 200mV SUPER WOOFER: 3.1 V SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 16 ohms or more PHONES (stereo jack) : accepts headphones of 32 ohms or more
<Cassette deck section>	
Track format	4 tracks, 2 channels stereo
Frequency response	CrO ₂ tape: 50 Hz - 16000 Hz Normal tape: 50 Hz - 15000 Hz
Signal-to noise ratio	60 dB (Dolby B NR ON, CrO ₂ tape peak level)
Recording system	AC bias
Heads	Deck 1 : playback head x 1 Deck 2 : Recording/Playback/erase head x 1

<Compact disc player section>	
Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$)
D-A converter	1 bit dual
Signal-to-noise ratio	83 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable
<Speaker system SX-NAVF9>	
Cabinet type	3 way, bass reflex (magnetic shielded type)
Speakers	Woofers : 160 mm cone type Tweeters : 80 mm cone type Super tweeter: 20 mm ceramic type
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	260 x 353 x 330mm
Weight	5.9 kg
<General>	
Power requirements	120 V / 220 - 230 V / 240 V AC, switchable 50/60 Hz
Power consumption	210 W
Dimensions of main unit (W x H x D)	300 x 357.5 x 374 mm
Weight of main unit	13 kg

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc. Under license from BBE Sound, Inc.

CD DIASSEMBLY INSTRUCTIONS

1. ピックアップの交換方法

- 1) TRAY をオープンさせる。
stopper を矢印の方向へ押し、SHAFT SLED 半分だけ抜く。
- 2) GEAR MAIN CAMを反時計方向 ("a" の方向) に回し、figure 1のようにCDメカを持ち上げる。
- 3) SHAFT SLED を抜く。
- 4) CDメカを下げてPICK UPを交換する。
- 5) CDメカをfigure 1のように上げて、SHAFT SLEDを取り付ける。

1. How to replace PICK UP.

- 1) Open the TRAY.
Push the stopper to arrow direction and release half of the SHAFT SLED.
- 2) Turn GEAR MAIN CAM to the counterclockwise (arrow "a") direction, and lift up CD mechanism. (figure 1)
- 3) Remove SHAFT SLED.
- 4) CD mechanism in down position, replace PICK UP.
- 5) Lift up CD mechanism (figure 1), and Reassemble the SHAFT SLED.

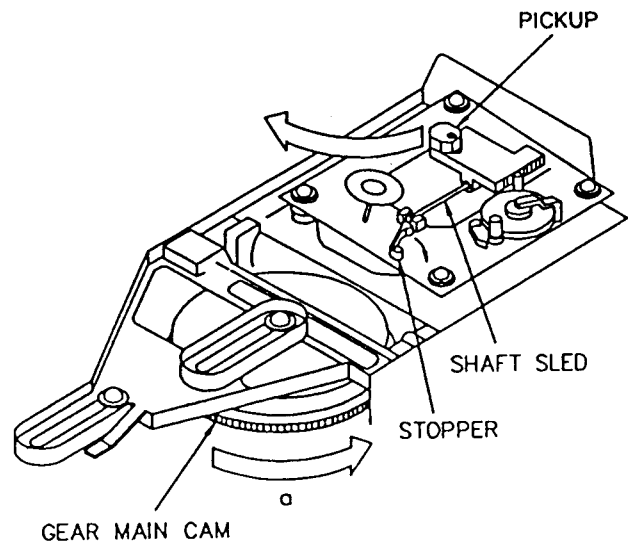


Figure 1

2. 5巻チェンジャーブロックの外し方 (figure 2)

- 1) CD基板のFFC 2本を外し、ビス5本を外す。
- 2) 5巻チェンジャーブロックを後から持ち上げて外す。
(PANEL TRAY を外さなくても、5巻チェンジャーブロックを後から外すことができる。)

2. How to remove 5CD CHANGER BLOCK (figure 2)

- 1) Remove the two FFC of the CD circuit board, and remove the five SCREWS.
- 2) Lift 5 CD CHANGER BLOCK from behind, and remove it.
(5CD CHANGER BLOCK can be removed even if PANEL TRAY are not removed.)

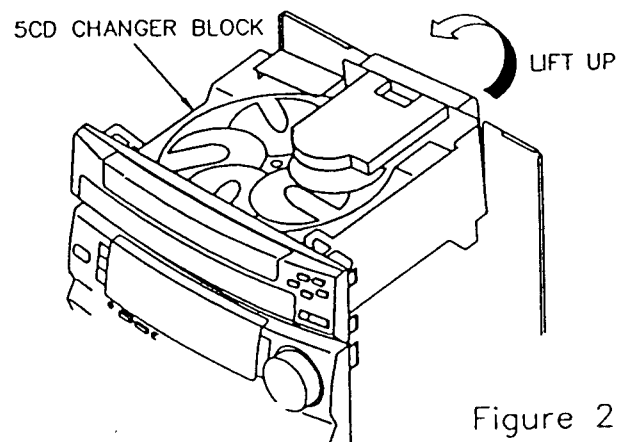
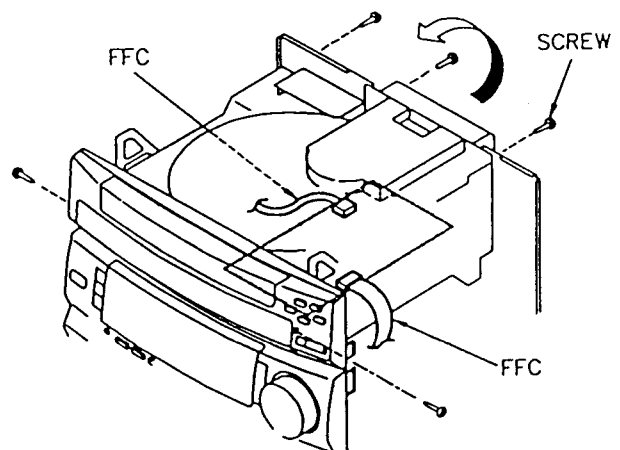


Figure 2

3 TRAYの分解・組立て方法

(1) 分解方法

- 1) CHAS MECHA 下部のPLATE GEARのボスを外側 (矢印 "b" 方向) に強く押す。
(figure 3)
(TRAY が少しせり出すのを確認する)
- 2) TRAY をオープン位置まで引き出す。
- 3) FFC を抜き、両側のCHAS MECH (2ヶ所) を押してTRAYを外す。
(figure 4)

3. The disassemble and reassemble the TRAY

(1) Disassembling procedure.

- 1) Push the PLATE GEAR'S Boss at the bottom part of CHAS MECHA strongly to the outside (arrow "b" direction). (figure 3)
(Confirm that TRAY appears a little in the front.)
- 2) Draw TRAY to the open position.
- 3) Remove FFC, and push the two LEVERS at both side of the CHAS MECH to remove TRAY. (figure 4)

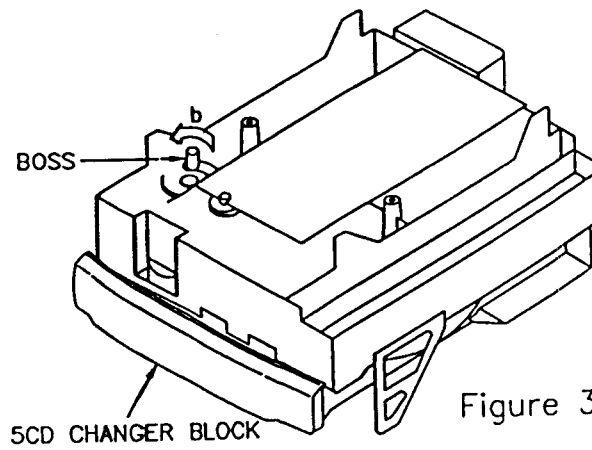


Figure 3

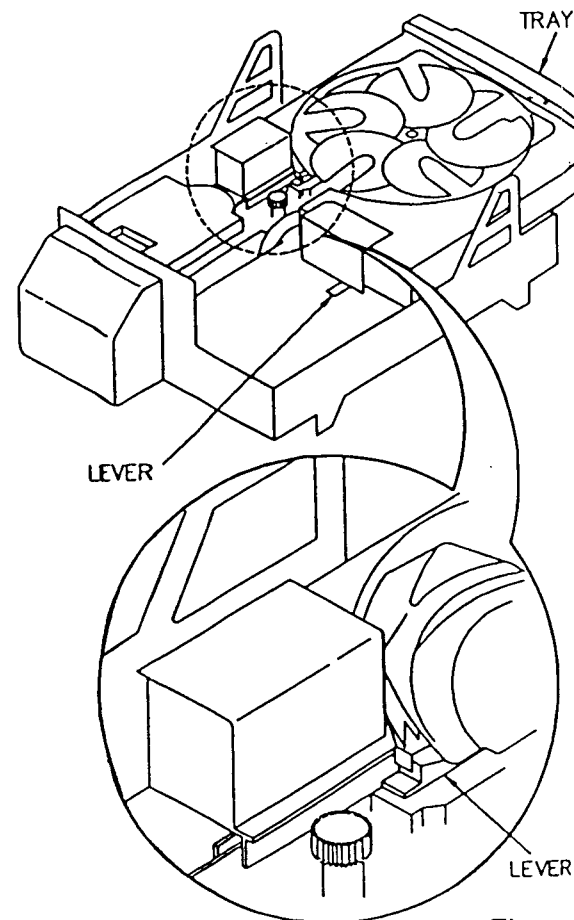
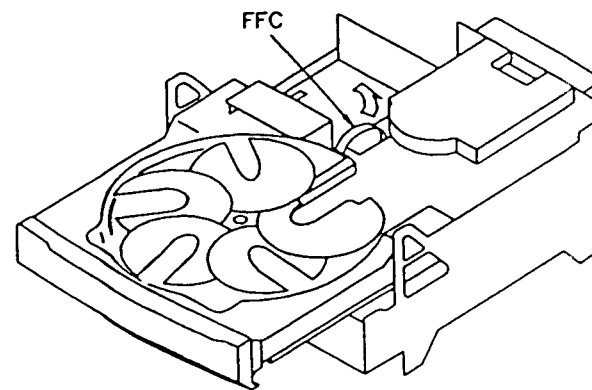


Figure 4

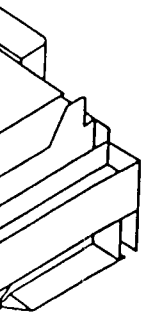
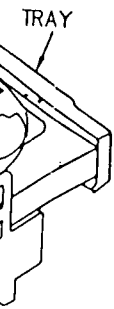
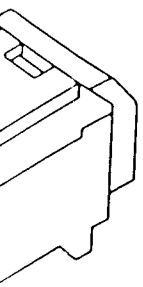


figure 3



PER

ure 4

(2) 組立て方法

- 1) LEVER TRAY が figure 5 の位置で、CD 効が下がっていることを確認する。
- 2) TRAY を CHAS MECHA のレールに沿って組み込む。
- 3) 半分まで TRAY を組み込んだら FFC を差し、TRAY を最後まで押し入れる。
(figure 6)

(2) Reassembling procedure.

- 1) Confirm that LEVER TRAY is at the most right position in order for the CD Mechanism to be in the down position. (figure 5)
- 2) Push in the TRAY along the rail of the CHAS MECHA.
- 3) After TRAY is half closed and FFC is put in, it can enter by force until the end of TRAY closed. (figure 6)

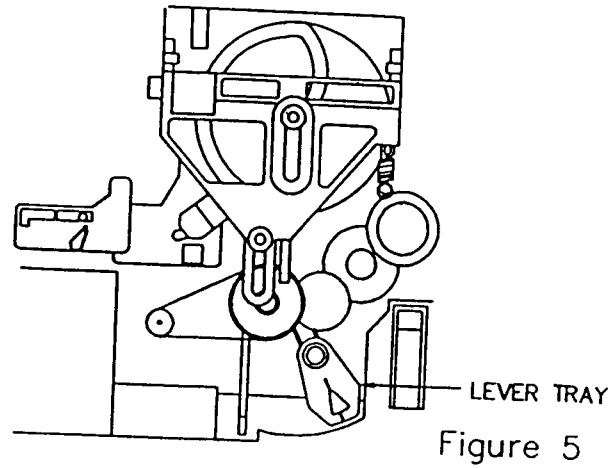


Figure 5

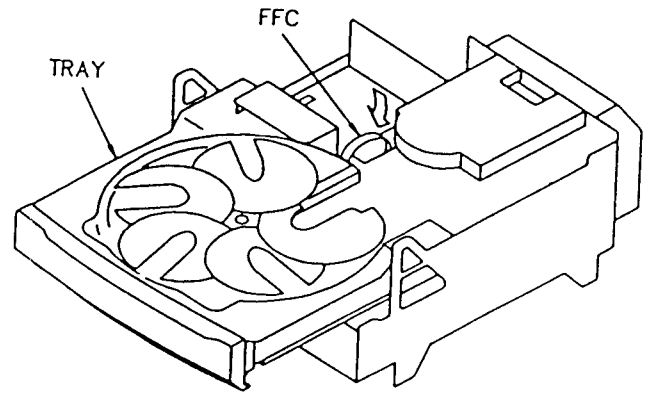


Figure 6

4. ターンテーブルの組立方法 (figure 7)

- 1) LEVER TT を "C" の方向に押しながら、TURN TABLE 5CD を組み込む。(figure 7)
この時、TRAY 5CD と TURN TABLE 5CD の切り欠きが同じ方向になるようにする。
(figure 8)

* 組み込む際の TURN TABLE 5CD の CD 番号 (1~5) は任意で構いません。(figure 7)

4. How to reassemble the TURN TABLE. (figure 7)

- 1) Push LEVER TT in the direction of "C", and put in the TURN TABLE 5CD. (figure 7)

After reassembly, one of the TURN TABLE DISC TRAY (can be either one of the five disc trays) must be aligned with TURN TABLE 5CD. (figure 8)

That is, having no gap difference between the TURN TABLE 5CD and the TRAY 5CD.

* When reassembling the TURN TABLE 5CD, it is acceptable facing any CD number r (1~5).

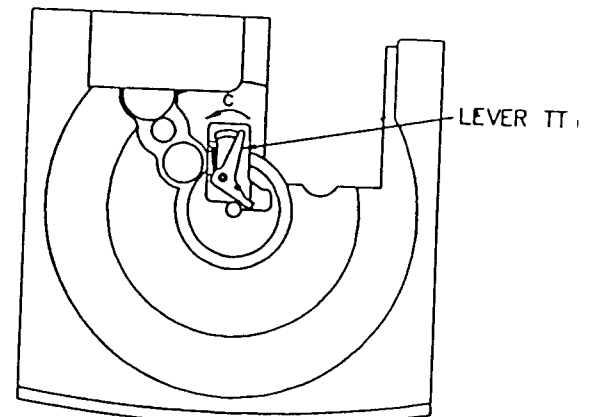


Figure 7

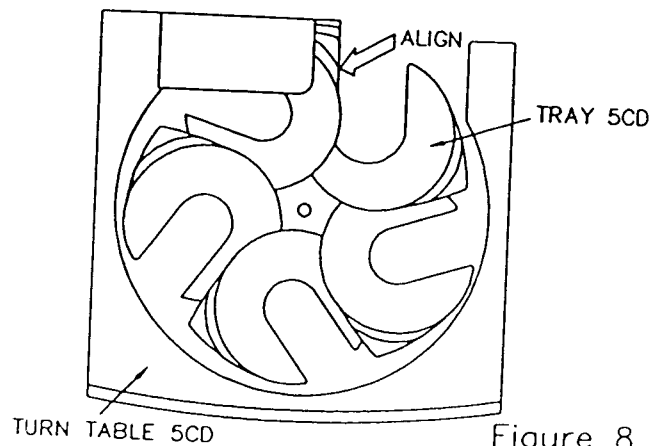


Figure 8

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laitteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstråling, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

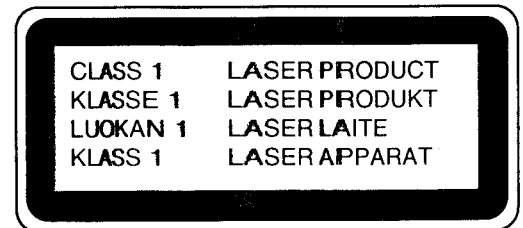
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.

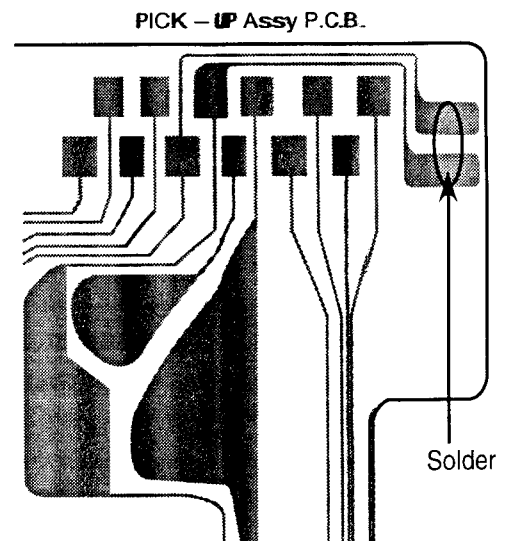


Precaution to replace Optical block

(KSS-213B)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use the clothes do not touch the diode.

- 1) After the connection, remove solder shown in figure below.



ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

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SS 1

on the

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC							
	87-017-745-019		IC, CXA1782BQ	87-017-437-080			DIODE, 1N4148M
	87-070-294-019		C-IC, CXD2508AQ	87-A40-224-010			DIODE, GBU8DL
	87-070-305-019		IC, BA6897S	87-A40-115-060			DIODE, RS603M
	87-001-982-019		IC, TA7291S	87-017-978-080			DIODE, 1N4003
	87-017-888-089		IC, NJM4558MD	87-020-027-080			C-DIODE, 1SS184
	86-NF9-620-010		IC, UPD780206GF-014-3BA	87-020-125-080			C-DIODE, 1SS181
	87-A20-154-010		IC, SPS-444-1	87-A40-200-080			ZENER, UZL11L3
	87-A20-264-010		IC, STK-419-150	87-A40-211-080			ZENER, UZ36BSA
	87-070-121-010		IC, HA12185	87-A40-207-080			ZENER, UZ11BSC
	87-070-232-010		IC, BA3834S	87-A40-274-010			DIODE, FMB-G16L
	87-017-375-080		C-IC, TC4094BF	87-A40-199-080			ZENER, UZL6H2
	87-A20-355-010		IC, CXA1553P	87-A40-202-080			ZENER, UZ5.1BSB
	87-A20-107-010		IC, BA3836	87-020-331-080			C-DIODE, DAN202K
	87-027-666-010		IC, TC4052BP	87-020-465-080			DIODE, 1SS133
	87-A20-056-010		IC, BA3880S	87-020-330-080			C-DIODE, DAP202K
	87-017-374-010		IC, TC4094BP	87-A40-198-080			ZENER, UZL6M1
	87-017-888-080		C-IC, NJM4558MD	87-A40-197-080			ZENER, UZL6L1
	87-A20-067-040		C-IC, M65849FP	87-020-339-080			C-DIODE, 1SS226
	87-A20-437-010		C-IC, M62431FP	MAIN C.B			
	87-070-127-110		IC, LC72131D	C101	87-A10-231-090		CAP, E 3300-80
	87-017-022-080		C-IC, NJM2068M-D(T1)	C102	87-A10-231-090		CAP, E 3300-80
	87-017-714-110		IC, LA1836L	C104	87-010-235-080		CAP, E 470-16 SME
	87-A20-312-010		IC, M62420SP	C105	87-010-235-080		CAP, E 470-16 SME
	87-020-454-010		IC, DN6851	C107	87-010-247-080		CAP, E 100-50 M SME
TRANSISTOR							
	89-213-702-010		TR, 2SB1370E	C108	87-010-247-080		CAP, E 100-50 M SME
	87-026-609-080		TR, KTA1266GR	C109	87-010-263-080		CAP, E 100-10 SME
	87-A30-065-080		TR, 2SC2785FE	C112	87-010-382-080		CAP, E 22-25 M SME
	89-332-665-080		TR, 2SC3266GR	C113	87-010-403-080		CAP, E 3.3-50 M SME
	89-337-221-380		C-TR, 2SC3722K(R/S/E)	C116	87-012-140-080		C-CAP, S 470P-50 J CH
	89-324-122-080		C-TR, 2SC2412KR	C121	87-012-368-080		C-CAP, S 0.1-50 Z F
	89-110-372-080		C-TR, 2SA1037K(R)	C122	87-012-368-080		C-CAP, S 0.1-50 Z F
	87-026-635-080		C-TR, UN2213	C123	87-018-209-080		CAP, TC U 0.1-50 Z F UP050
	89-327-125-080		C-TR, 2SC2712GR	C124	87-012-368-080		C-CAP, S 0.1-50 Z F
	87-026-239-080		C-TR, DTC114TK	C125	87-010-263-080		CAP, E 100-10 SME<LH>
	87-026-233-080		C-TR, DTA114TK	C145	87-010-186-080		C-CAP, S 4700P-50 K B
	87-026-211-080		C-TR, DTA114EK	C146	87-010-186-080		C-CAP, S 4700P-50 K B
	89-111-625-080		C-TR, 2SA1162 GR	C152	87-010-260-080		CAP, E 47-25 SME
	87-026-213-080		C-TR, DTC114YK	C171	87-A10-056-090		CAP, E 4700-35 M
	87-026-463-080		TR, 2SA933S(RS)	C172	87-A10-056-090		CAP, E 4700-35 M
	87-110-155-080		TR, 2SA1015GR	C173	87-010-196-080		C-CAP, S 0.1-25 Z F C2012
	87-A30-047-080		TR, CSD655E	C174	87-010-196-080		C-CAP, S 0.1-25 Z F C2012
	89-421-722-389		TR, 2SD2172V/W	C175	87-010-196-080		C-CAP, S 0.1-25 Z F C2012
	87-026-223-080		C-TR, DTC143TK	C176	87-015-785-080		C-CAP, 0.1-25 Z F
	89-320-011-080		TR, 2SC2001K	C220	87-010-194-080		C-CAP, S 0.047-25 Z F
	87-026-608-080		C-TR, DTC123JK	C221	87-010-400-080		CAP, E 0.47-50 M SME
	89-333-266-080		C-TR, 2SC3326B	C222	87-010-400-080		CAP, E 0.47-50 M SME
	87-A30-066-080		TR, 2SA1175FE	C223	87-010-187-080		C-CAP, S 5600P-50 K B
	89-109-705-080		TR, 2SA970GR	C224	87-010-187-080		C-CAP, S 5600P-50 K B
	87-026-297-080		C-TR, DTA144TK	C225	87-010-179-080		C-CAP, S 1200P-50 K B
	87-026-226-080		C-TR, DTA143EK	C226	87-010-179-080		C-CAP, S 1200P-50 K B
	89-502-466-080		FET, 2SK246BL	C227	87-010-402-080		CAP, E 2.2-50 M SME
	89-112-965-080		TR, 2SA1296GR	C228	87-010-402-080		CAP, E 2.2-50 M SME
	87-026-228-080		C-TR, DTA124EK	C229	87-010-402-080		CAP, E 2.2-50 M SME
	87-026-610-080		TR, KTC3198GR	C230	87-010-402-080		CAP, E 2.2-50 M SME
	89-109-521-080		TR, 2SA952K	C231	87-010-147-080		C-CAP, S 3P-50 C CH GRM
	87-026-238-080		C-TR, DTC144WK	C232	87-018-098-080		CAP, TC U 3.3P-50 K SL UP050
	87-026-214-080		TR, DTA114YS	C233	87-010-196-080		C-CAP, S 0.1-25 Z F C2012
	89-503-685-080		C-FET, 2SK368GR	C234	87-010-196-080		C-CAP, S 0.1-25 Z F C2012
	89-327-143-080		C-TR, 2SC27140	C235	87-010-196-080		C-CAP, S 0.1-25 Z F C2012
	87-026-269-080		TR, DTA114ES<HE>	C236	87-010-196-080		C-CAP, S 0.1-25 Z F C2012
	89-110-373-080		C-TR, 2SA1037K(S)<HE>	C243	87-010-322-080		C-CAP, S 100P-50 J CH
	89-421-141-280		C-TR, 2SD2114KU<HE>	C244	87-010-322-080		C-CAP, S 100P-50 J CH
	89-505-434-540		C-FET, 2SK543-TB(4/5)	C249	87-018-209-080		CAP, TC U 0.1-50 Z F UP050
				C250	87-A10-200-080		CAP, E 10-100 M BP SME
				C260	87-015-785-080		C-CAP, 0.1-25 Z F
				C301	87-010-318-080		C-CAP, S 47P-50 J CH
				C302	87-010-318-080		C-CAP, S 47P-50 J CH
				C303	87-012-157-080		C-CAP, S 330P-50 J CH GRM
DIODE							

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C304	87-012-157-080		C-CAP,S 330P-50 J CH GRM	C547	87-015-632-080		C-CAP,0.015-50 K B<HE>
C305	87-012-145-080		C-CAP,S 270P-50 J CH	C548	87-015-883-080		C-CAP, 0.022-50 K B<LH>
C306	87-012-145-080		C-CAP,S 270P-50 J CH	C548	87-015-632-080		C-CAP,0.015-50 K B<HE>
C307	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C553	87-015-627-080		C-CAP,1000P-50 K B
C311	87-010-198-080		C-CAP,S 0.022-25 K B	C554	87-015-627-080		C-CAP,1000P-50 K B
C312	87-010-198-080		C-CAP,S 0.022-25 K B	C557	87-010-178-080		C-CAP,S 1000P-50 K B
C313	87-010-181-080		C-CAP,S 1800P-50 K B	C558	87-010-178-080		C-CAP,S 1000P-50 K B
C314	87-010-181-080		C-CAP,S 1800P-50 K B	C597	87-010-404-080		CAP,E 4.7-50 M SME
C315	87-010-179-080		C-CAP,S 1200P-50 K B	C598	87-010-404-080		CAP,E 4.7-50 M SME
C316	87-010-179-080		C-CAP,S 1200P-50 K B	C601	87-010-178-080		C-CAP,S 1000P-50 K B
C317	87-016-492-080		C-CAP,S 0.33-16 Z F	C602	87-010-178-080		C-CAP,S 1000P-50 K B
C318	87-016-492-080		C-CAP,S 0.33-16 Z F	C603	87-010-405-080		CAP,E 10-50 M SME
C319	87-016-491-080		C-CAP,S 0.22-16 Z F C2021	C604	87-010-405-080		CAP,E 10-50 M SME
C320	87-016-491-080		C-CAP,S 0.22-16 Z F C2021	C605	87-010-260-080		CAP,E 47-25 SME
C321	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C606	87-010-101-080		CAP,E 220-16 SME
C322	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C607	87-010-188-080		C-CAP,S 6800P-50 K B
C324	87-010-260-080		CAP,E 47-25 SME	C608	87-010-188-080		C-CAP,S 6800P-50 K B
C325	87-010-370-080		CAP,E 330-6.3 M SME	C609	87-018-127-080		CAP,TC U 470P-50 K B UP050
C326	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C610	87-018-127-080		CAP,TC U 470P-50 K B UP050
C330	87-010-405-080		CAP,E 10-50 M SME	C611	87-010-197-080		C-CAP,S 0.01-25 K B
C332	87-015-785-080		C-CAP, 0.1-25 Z F	C612	87-010-197-080		C-CAP,S 0.01-25 K B
C335	87-016-462-080		C-CAP,S 1-16 Z F	C613	87-010-195-080		C-CAP,S 0.068-25 Z F C2012
C336	87-016-462-080		C-CAP,S 1-16 Z F	C614	87-010-195-080		C-CAP,S 0.068-25 Z F C2012
C337	87-010-196-080		C-CAP,S 0.1-25 Z F C2312	C615	87-010-404-080		CAP,E 4.7-50 M SME
C338	87-010-196-080		C-CAP,S 0.1-25 Z F C2312	C616	87-010-404-080		CAP,E 4.7-50 M SME
C339	87-010-196-080		C-CAP,S 0.1-25 Z F C2312	C617	87-010-404-080		CAP,E 4.7-50 M SME
C340	87-015-785-080		C-CAP, 0.1-25 Z F	C618	87-010-404-080		CAP,E 4.7-50 M SME
C351	87-012-154-080		C-CAP,S 150P-50 J CH GRM	C641	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C352	87-012-154-080		C-CAP,S 150P-50 J CH GRM	C642	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C451	87-012-140-080		C-CAP,S 470P-50 J CH	C701	87-010-381-080		CAP,E 330-16 SME
C452	87-012-140-080		C-CAP,S 470P-50 J CH	C702	87-010-404-080		CAP,E 4.7-50 M SME
C453	87-010-178-080		C-CAP,S 1000P-50 K B	C703	87-010-197-080		C-CAP,S 0.01-25 K B
C456	87-010-260-080		CAP,E 47-25 SME	C704	87-010-197-080		C-CAP,S 0.01-25 K B
C457	87-010-197-080		C-CAP,S 0.01-25 K B	C711	87-010-263-080		CAP,E 100-10 SME
C458	87-010-183-080		C-CAP,S 2700P-50 K B	C712	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C459	87-010-183-080		C-CAP,S 2700P-50 K B	C722	87-010-312-080		C-CAP,S 15P-50 J CH
C460	87-010-183-080		C-CAP,S 2700P-50 K B	C723	87-010-178-080		C-CAP,S 1000P-50 K B
C470	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C725	87-010-178-080		C-CAP,S 1000P-50 K B
C501	87-010-179-080		C-CAP,S 1200P-50 K B	C727	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C502	87-010-179-080		C-CAP,S 1200P-50 K B	C728	87-010-248-080		CAP,E 220-10 SME
C503	87-012-155-080		C-CAP,S 180P-50 J CH GRM	C735	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C504	87-012-155-080		C-CAP,S 180P-50 J CH GRM	C770	87-010-405-080		CAP,E 10-50 M SME
C515	87-010-545-080		CAP,E 0.22-50 M SME	C771	87-010-405-080		CAP,E 10-50 M SME
C516	87-010-545-080		CAP,E 0.22-50 M SME	C772	87-010-194-080		C-CAP,S 0.047-25 Z F
C519	87-015-785-080		C-CAP, 0.1-25 Z F	C773	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C521	87-010-197-080		C-CAP,S 0.01-25 K B	C774	87-010-263-080		CAP,E 100-10 SME
C522	87-010-318-080		C-CAP,S 47P-50 J CH	C775	87-010-405-080		CAP,E 10-50 M SME
C523	87-010-197-080		C-CAP,S 0.01-25 K B	C776	87-010-197-080		C-CAP,S 0.01-25 K B<LH>
C525	87-010-184-080		C-CAP,S 3300P-50 K B	C777	87-010-400-080		CAP,E 0.47-50 M SME
C526	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C778	87-010-401-080		CAP,E 1-50 M SME
C527	87-010-401-080		CAP,E 1-50 M SME	C779	87-010-401-080		CAP,E 1-50 M SME
C528	87-010-401-080		CAP,E 1-50 M SME	C780	87-010-197-080		C-CAP,S 0.01-25 K B
C529	87-010-384-080		CAP,E 100-25 M SME	C781	87-010-405-080		CAP,E 10-50 M SME
C530	87-010-197-080		C-CAP,S 0.01-25 K B	C782	87-010-405-080		CAP,E 10-50 M SME
C531	87-010-183-080		C-CAP,S 2700P-50 K B	C785	87-010-197-080		C-CAP,S 0.01-25 K B
C532	87-010-194-080		C-CAP,S 0.047-25 Z F	C786	87-010-197-080		C-CAP,S 0.01-25 K B
C533	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C787	87-010-184-080		C-CAP,S 3300P-50 K B
C534	87-010-263-080		CAP,E 100-10 SME	C788	87-010-184-080		C-CAP,S 3300P-50 K B
C535	87-010-401-080		CAP,E 1-50 M SME	C789	87-010-179-080		C-CAP,S 1200P-50 K B
C536	87-010-401-080		CAP,E 1-50 M SME	C790	87-010-179-080		C-CAP,S 1200P-50 K B
C537	87-010-545-080		CAP,E 0.22-50 M SME	C791	87-010-401-080		CAP,E 1-50 M SME
C538	87-012-142-080		C-CAP,S 0.33-16 Z F	C792	87-010-180-080		C-CAP,S 1500P-50 K B
C540	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C793	87-010-189-080		C-CAP,S 8200P-50 K B
C541	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C794	87-010-408-080		CAP,E 47-50 SME
C542	87-010-405-080		CAP,E 10-50 M SME	C795	87-010-194-080		C-CAP,S 0.047-25 Z F
C543	87-010-546-080		CAP,E 0.33-50 SME	C796	87-010-403-080		CAP,E 3.3-50 M SME
C544	87-010-546-080		CAP,E 0.33-50 SME	C799	87-010-178-080		C-CAP,S 1000P-50 K B
C545	87-010-400-080		CAP,E 0.47-50 M SME	C802	87-010-197-080		C-CAP,S 0.01-25 K B
C546	87-010-400-080		CAP,E 0.47-50 M SME	C814	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C547	87-015-883-080		C-CAP, 0.022-50 K B<LH>	C819	87-010-197-080		C-CAP,S 0.01-25 K B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C820	87-010-408-080		CAP,E 47-50 SME	TC941	87-011-220-080		TRIMMER,CER 20P 6.15X5.9 VCT51<HE>
C821	87-010-197-080		C-CAP,S 0.01-25 K B	TC942	87-011-221-080		TRIMMER,CER 30P 6.15X5.9 VCT51<HE>
C823	87-010-197-080		C-CAP,S 0.01-25 K B	TH241	87-A90-157-080		C-THMS,4.7K<HE>
C828	87-010-197-080		C-CAP,S 0.01-25 K B	VR651	87-A90-153-010		VR,RTRY 50KBX2 V
C829	87-010-197-080		C-CAP,S 0.01-25 K B	W101	86-NF9-651-010		F-CABLE,7P 2.5 (NF9)
C830	87-015-819-080		C-CAP,0.01-50 K B	X703	84-508-618-010		VIB,CER CSB 456 F15
C835	87-010-197-080		C-CAP,S 0.01-25 K B	X721	86-NFZ-651-010		VIB,XTAL 4.500MHZ CSA-309
C901	87-010-197-080		C-CAP,S 0.01-25 K B	X722	87-030-354-010		VIB,CER 450.0KHZ BFU C<HE>
C902	87-015-785-080		C-CAP, 0.1-25 Z F				
C903	87-018-119-080		CAP,TC U 100P-50 K B UP050				
				FRONT C.B			
C941	87-010-314-080		C-CAP,S 22P-50 J CH<HE>	C201	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C943	87-010-197-080		C-CAP,S 0.01-25 K B<HE>	C202	87-012-156-080		C-CAP,S 220P-50 J CH GRM
C944	87-014-051-080		CAP,PP 560P-100 J<HE>	C203	87-010-263-040		CAP,E 100-10 M SME
C945	87-010-197-080		C-CAP,S 0.01-25 K B<HE>	C204	87-010-494-040		CAP,E 1-50 5L SRE
C946	87-010-401-080		CAP,E 1-50 M SME	C205	87-010-494-040		CAP,E 1-50 5L SRE
C950	87-014-073-080		CAP,PP 4700P-100 J<HE>	C206	87-010-550-040		CAP,E 100-6.3 5L SRE
C952	87-010-197-080		C-CAP,S 0.01-25 K B<HE>	C207	87-010-550-040		CAP,E 100-6.3 5L SRE
C953	87-010-197-080		C-CAP,S 0.01-25 K B<HE>	C208	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C954	87-010-400-080		CAP,E 0.47-50 M SME<HE>	C209	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C956	87-010-263-080		CAP,E 100-10 SME<HE>	C210	87-010-314-080		C-CAP,S 22P-50 J CH
C960	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C211	87-010-154-080		C-CAP,S 10P-50 D CH
C961	87-010-152-080		C-CAP,S 8P-50 D CH<LH>	C212	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C987	87-018-134-080		CAP,TC U 0.01-16 N Y UP050	C213	87-010-178-080		C-CAP,S 1000P-50 K B
C990	87-010-197-080		C-CAP,S 0.01-25 K B	C214	87-010-112-040		CAP,E 100-16 SME
C993	87-018-134-080		CAP,TC U 0.01-16 N Y UP050	C215	87-010-322-080		C-CAP,S 100P-50 J CH
C995	87-010-197-080		C-CAP,S 0.01-25 K B	C216	87-010-560-040		CAP,E 10-50 M 5L MA
C999	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C351	87-010-497-040		CAP,E 4.7-35 5L SRE
CF801	87-008-261-010		FLTR,CFSFE10.7MA5	C352	87-010-497-040		CAP,E 4.7-35 5L SRE
CF802	87-008-261-010		FLTR,CFSFE10.7MA5	C353	87-010-981-040		CAP,E 22-35 M 5L SRE
FFE801	A8-6ZA-190-030		6ZA-1 YFEUNM	C381	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
FR121	87-029-060-010		RES,FUSE 33-1/4W J	C382	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
FR122	87-029-060-010		RES,FUSE 33-1/4W J	C383	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
J252	87-099-678-010		JACK,6.3 BLK ST W/SW	C384	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
J253	87-099-474-010		JACK,PIN 3P BLK W/SW	C385	87-010-322-080		C-CAP,S 100P-50 J CH
J254	87-A60-238-010		TERMINAL,SP 4P (MSC)	C386	87-010-400-040		CAP,E 0.47-50 SME
J652	87-099-625-010		JACK,PIN 4P BLK W/O SW	C387	87-010-400-040		CAP,E 0.47-50 SME
J801	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02	C389	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
L101	87-003-383-010		COIL,1UH K	C401	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
L102	87-003-383-010		COIL,1UH K	C402	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
L403	87-A50-049-010		COIL,TRAP 85K(COI)	C601	87-010-405-040		CAP,E 10-50 M SME
L404	87-A50-049-010		COIL,TRAP 85K(COI)	C602	87-010-176-080		C-CAP,S 680P-50 J SL
L451	87-007-342-010		COIL,OSC 85KHZ BIAS	C603	87-010-186-080		C-CAP,S 4700P-50 K B
L701	87-A50-027-010		COIL,1 POLE MPX(TOK)	C604	87-010-322-080		C-CAP,S 100P-50 J CH
L702	87-A50-027-010		COIL,1 POLE MPX(TOK)	C605	87-010-321-080		C-CAP,S 82P-50 J CH
L741	87-A50-015-010		COIL,FM DET (TOK)	C606	87-010-401-040		CAP,E 1-50 M SME
L742	87-A90-051-010		FLTR, CFAZ-450 (TOK)<LH>	C607	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
L742	87-A90-052-010		FLTR, CFMT-450A(TOK)<HE>	C608	87-010-322-080		C-CAP,S 100P-50 J CH
L743	87-005-564-080		C-COIL,2125 2.2UH K MLF2012	C609	87-010-491-040		CAP,E 0.22-50 5L SRE
L770	87-003-102-080		COIL,10UH K LAL02	C610	87-010-177-080		C-CAP,S 820P-50 J SL
L832	87-005-847-080		COIL,2.2UH K CECS	C611	87-010-406-040		CAP,E 22-50 M SME
L941	87-A50-022-010		COIL,ANT SW (COI) 7.96MHZ<HE>	C612	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
L942	87-A50-021-010		COIL,OSC SW (COI) 15MHZ<HE>	C614	87-A10-189-040		CAP,E 220-10 M
L943	87-005-372-080		COIL,1MH K LAL03<HE>	C615	87-010-498-040		CAP,E 10-16 M 5L SRE
L944	87-003-131-080		COIL,10MH J EL0607<HE>	C619	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
L981	86-NF4-665-010		COIL,AM PACK 1(TOK)<LH>	C620	87-010-197-080		C-CAP,S 0.01-25 K B
L981	86-NF4-666-010		COIL,AM PACK 3(TOK)<HE>	C622	87-010-194-080		C-CAP,S 0.047-25 Z F
PR113	87-026-681-080		PROTECTOR,5A 491SERIES 60V	C650	87-010-319-080		C-CAP,S 56P-50 J CH
PR114	87-026-681-080		PROTECTOR,5A 491SERIES 60V	C651	87-010-319-080		C-CAP,S 56P-50 J CH
RY101	87-045-389-010		RELAY,12V OSA-SS-212DM5	C652	87-010-404-040		CAP,E 4.7-50 SME
RY102	87-045-382-010		RELAY,12V OUAZ-SH-112L	C654	87-010-178-080		C-CAP,S 1000P-50 K B
SFR301	87-024-355-080		SFR,33K H EVN DJAA03	C655	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
SFR302	87-024-355-080		SFR,33K H EVN DJAA03	C656	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
SFR303	87-024-355-080		SFR,33K H EVN DJAA03	C657	87-010-263-040		CAP,E 100-10 M SME
SFR304	87-024-355-080		SFR,33K H EVN DJAA03	C658	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
SFR305	87-024-356-080		SFR,47K H EVN DJAA03	C659	87-010-184-080		C-CAP,S 3300P-50 K B
SFR306	87-024-356-080		SFR,47K H EVN DJAA03	C660	87-010-426-080		C-CAP,S 0.012-25 K B
SFR451	87-024-356-080		SFR,47K H EVN DJAA03	C663	87-010-263-040		CAP,E 100-10 M SME
SFR452	87-024-356-080		SFR,47K H EVN DJAA03	C664	87-012-141-080		C-CAP,S 0.22-16 Z F
SFR722	87-024-352-080		SFR,4.7K H EVN DJAA03	C667	87-018-130-080		CAP,TC U 820P-50 K B UP050
TC701	87-011-253-080		TRIMMER,CER 30P 4.0X4.5 ECRLA				

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C668	87-010-180-080		C-CAP,S 1500P-50 K B	LED401	87-070-281-080		LED,SLZ-736A-25H-S-T1 P-GRN
C669	87-010-404-040		CAP,E 4.7-50 SME	LED402	87-070-281-080		LED,SLZ-736A-25H-S-T1 P-GRN
C670	87-010-404-040		CAP,E 4.7-50 SME	LED403	87-070-281-080		LED,SLZ-736A-25H-S-T1 P-GRN
C671	87-010-188-080		C-CAP,S 6800P-50 K B	LED404	87-070-281-080		LED,SLZ-736A-25H-S-T1 P-GRN
C672	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	LED405	87-070-281-080		LED,SLZ-736A-25H-S-T1 P-GRN
C701	87-010-421-040		CAP,E 4.7-50 M 5L SRE	LED406	87-070-281-080		LED,SLZ-736A-25H-S-T1 P-GRN
C702	87-010-112-040		CAP,E 100-16 SME	LED407	87-017-979-010		LED,SEL2413E GRN
C705	87-010-493-040		CAP,E 0.47-50 M 5L SRE	LED408	87-017-979-010		LED,SEL2413E GRN
C706	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	LED409	87-017-979-010		LED,SEL2413E GRN
C707	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	LED410	87-017-979-010		LED,SEL2413E GRN
C708	87-010-400-040		CAP,E 0.47-50 SME	LED411	87-017-979-010		LED,SEL2413E GRN
C709	87-010-192-080		C-CAP,S 0.022-50 Z F C2012	LED412	87-017-979-010		LED,SEL2413E GRN
C710	87-010-400-040		CAP,E 0.47-50 SME	LED413	87-017-979-010		LED,SEL2413E GRN
C711	87-010-190-080		C-CAP,S 0.01-50 Z F C2012	LED414	87-017-979-010		LED,SEL2413E GRN
C712	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	LED420	87-A40-259-080		LED,SLR-342VCT31 RED
C713	87-010-185-080		C-CAP,S 3900P-50 K B	LED421	87-A40-259-080		LED,SLR-342VCT31 RED
C714	87-010-194-080		C-CAP,S 0.047-25 Z F	LED422	87-A40-259-080		LED,SLR-342VCT31 RED
C715	87-010-181-080		C-CAP,S 1800P-50 K B	LED423	87-A40-259-080		LED,SLR-342VCT31 RED
C716	87-010-192-080		C-CAP,S 0.022-50 Z F C2012	LED425	87-070-278-010		LED,SLZ-738A-24S PGRN
C717	87-010-176-080		C-CAP,S 680P-50 J SL	LED426	87-070-278-010		LED,SLZ-738A-24S PGRN
C718	87-010-188-080		C-CAP,S 6800P-50 K B	LED427	87-070-278-010		LED,SLZ-936C-30-S RED
C719	87-012-145-080		C-CAP,S 270P-50 J CH	LED428	87-070-278-010		LED,SLZ-936C-30-S RED
C720	87-010-183-080		C-CAP,S 2700P-50 K B	LED429	87-070-278-010		LED,SLZ-738A-24S PGRN
C721	87-010-402-040		CAP,E 2.2-50 SME	LED430	87-070-278-010		LED,SLZ-738A-24S PGRN
C722	87-010-495-040		CAP,E 2.2-50 5L SFE	S301	87-A90-095-080		SW,TACT EVQ11G04M
C723	87-010-378-040		CAP,E 10-16 M SME	S302	87-A90-095-080		SW,TACT EVQ11G04M
C724	87-010-192-080		C-CAP,S 0.022-50 Z F C2012	S303	87-A90-095-080		SW,TACT EVQ11G04M
C725	87-010-493-040		CAP,E 0.47-50 M 5L SFE	S304	87-A90-095-080		SW,TACT EVQ11G04M
C726	87-010-190-080		C-CAP,S 0.01-50 Z F C2012	S305	87-A90-095-080		SW,TACT EVQ11G04M
C727	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S306	87-A90-095-080		SW,TACT EVQ11G04M
C728	87-010-185-080		C-CAP,S 3900P-50 K B	S307	87-A90-095-080		SW,TACT EVQ11G04M
C729	87-010-194-080		C-CAP,S 0.047-25 Z F	S308	87-A90-095-080		SW,TACT EVQ11G04M
C730	87-010-181-080		C-CAP,S 1800P-50 K B	S309	87-A90-095-080		SW,TACT EVQ11G04M
C731	87-010-192-080		C-CAP,S 0.022-50 Z F C2012	S310	87-A90-095-080		SW,TACT EVQ11G04M
C732	87-010-176-080		C-CAP,S 680P-50 J SL	S311	87-A90-095-080		SW,TACT EVQ11G04M
C733	87-010-188-080		C-CAP,S 6800P-50 K B	S312	87-A90-095-080		SW,TACT EVQ11G04M
C734	87-012-145-080		C-CAP,S 270P-50 J CH	S313	87-A90-095-080		SW,TACT EVQ11G04M
C735	87-010-183-080		C-CAP,S 2700P-50 K B	S314	87-A90-095-080		SW,TACT EVQ11G04M
C751	87-010-322-080		C-CAP,S 100P-50 J CH	S315	87-A90-095-080		SW,TACT EVQ11G04M
C752	87-010-322-080		C-CAP,S 100P-50 J CH	S316	87-A90-095-080		SW,TACT EVQ11G04M
C753	87-010-493-049		CAP,E 0.47-50 M 5L SFE	S317	87-A90-095-080		SW,TACT EVQ11G04M
C754	87-010-493-049		CAP,E 0.47-50 M 5L SFE	S318	87-A90-095-080		SW,TACT EVQ11G04M
C801	87-010-197-080		C-CAP,S 0.01-25 K B	S319	87-A90-095-080		SW,TACT EVQ11G04M
C802	87-010-178-080		C-CAP,S 1000P-50 K B	S320	87-A90-095-080		SW,TACT EVQ11G04M
C803	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S321	87-A90-095-080		SW,TACT EVQ11G04M
C804	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S326	87-A90-095-080		SW,TACT EVQ11G04M
C805	87-010-805-080		C-CAP,S 1-16 Z F	S327	87-A90-095-080		SW,TACT EVQ11G04M
C806	87-010-805-080		C-CAP,S 1-16 Z F	S328	87-A90-095-080		SW,TACT EVQ11G04M
C807	87-010-561-040		CAP,E 100-16 M 5L SRE	S329	87-A90-095-080		SW,TACT EVQ11G04M
C808	87-A10-189-040		CAP,E 220-10 M	S330	87-A90-095-080		SW,TACT EVQ11G04M
C809	87-010-491-040		CAP,E 0.22-50 5L SRE	S331	87-A90-095-080		SW,TACT EVQ11G04M
C810	87-010-491-040		CAP,E 0.22-50 5L SRE	S332	87-A90-095-080		SW,TACT EVQ11G04M
C811	87-010-495-040		CAP,E 2.2-50 5L SRE	S333	87-A90-095-080		SW,TACT EVQ11G04M
C813	87-010-560-040		CAP,E 10-50 M 5L MA	S334	87-A90-095-080		SW,TACT EVQ11G04M
C814	87-010-405-040		CAP,E 10-50 M SME	S335	87-A90-095-080		SW,TACT EVQ11G04M
C815	87-010-322-080		C-CAP,S 100P-50 J CH	S336	87-A90-095-080		SW,TACT EVQ11G04M
C816	87-010-322-080		C-CAP,S 100P-50 J CH	S338	87-A90-095-080		SW,TACT EVQ11G04M
C817	87-012-142-080		C-CAP,S 0.33-16 Z F	S339	87-A90-095-080		SW,TACT EVQ11G04M
FB601	87-008-372-080		FLTR,EMIBL01 RN1	SW251	87-A90-392-010		SW,RTRY EC16B24304-20 NON
FFC102	87-A80-054-010		FF-CABLE,4P 1.25 70MM	VR601	86-NFA-657-010		VR,RTRY 10K15AX1 1 V XV0121PVN
FFC104	87-A80-052-010		FF-CABLE,14P 1.25 281MM				
FFC106	86-921-081-110		FF-CABLE,21P 1.25	CD SW C.B			
FFC301	87-A80-053-010		FF-CABLE,8P 1.25 300MM				
FFC501	86-915-161-110		FF-CABLE,15P 1.25	LED451	87-017-979-010		LED,SEL2413E GRN
FL301	86-NF9-653-010		FL,BJ539GK	LED452	87-017-979-010		LED,SEL2413E GRN
FL302	86-NF9-616-010		FL,BJ504GK	LED453	87-017-979-010		LED,SEL2413E GRN
J601	87-A60-284-010		JACK,3.5MO (MSC)	LED454	87-017-979-010		LED,SEL2413E GRN
J621	87-A60-284-010		JACK,3.5MO (MSC)	LED455	87-017-979-010		LED,SEL2413E GRN
L201	87-A50-158-010		COIL,CLOCK 4.19MHZ (NF9)	LED456	87-017-979-010		LED,SEL2413E GRN
L65C	87-005-738-080		COIL,47UH J SP02	LED457	87-017-979-010		LED,SEL2413E GRN

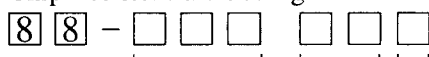
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LED458	87-017-979-010		LED,SEL2413E GRN	C104	87-012-156-089		C-CAP,S 220P-50 CH
LED459	87-017-979-010		LED,SEL2413E GRN	C105	87-010-404-049		CAP,E 4.7-50 SME
LED460	87-017-979-010		LED,SEL2413E GRN	C106	87-010-263-049		CAP,E 100-10 SME
S451	87-A90-095-080		SW,TACT EVQ11G04M	C107	87-010-197-089		C-CAP,S 0.01-25 B
S452	87-A90-095-080		SW,TACT EVQ11G04M	C108	87-016-526-089		C-CAP,S 0.47-16 BK
S453	87-A90-095-080		SW,TACT EVQ11G04M	C109	87-010-197-089		C-CAP,S 0.01-25 B
S454	87-A90-095-080		SW,TACT EVQ11G04M	C112	87-010-318-089		C-CAP,S 47P-50 CH
S455	87-A90-095-080		SW,TACT EVQ11G04M	C113	87-010-263-089		CAP,E 100-10 SME 5X11
S456	87-A90-095-080		SW,TACT EVQ11G04M	C114	87-010-197-089		C-CAP,S 0.01-25 B
S457	87-A90-095-080		SW,TACT EVQ11G04M	C115	87-010-318-089		C-CAP,S 47P-50 CH
VR C.B				C116	87-010-318-089		C-CAP,S 47P-50 CH
SW252	87-A90-340-010		SW,RTRY EC16B24204-15	C117	87-010-197-089		C-CAP,S 0.01-25 B
AC2 C.B				C122	87-010-186-089		C-CAP,S 4700P-50 B
PR101	87-026-682-080		PROTECTOR,10A 491SERIES 60V	C123	87-010-382-049		CAP,E 22-25 SME
PR102	87-026-682-080		PROTECTOR,10A 491SERIES 60V	C201	87-010-318-089		C-CAP,S 47P-50 CH
PT C.B				C202	87-010-318-089		C-CAP,S 47P-50 CH
F109	82-304-743-010		TERMINAL,1P	C203	87-010-321-089		C-CAP,S 82P-50 CH
F110	87-035-368-010		FUSE,4A,250V T	C204	87-010-321-089		C-CAP,S 82P-50 CH
FC101	87-033-213-080		FUSE CLAMP,PF15000	C205	87-010-321-089		C-CAP,S 82P-50 CH
FC102	87-033-213-080		FUSE CLAMP,PF15000	C206	87-010-321-089		C-CAP,S 82P-50 CH
FC103	87-033-213-080		FUSE CLAMP,PF15000	C207	87-012-153-089		C-CAP,S 120P-50 CH
FC104	87-033-213-080		FUSE CLAMP,PF15000	C208	87-012-153-089		C-CAP,S 120P-50 CH
PT001	86-NF9-630-010		PT,6NF-9H<HE>	C209	87-012-153-089		C-CAP,S 120P-50 CH
PT001	86-NF9-631-010		PT,6NF-9LH<LH>	C210	87-012-153-089		C-CAP,S 120P-50 CH
SW101	87-A90-165-010		SW,SL 1-2-3 SWS2301	C211	87-010-403-049		CAP,E 3.3-50 SME
CD MAIN C.B				C212	87-010-403-089		CAP,E 3.3-50 SME
C11	86-ZG1-605-019		CABLE,FFC 16P	C213	87-010-186-089		C-CAP,S 4700P-50 B
C12	87-010-182-089		C-CAP,S 2200P-50 B	C214	87-010-186-089		C-CAP,S 4700P-50 B
C13	87-016-081-089		C-CAP,S 0.1-16 RK	C231	87-016-251-049		CAP,E 220-16 SMG
C14	87-016-081-089		C-CAP,S 0.1-16 RK	C232	87-010-263-089		CAP,E 100-10 SME 5X11
C15	87-010-404-049		CAP,E 4.7-50 SME	C301	87-010-196-089		C-CAP,S 0.1-25 F
C16	87-016-081-089		C-CAP,S 0.1-16 RK	C302	87-010-260-089		CAP,E 47-25 SME
C17	87-010-197-089		C-CAP,S 0.01-25 B	C401	87-010-403-089		CAP,E 3.3-50 SME
C18	87-010-402-049		CAP,E 2.2-50 SME	C402	87-010-403-049		CAP,E 3.3-50 SME
C19	87-010-382-049		CAP,E 22-25 SME	C501	87-016-459-049		CAP,E 470-10 SMG
C20	87-010-213-089		C-CAP,S 0.015-25 B	C502	87-010-197-089		C-CAP,S 0.01-25 B
C21	87-010-197-089		C-CAP,S 0.01-25 B	C503	87-010-263-049		CAP,E 100-10 SME
C22	87-010-263-049		CAP,E 100-10 SME	C504	87-010-196-089		C-CAP,S 0.1-25 F
C23	87-010-197-089		C-CAP,S 0.01-25 B	C505	87-010-196-089		C-CAP,S 0.1-25 F
C24	87-016-369-089		C-CAP,S 0.033-25 B K	C506	87-010-196-089		C-CAP,S 0.1-25 F
C25	87-010-197-089		C-CAP,S 0.01-25 B	C507	87-010-196-089		C-CAP,S 0.1-25 F
C26	87-016-369-089		C-CAP,S 0.033-25 B K	C508	87-016-459-049		CAP,E 470-10 SMG
C27	87-010-197-089		C-CAP,S 0.01-25 B	C509	87-010-196-089		C-CAP,S 0.1-25 F
C28	87-010-146-029		C-CAP,S 2P-50 C CH GRM	C510	87-010-196-089		C-CAP,S 0.1-25 F
C29	87-010-154-089		C-CAP,S 10P-50 D CH	C601	87-010-196-089		C-CAP,S 0.1-25 F
C30	87-010-263-049		CAP,E 100-10 SME	C602	87-016-251-049		CAP,E 220-16 SMG
C31	87-010-178-089		C-CAP,S 1000P-50 B	C603	87-010-196-089		C-CAP,S 0.1-25 F
C32	87-010-198-089		C-CAP,S 0.022-25 B	C701	87-010-322-089		C-CAP,S 100P-50 CH
C33	87-016-081-089		C-CAP,S 0.1-16 RK	C702	87-010-318-089		C-CAP,S 47P-50 CH
C34	87-010-197-089		C-CAP,S 0.01-25 B	C703	87-010-318-089		C-CAP,S 47P-50 CH
C35	87-010-263-049		CAP,E 100-10 SME	C705	87-010-178-089		C-CAP,S 1000P-50 B
C36	87-015-677-049		CAP,E 100-6.3 7L	C706	87-010-178-089		C-CAP,S 1000P-50 B
C37	87-010-197-089		C-CAP,S 0.01-25 B	C901	87-010-260-049		CAP,E 47-25 SME
C38	87-010-260-089		CAP,E 47-25 SME	C902	87-010-196-089		C-CAP,S 0.1-25 F
C39	87-010-196-089		C-CAP,S 0.1-25 F	L11	87-003-102-089		COIL,10UH K LAL02
C91	87-010-263-049		CAP,E 100-10 SME	LED901	87-A40-123-019		LED,SLZ-8128A-01-B
C101	87-010-596-089		C-CAP,S 0.047-16 RK	M601	87-045-305-019		MOTOR,RF-500TB
C102	87-010-188-089		C-CAP,S 6800P-50 B	R36	87-022-365-089		C-RES,S 100K-1/10W F
C103	87-018-133-089		CAP,TC-U 4700P-16 NX	R37	87-022-363-089		C-RES,S 68K-1/10W F
				R38	87-022-363-089		C-RES,S 68K-1/10W F
				R39	87-022-363-089		C-RES,S 68K-1/10W F
				R40	87-022-363-089		C-RES,S 68K-1/10W F
				R41	87-022-365-089		C-RES,S 100K-1/10W F
				SFR11	87-024-175-089		SFR,47K DIA6V
				SFR12	87-024-173-089		SFR,22K HRH0638C
				SFR13	87-024-176-089		SFR,100K DIA6V
				SW601	87-036-109-019		SW,PUSH SPPB 61
				SW602	87-036-109-019		SW,PUSH SPPB 61
				SW603	87-036-109-019		SW,PUSH SPPB 61
				W604	88-9C6-261-110		FF-CABLE 6P 1.25 260MM

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
X101	87-030-402-089		VIB,XTAL 16.9344MHZ				
LED C.B				DECK C.B			
LED701	87-017-733-080		LED,SEL1250SM	CON502	82-ZM1-625-019		RBN,CORD,4P-55
LED702	87-017-350-080		LED,SEL1550CM	SFR1	87-024-581-089		SFR,3.3K DIA 6H
LED703	87-017-733-080		LED,SEL1250SM	SOL1	82-ZM1-618-010		SOL ASSY, 27
T-T C.B				SOL2	82-ZM1-618-010		SOL ASSY, 27
C411	87-018-214-089		CAP,TC U 0.1-50	SW1	87-036-378-010		SW, PUSH 1-1-1 SH2
LED411	87-070-288-019		LED,GL380	SW2	87-036-378-010		SW, PUSH 1-1-1 SH2
M401	87-A90-036-019		MOT ASSY,RF-300CA-11	SW3	87-036-378-010		SW, PUSH 1-1-1 SH2
PS401	87-A90-156-019		SNSR,SG-240	SW4	87-036-378-010		SW, PUSH 1-1-1 SH2
Q411	87-A30-031-019		P-TR,PT380F	SW5	87-036-378-010		SW, PUSH 1-1-1 SH2
SW401	87-036-109-019		SW, PUSH SPPB61	SW6	87-036-378-019		SW, PUSH 1-1-1 SH2
CD MOTOR C.B				SW8	87-036-378-019		SW, PUSH 1-1-1 SH2
SW1	87-036-340-019		SW,LEAF LSA-1121	W502	87-099-756-019		CONN, 15P 9604 S F
M20	87-045-358-019		MOT,RF-310TA 43	HEAD-1 C.B			
M21	87-045-356-019		MOT,RF-310TA 30	HEAD-2 C.B			
				CON351	86-NF5-618-110		CONN ASSY,8P RPB

○チップ抵抗部品コード/CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

Chip Resistor Part Coding



A
抵抗部品コード
Resistor Code

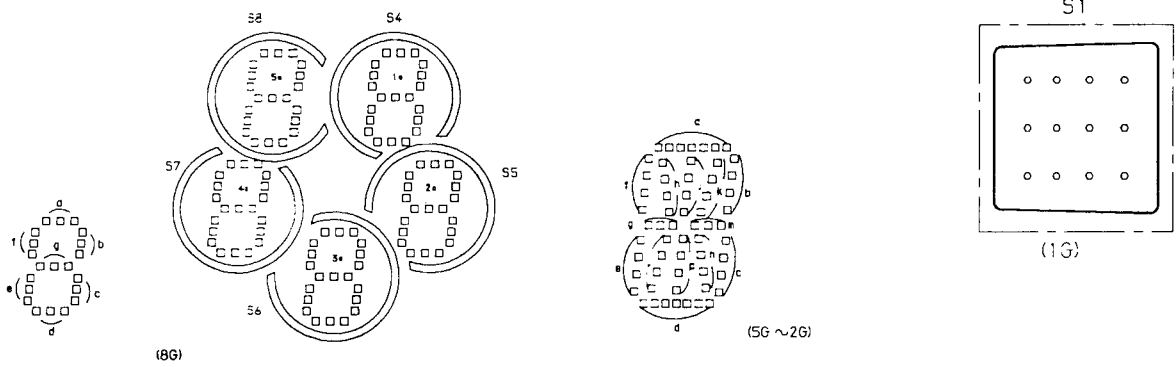
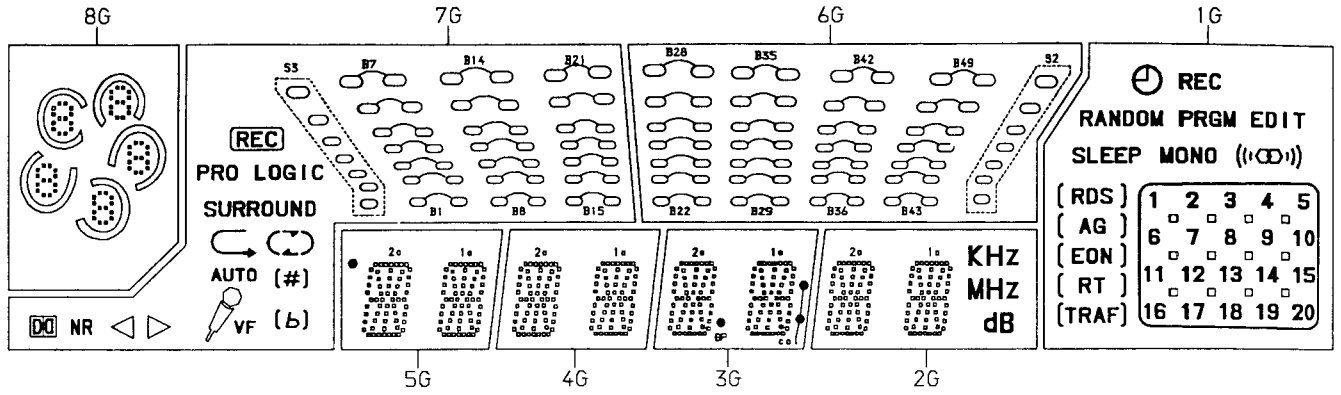
桁表示
Figure
抵抗値
Value of resistor

チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法/Dimensions (mm)			抵抗コード : A Resistor Code : A	
				外形/Form	L	W		t
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

FL GRID ASSIGNMENT & ANODE CONNECTION

FL, BJ539GK
GRID ASSIGNMENT

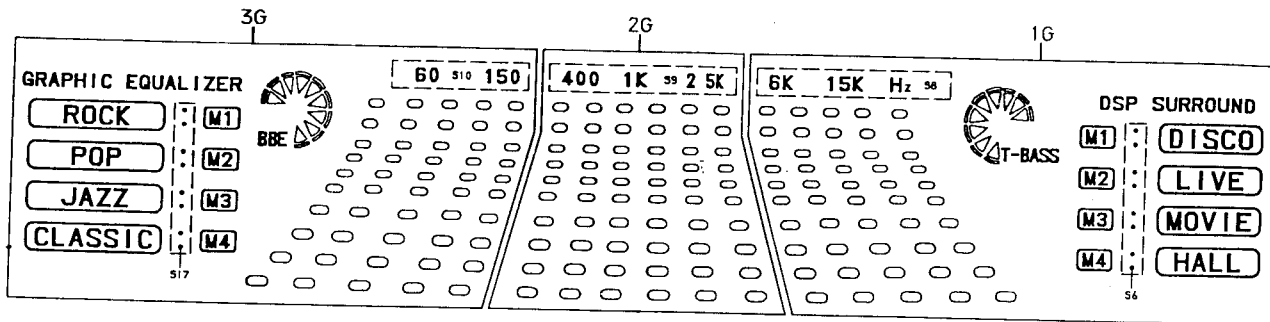


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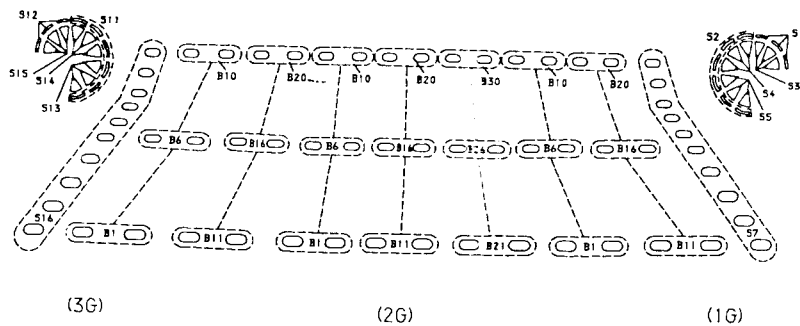
	8G	7G	6G	5G	4G	3G	2G	1G
P1	5a	—	—	—	—	—	—	REC
P2	5b	NR	—	—	—	—	—	⌚
P3	5f	NR	—	—	—	—	—	EDIT
P4	5g	◁	—	—	—	—	—	AI
P5	5c	▷	—	—	—	—	—	PRGM
P6	5e	VF	—	—	—	—	—	MONO
P7	5d	REC	—	—	—	—	—	RANDOM
P8	S8	S3	S2	—	—	—	—	SLEEP
P9	S6	⌋	—	○	—	—	—	((()))
P10	3d	↗	—	2c	2o	2a	2a	RDS
P11	3e	⌋	—	2n	2h	2h	2h	(RBS)
P12	3c	↶	—	2j	2j	2j	2j	AG
P13	3q	(#)	B22	2k	2k	2k	2k	(AG)
P14	3f	B1	B29	2f	2f	2f	2f	EON
P15	3b	B8	B36	2b	2b	2b	2b	(EON)
P16	3a	B15	B43	2m	2m	2m	2m	RT
P17	S5	#	B23	2q	2q	2q	2q	(RT)
P18	2d	B2	B30	2c	2c	2c	2c	TRAF
P19	2e	B9	B37	2e	2e	2e	2e	(TRAF)
P20	2c	B16	B44	2r	2r	2r	2r	1

	8G	7G	6G	5G	4G	3G	2G	1G
P21	2g	AUTO	B24	2p	2p	2p	2p	2
P22	2f	B3	B31	2n	2n	2n	2n	3
P23	2b	B10	B38	2d	2d	2d	2d	4
P24	2a	B17	B45	—	—	⌋ (UP)	—	KHz 5
P25	S7	SURROUND	B25	—	—	⌋ (DOWN)	—	MHz 6
P26	4d	B4	B32	—	—	⌋	—	dB 7
P27	4e	B11	B39	1a	1a	1a	1a	8
P28	4c	B18	B46	1h	1h	1h	1h	9
P29	4g	PRO LOGIC	B26	1j	1j	1j	1j	10
P30	4f	B5	B33	1k	1k	1k	1k	11
P31	4b	B12	B40	1f	1f	1f	1f	12
P32	4a	B19	B47	1b	1b	1b	1b	13
P33	S4	(b)	B27	1m	1m	1m	1m	14
P34	1d	B6	B34	1q	1q	1q	1q	15
P35	1e	B13	B41	1c	1c	1c	1c	16
P36	1c	B20	B48	1e	1e	1e	1e	17
P37	1g	b	B28	1r	1r	1r	1r	18
P38	1f	B7	B35	1p	1p	1p	1p	19
P39	1b	B14	B42	1n	1n	1n	1n	20
P40	1a	B21	B49	1d	1d	1d	1d	S1

FL, BJ504GK
GRID ASSIGNMENT



SEGMENT DESIGNATION

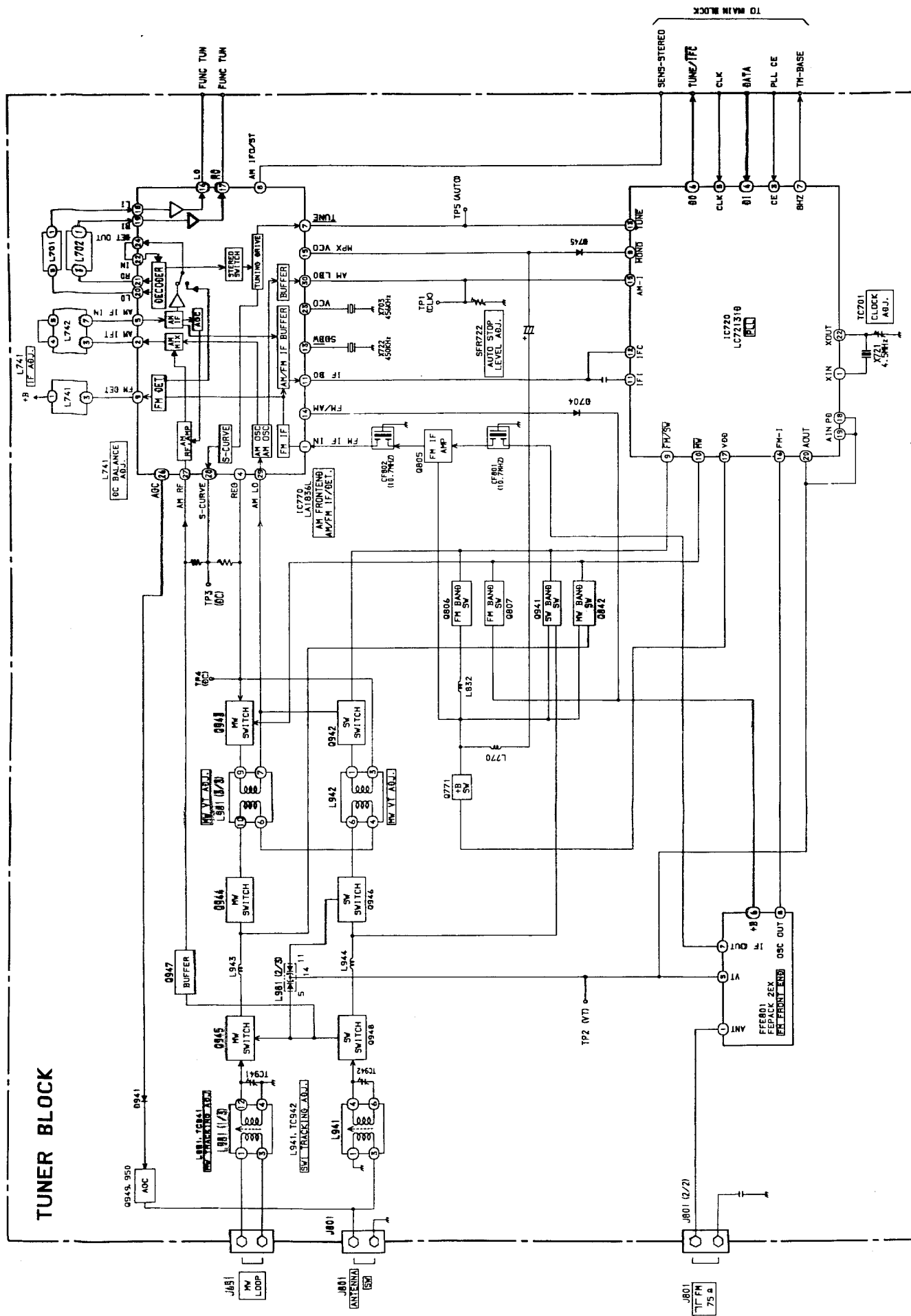


ANODE CONNECTION

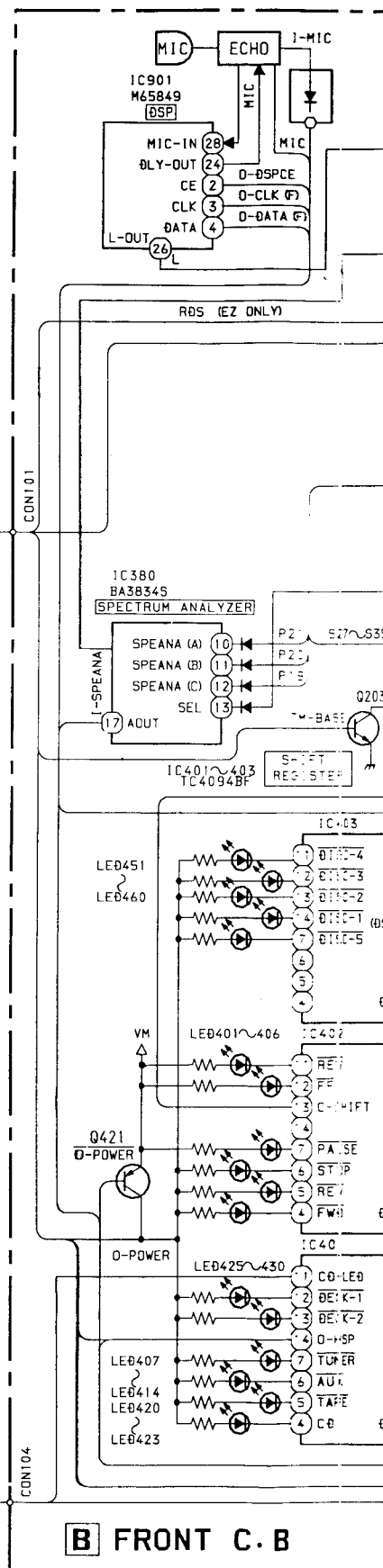
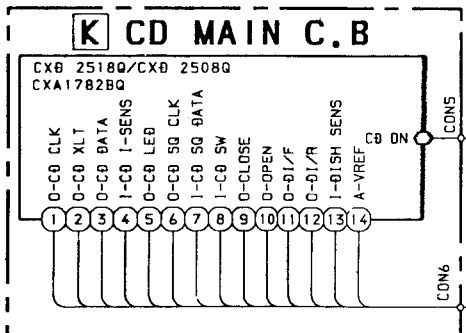
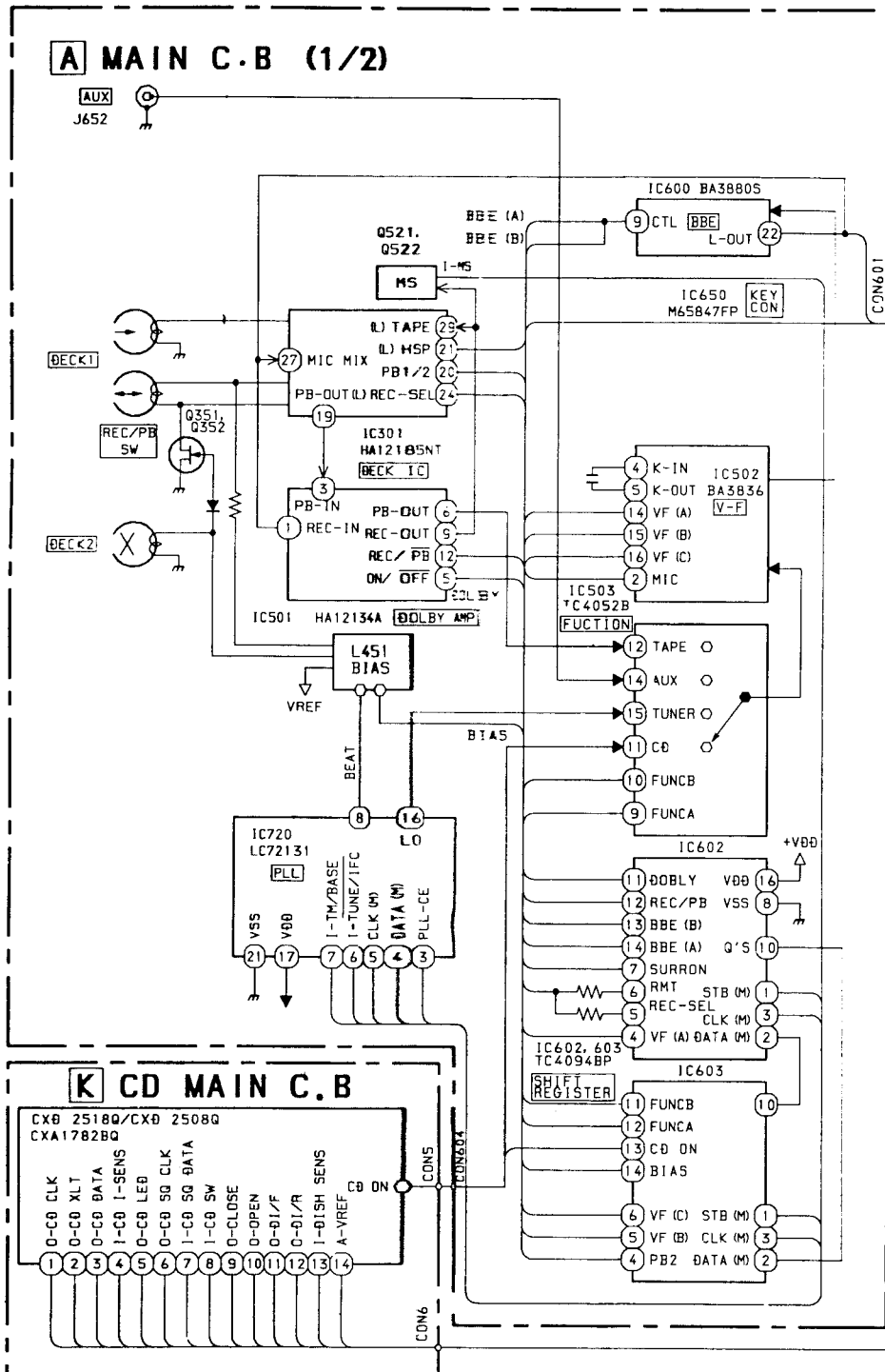
	3G	2G	1G
P1	GRAPHIC EQUALIZER	—	DSP SURROUND
P2	ROCK POP JAZZ CLASSIC	—	DISCO LIVE MOVIE HALL
P3	(ROCK)	—	(DISCO)
P4	(POP)	—	(LIVE)
P5	(JAZZ)	—	(MOVIE)
P6	(CLASSIC)	—	(HALL)
P7	S10	S9	S8
P8	M1 M3 M2 M4	—	M1 M3 M2 M4
P9	(M1)	—	(M1)
P10	(M2)	—	(M2)
P11	(M3)	B30	(M3)
P12	(M4)	B29	(M4)
P13	S11	B28	S1
P14	S12	B27	S2
P15	S13	B26	S3
P16	S14	B25	S4
P17	S15	B24	S5
P18	BBE	B23	T-BASS
P19	S16	B22	S7
P20	S17	B21	S8

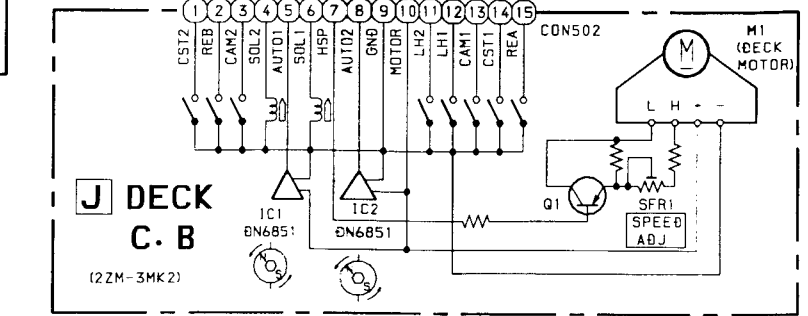
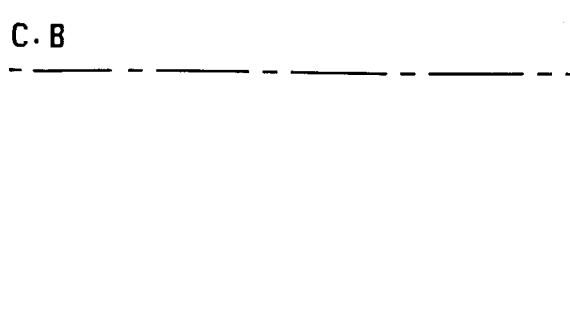
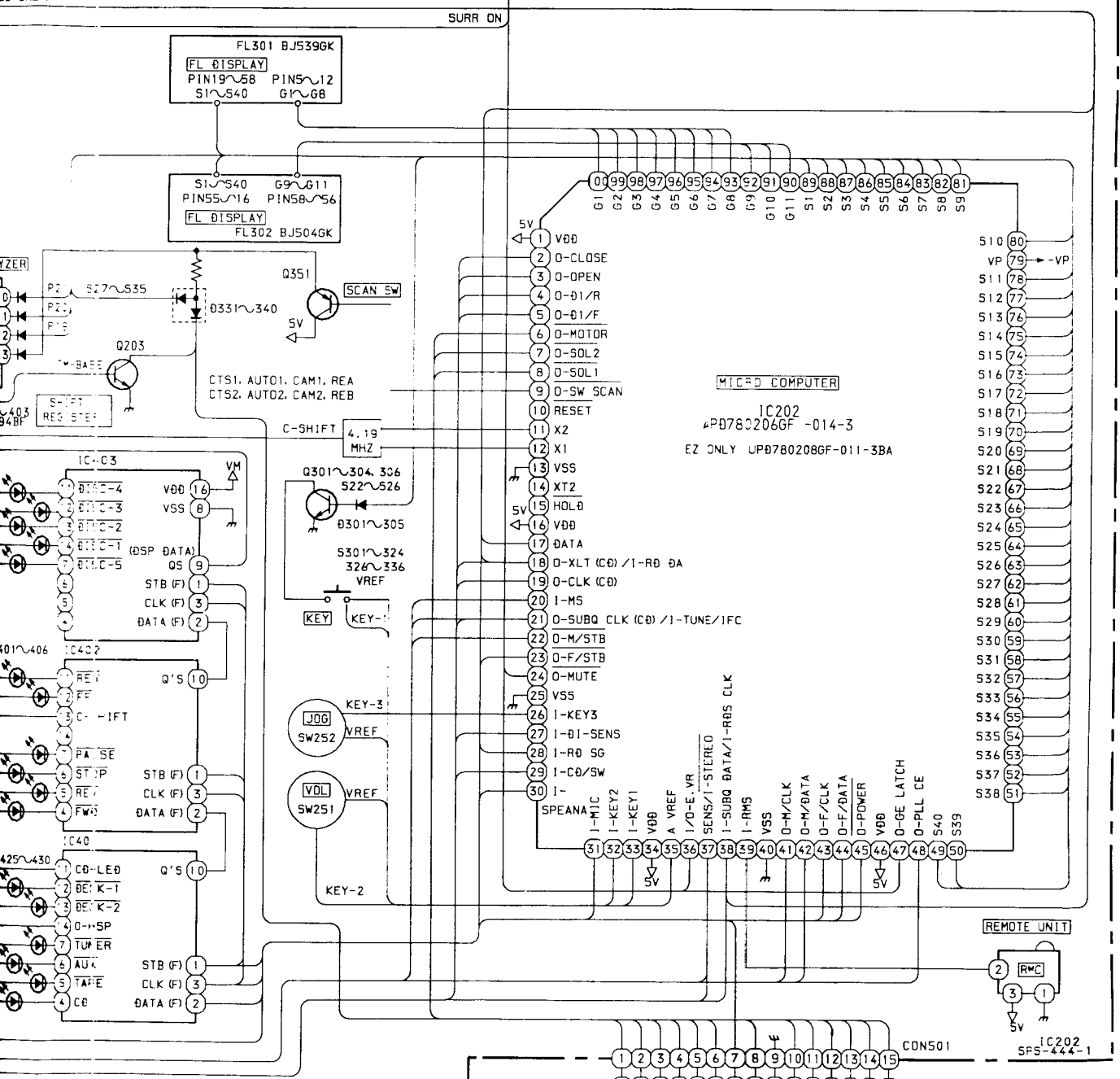
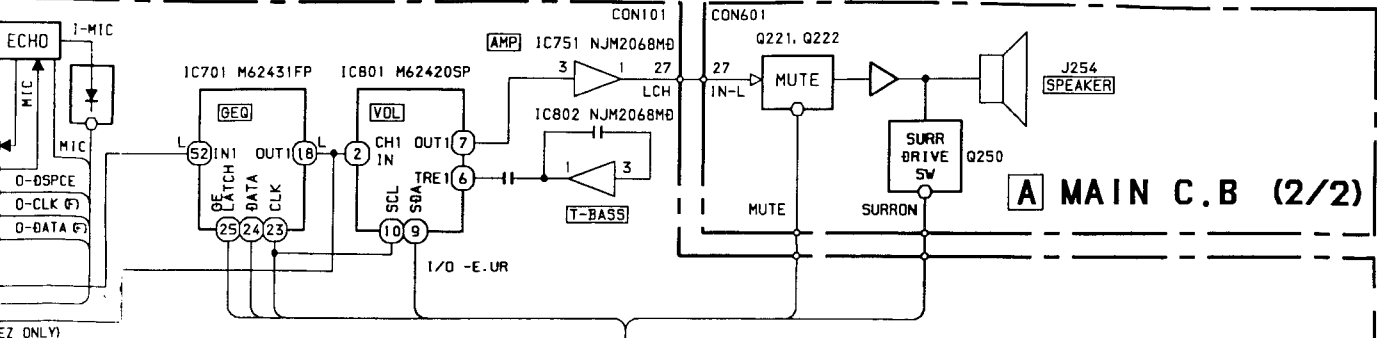
	3G	2G	1G
P21	B20	B20	B20
P22	B19	B19	B19
P23	B18	B18	B18
P24	B17	B17	B17
P25	B16	B16	B16
P26	B15	B15	B15
P27	B14	B14	B14
P28	B13	B13	B13
P29	B12	B12	B12
P30	B11	B11	B11
P31	B10	B10	B10
P32	B9	B9	B9
P33	B8	B8	B8
P34	B7	B7	B7
P35	B6	B6	B6
P36	B5	B5	B5
P37	B4	B4	B4
P38	B3	B3	B3
P39	B2	B2	B2
P40	B1	B1	B1

BLOCK DIAGRAM - 1 (TUNER : HE)

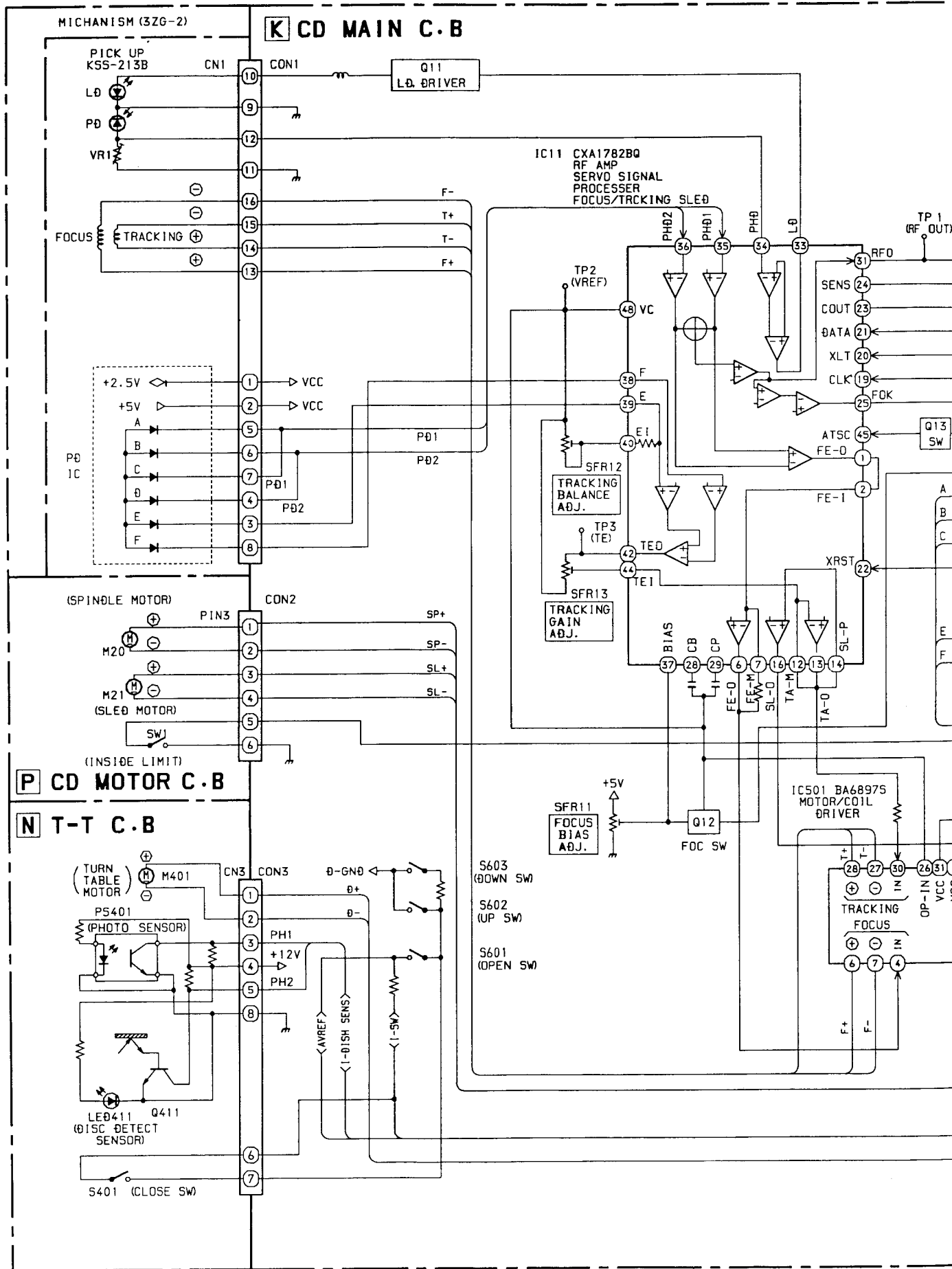


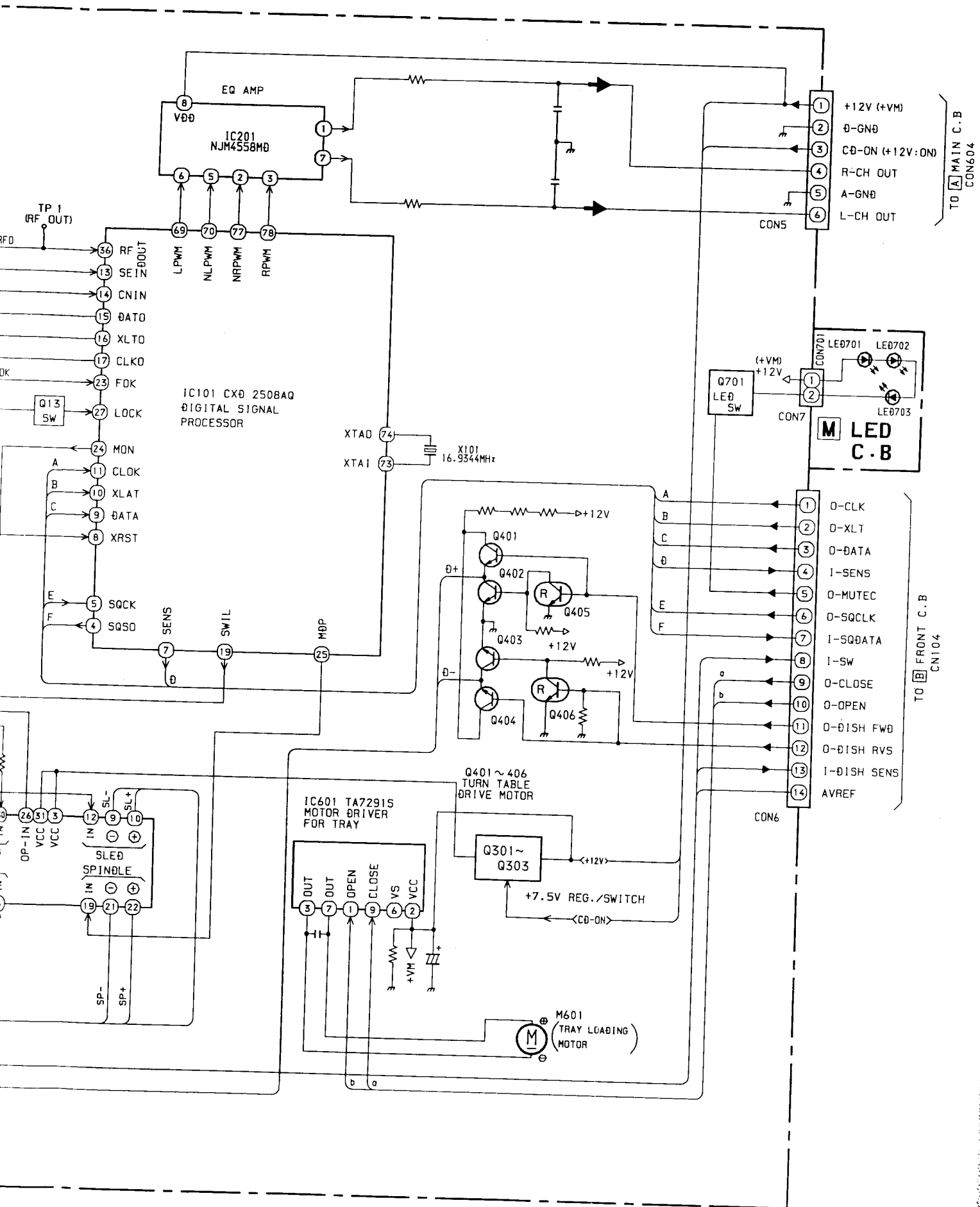
BLOCK DIAGRAM - 3 (MAIN / FRONT)



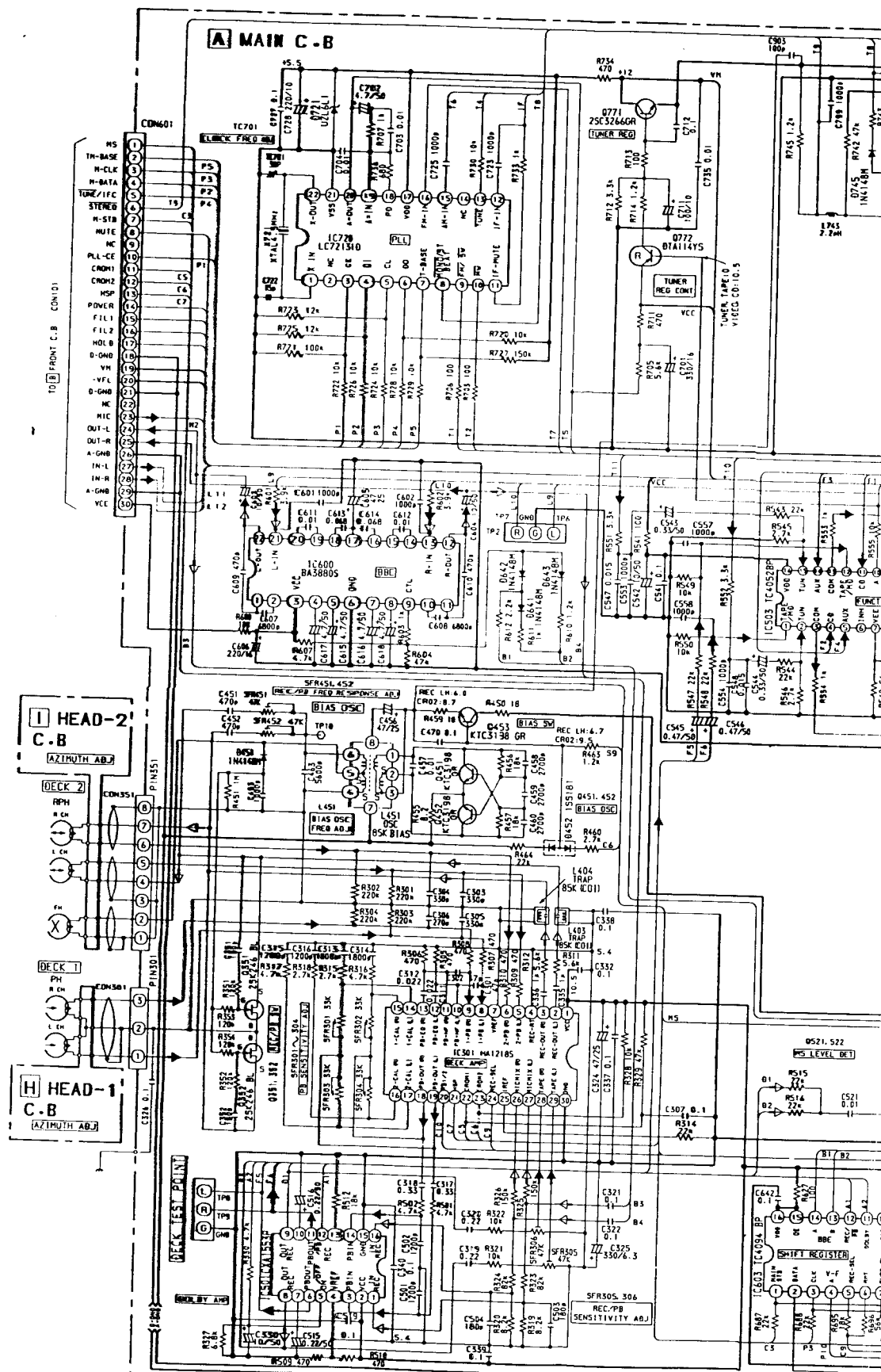


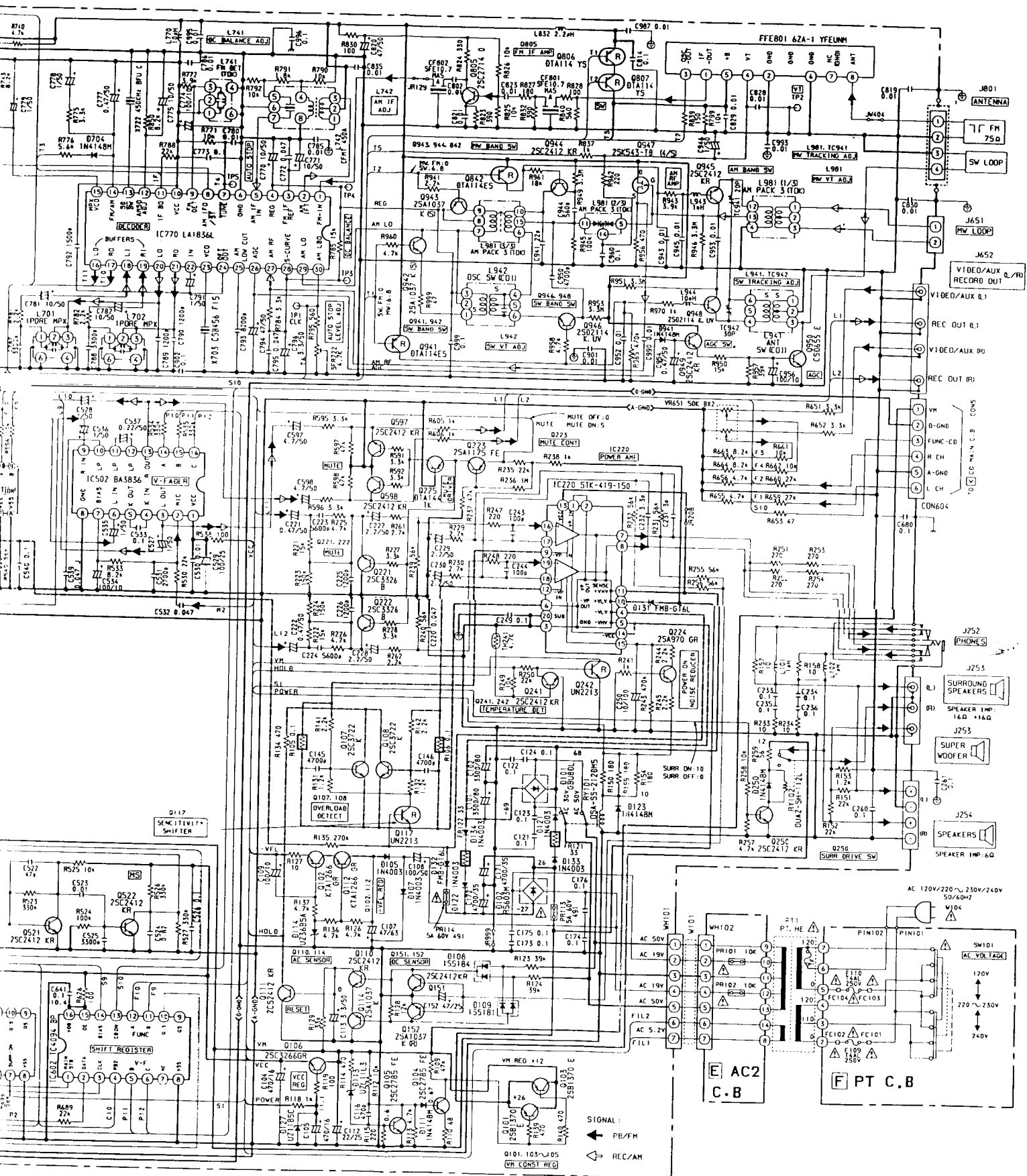
BLOCK DIAGRAM - 4 (CD)

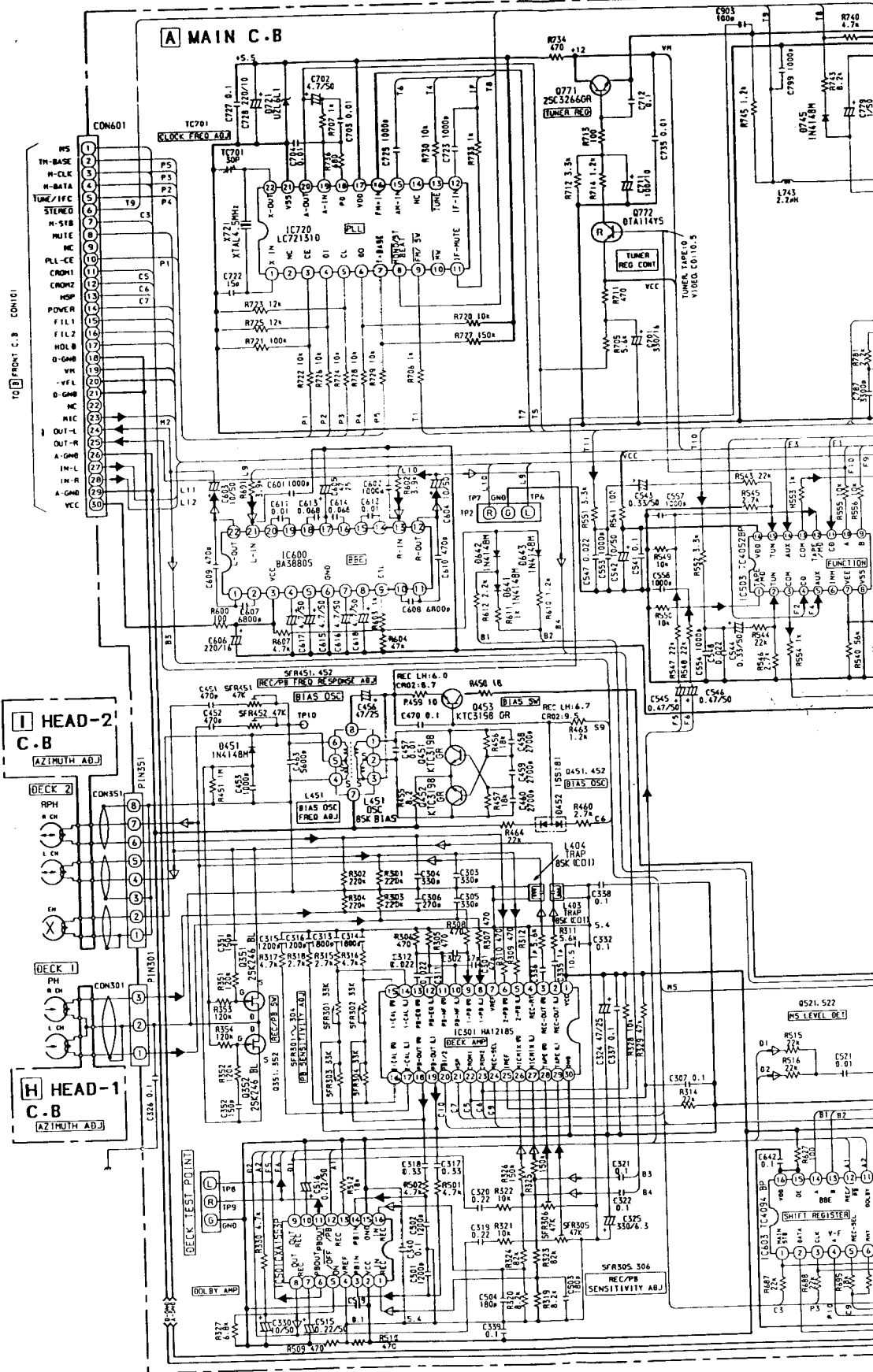


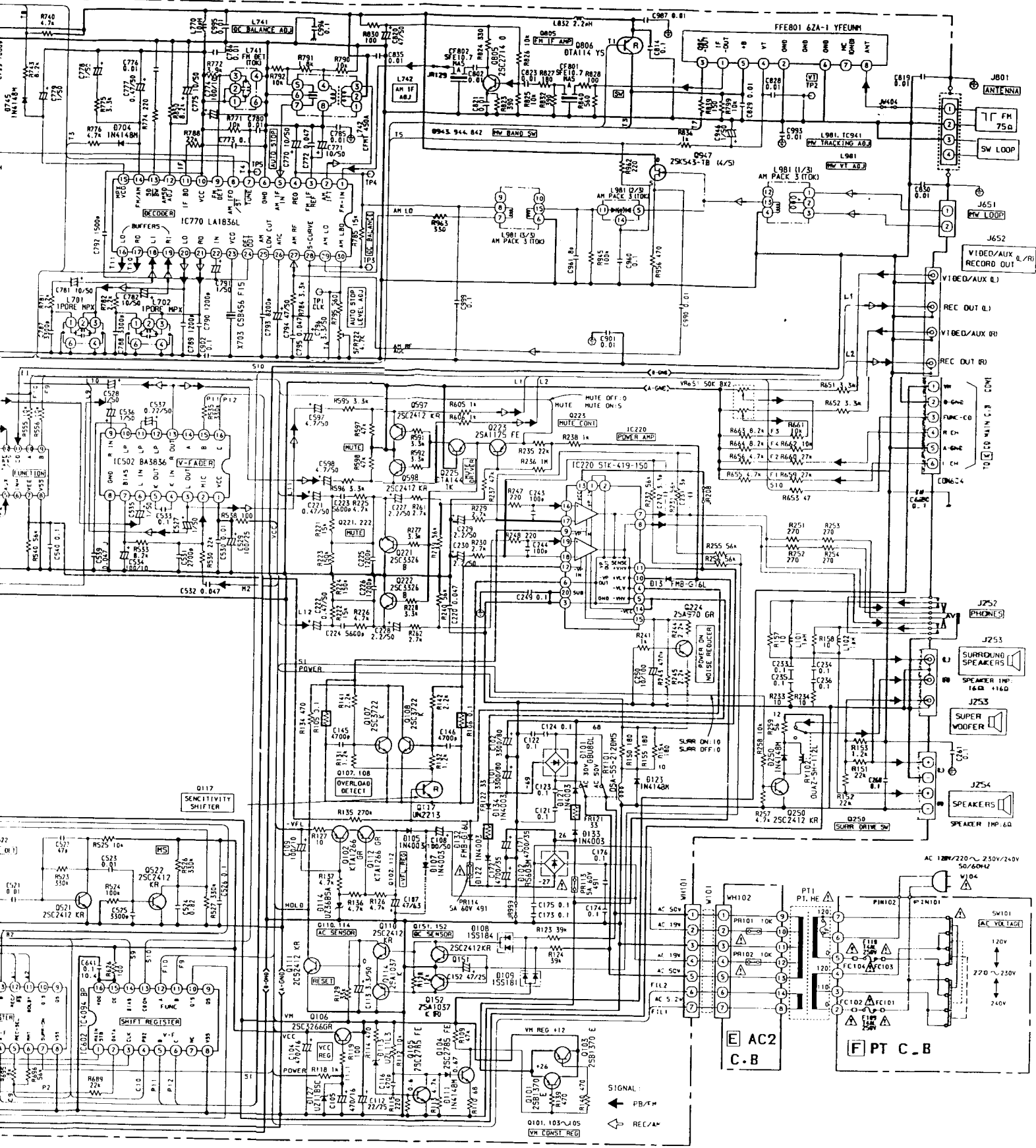


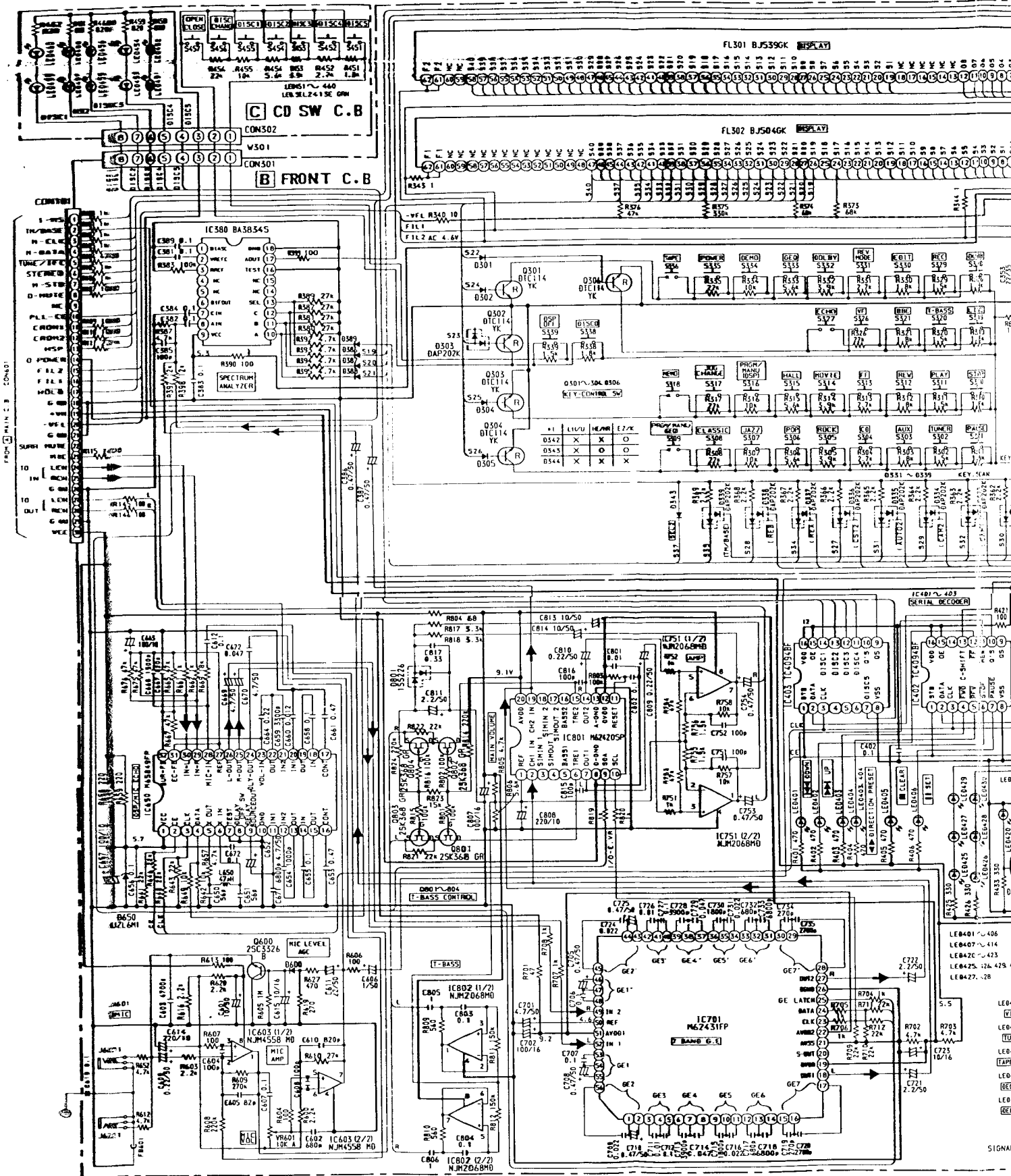
SCHEMATIC DIAGRAM - 1 (MAIN : HE)

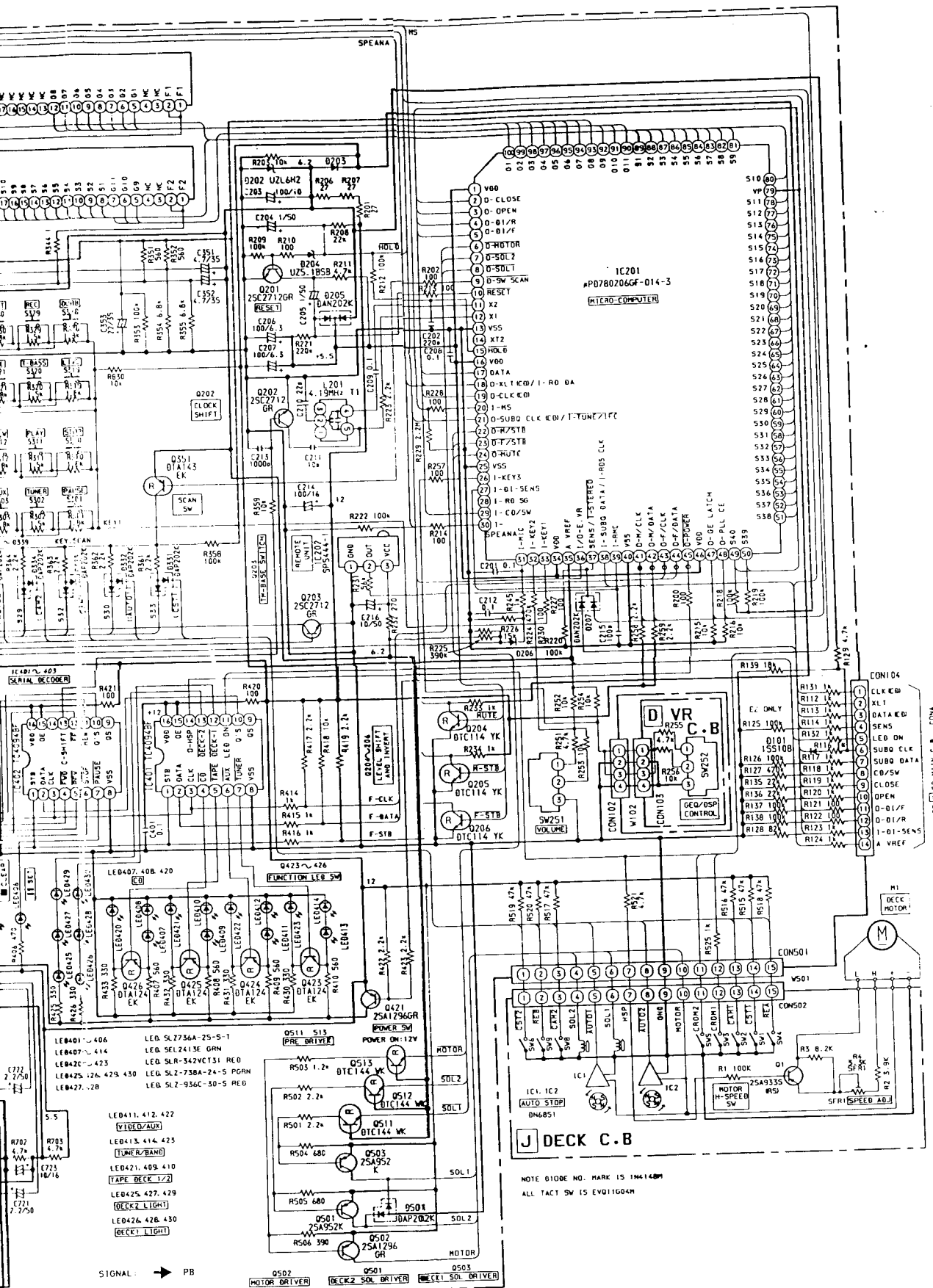










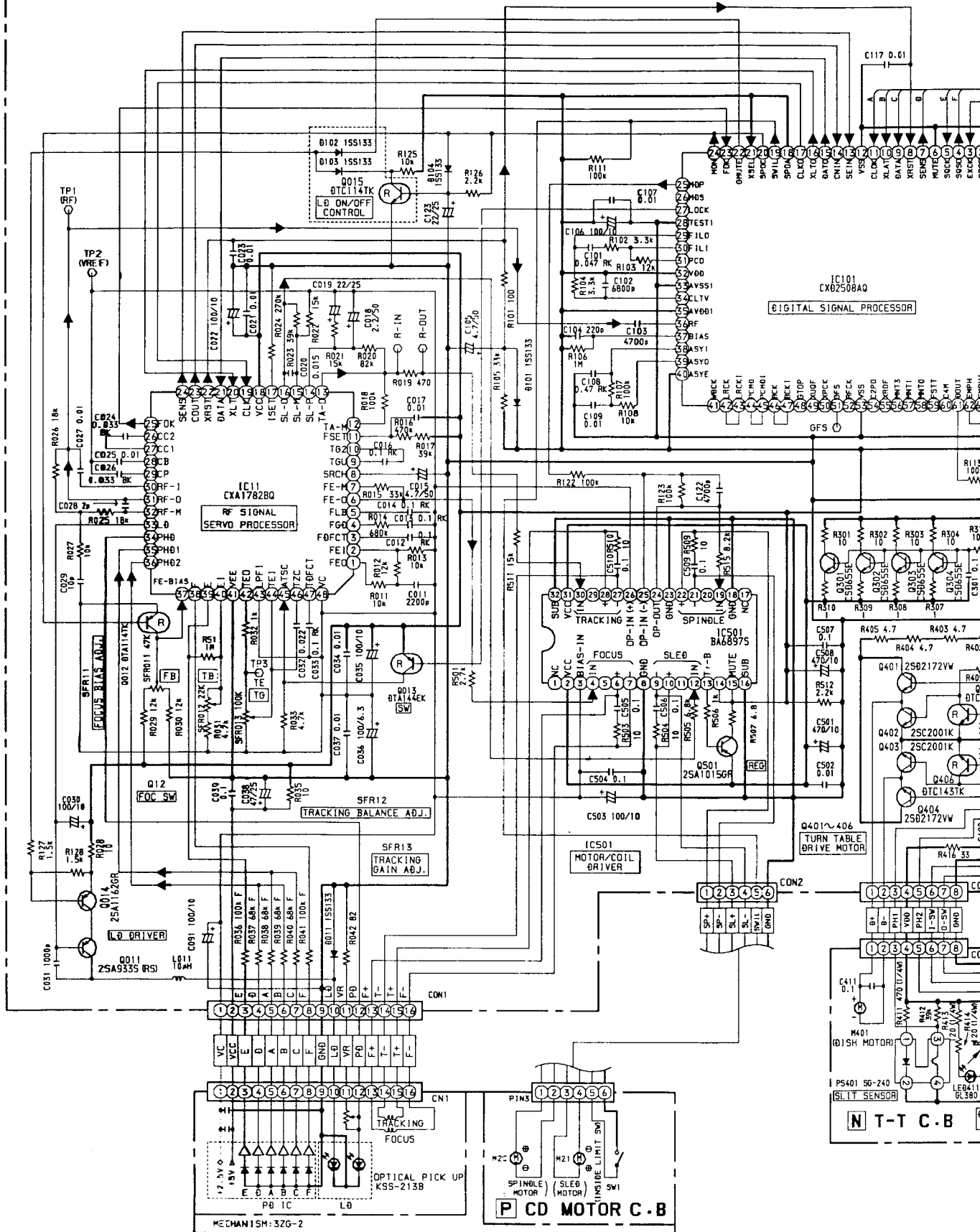


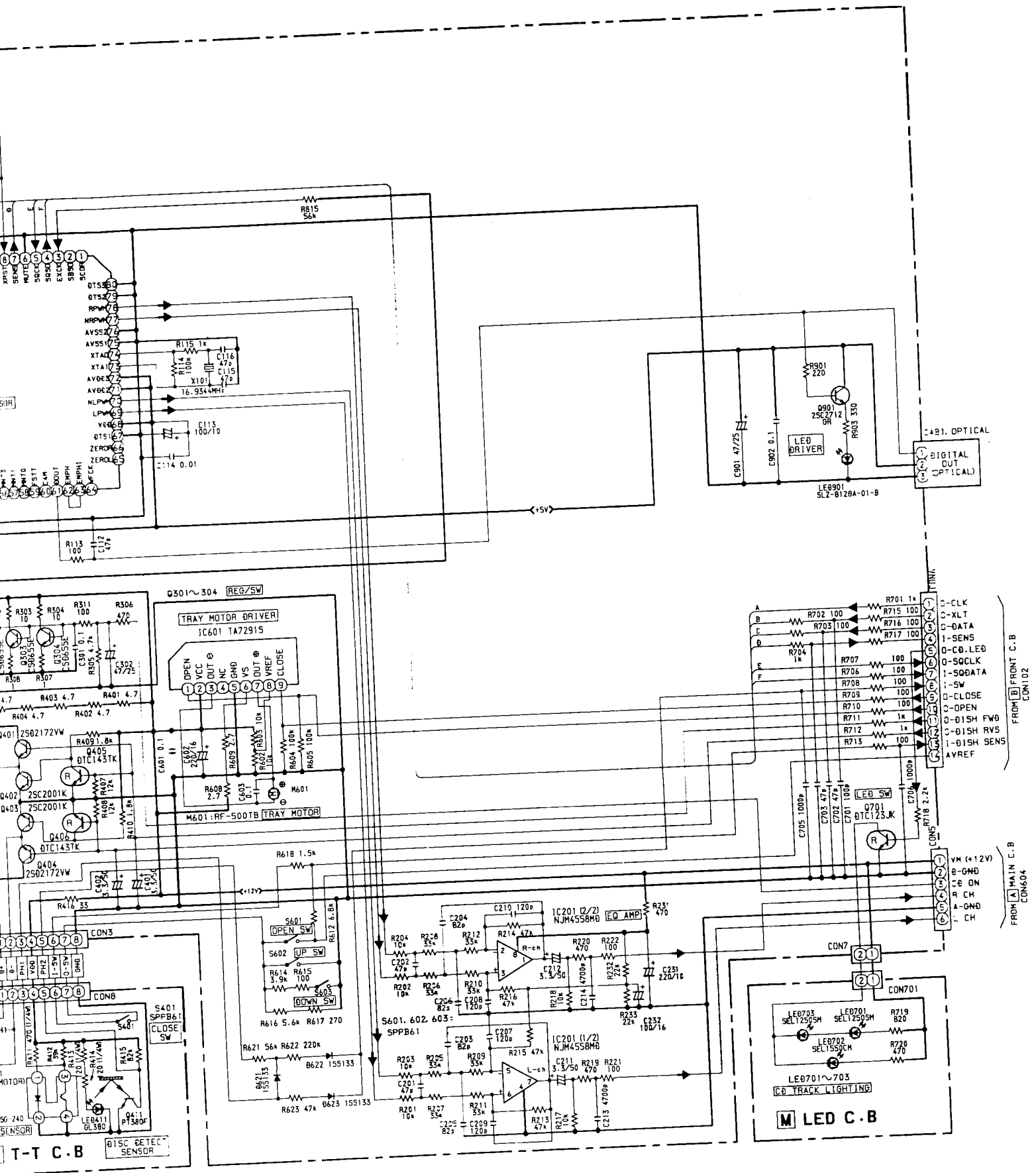
TO IC MAIN C.B. CONN.

NOTE 010DE NO. MARK IS 1M414BM
ALL TACT SW IS EV011G04M

SCHMATIC DIAGRAM - 4 (CD)

K CD MAIN C.B

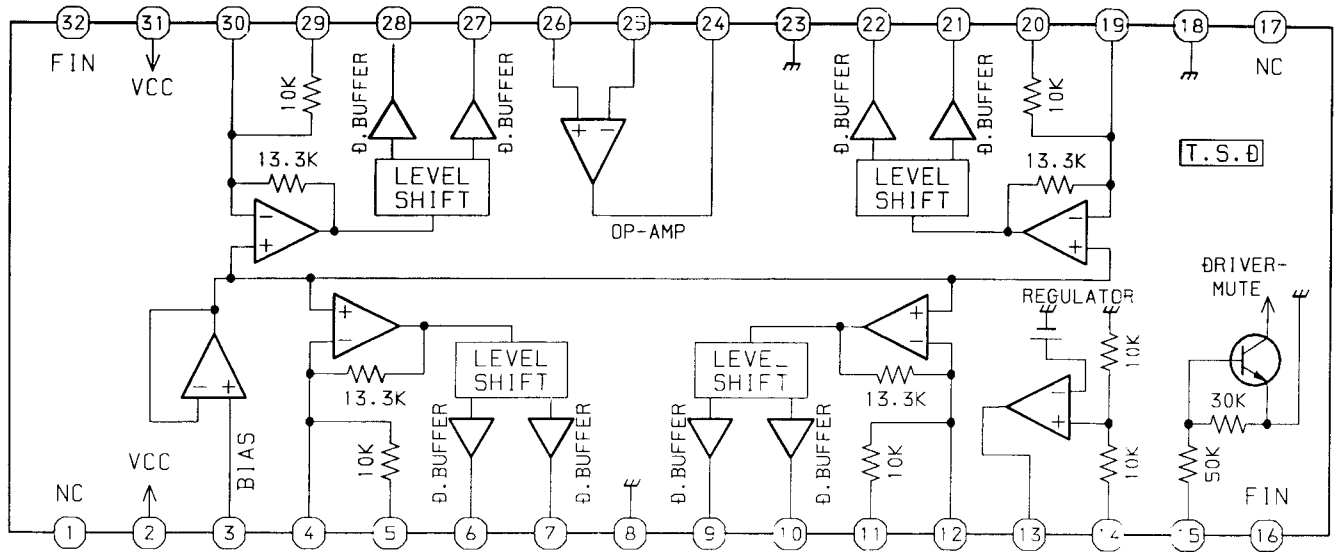




SIGNAL:
 ▲ ANALOG
 ▼ CONTROL

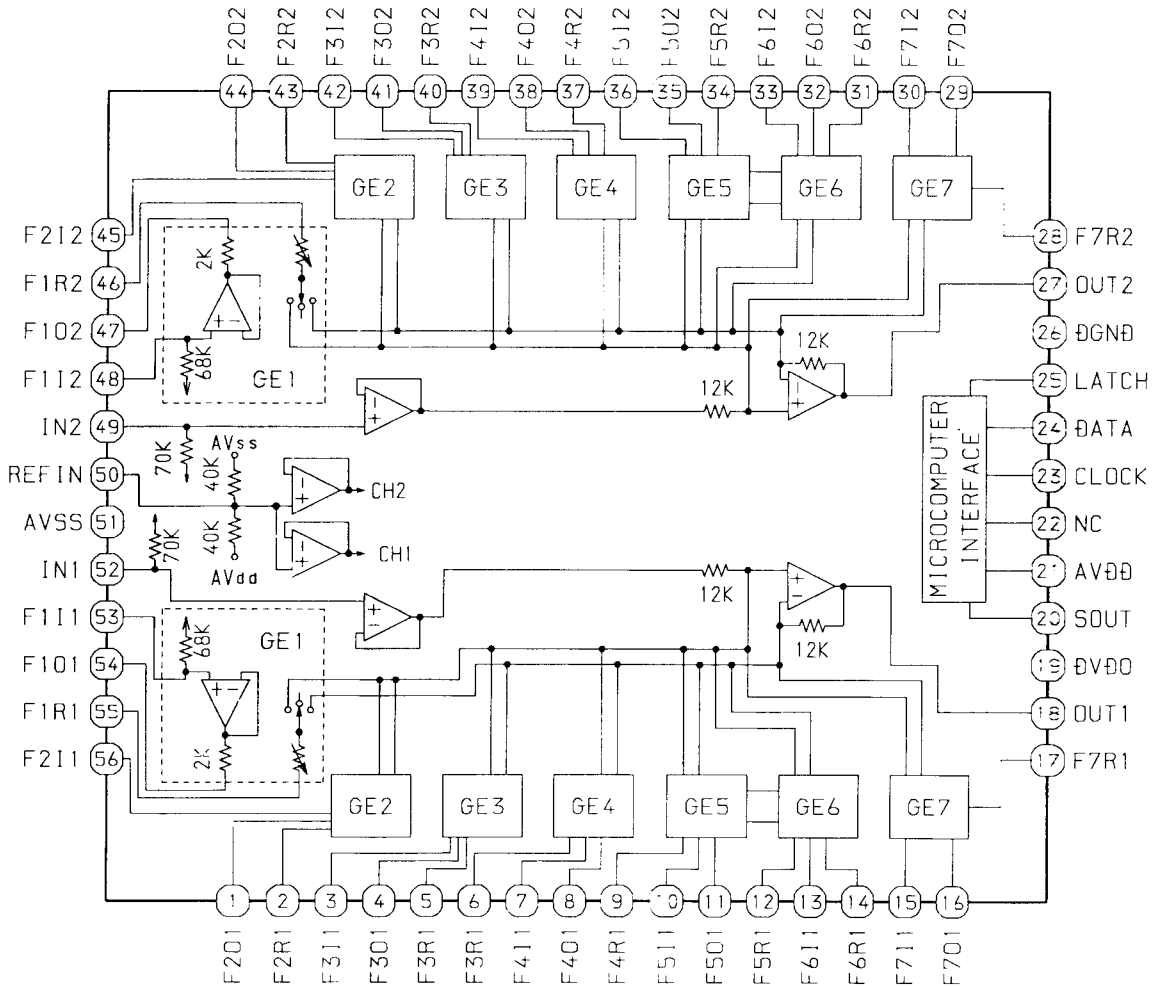
IC BLOCK DIAGRAM - 2

IC, BA6897S



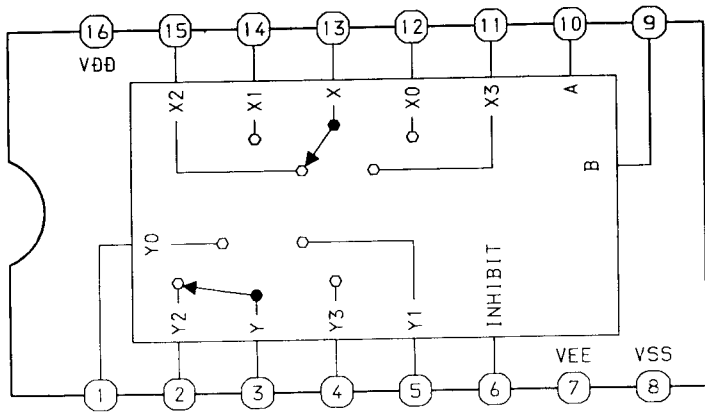
T.S.Ø: THERMAL SHUT DOWN CIRCUIT
D.BUFFER: DRIVE BUFFER

IC, M62431FP



IC, M65849FP

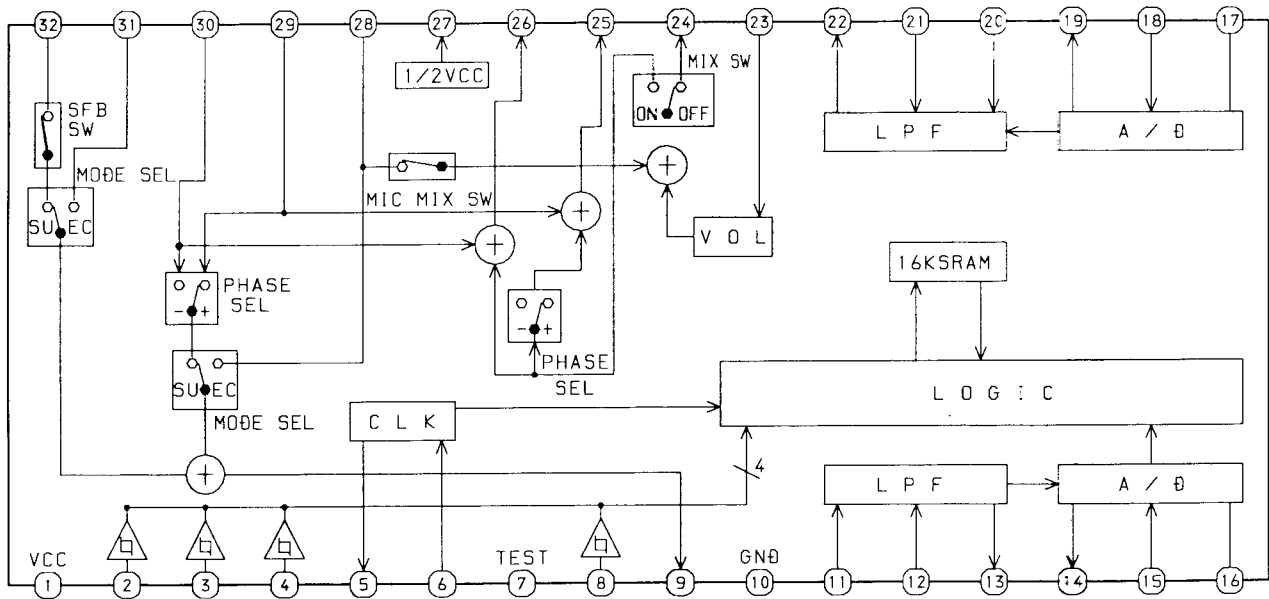
TRUTH TABLE



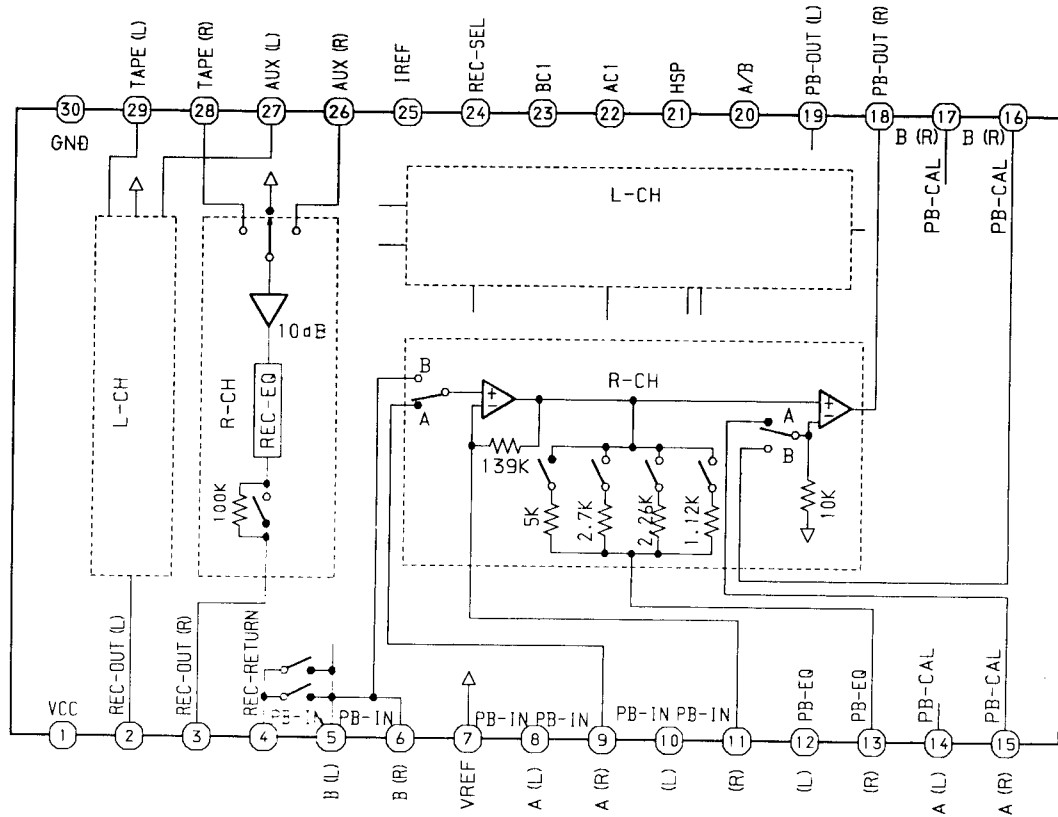
CONTROL INPUTS			DN SWITCH	
INHIBIT	B	A	Y0	X0
L	L	L	Y0	X0
L	L	H	Y1	X1
L	H	L	Y2	X2
L	H	H	Y3	X3
H	X	X'	—	—

L: LOW LEVEL
 H: HIGH LEVEL
 X: IRRELEVANT

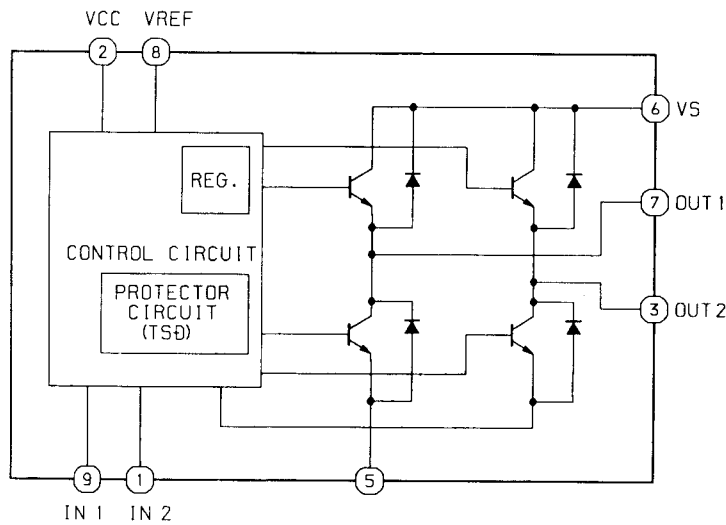
IC, TC4052BP



IC, HA12185NT



IC, TA7291

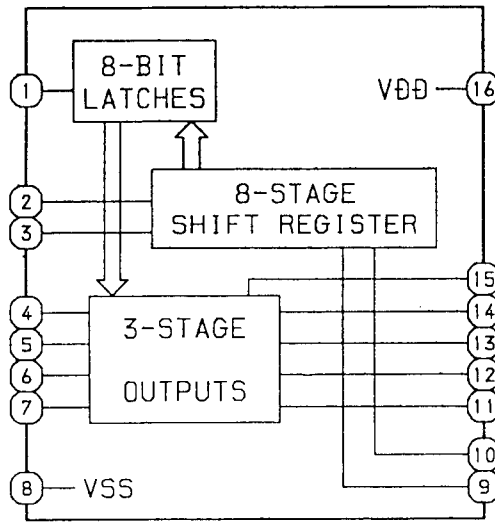


TRUTH TABLE

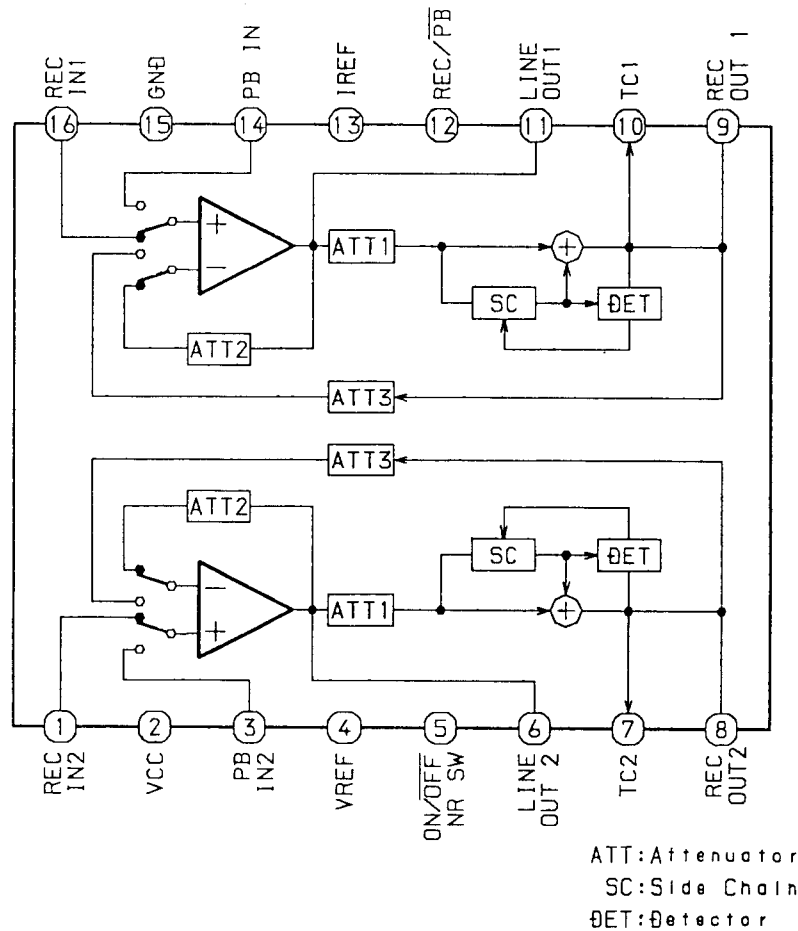
INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW
0	1	L	H	CCW
1	1	L	L	BRAKE

∞ : HI IMPEDANCE
NOTE : INPUT "H" ACTIVE

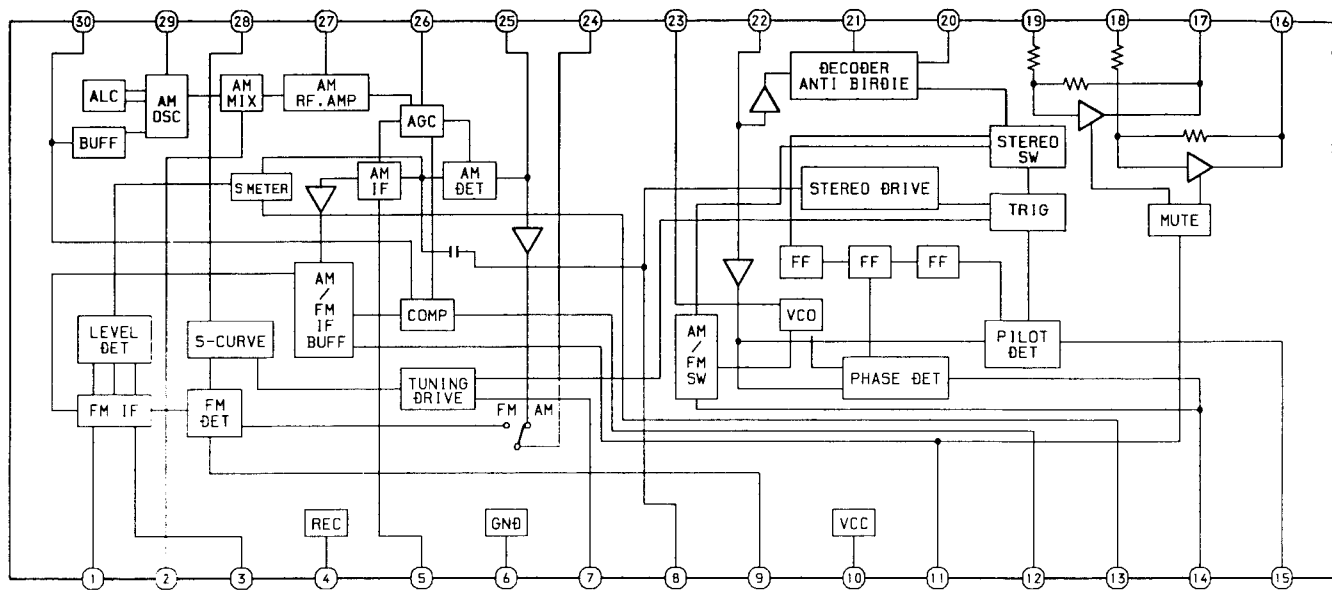
IC, TC4094BP



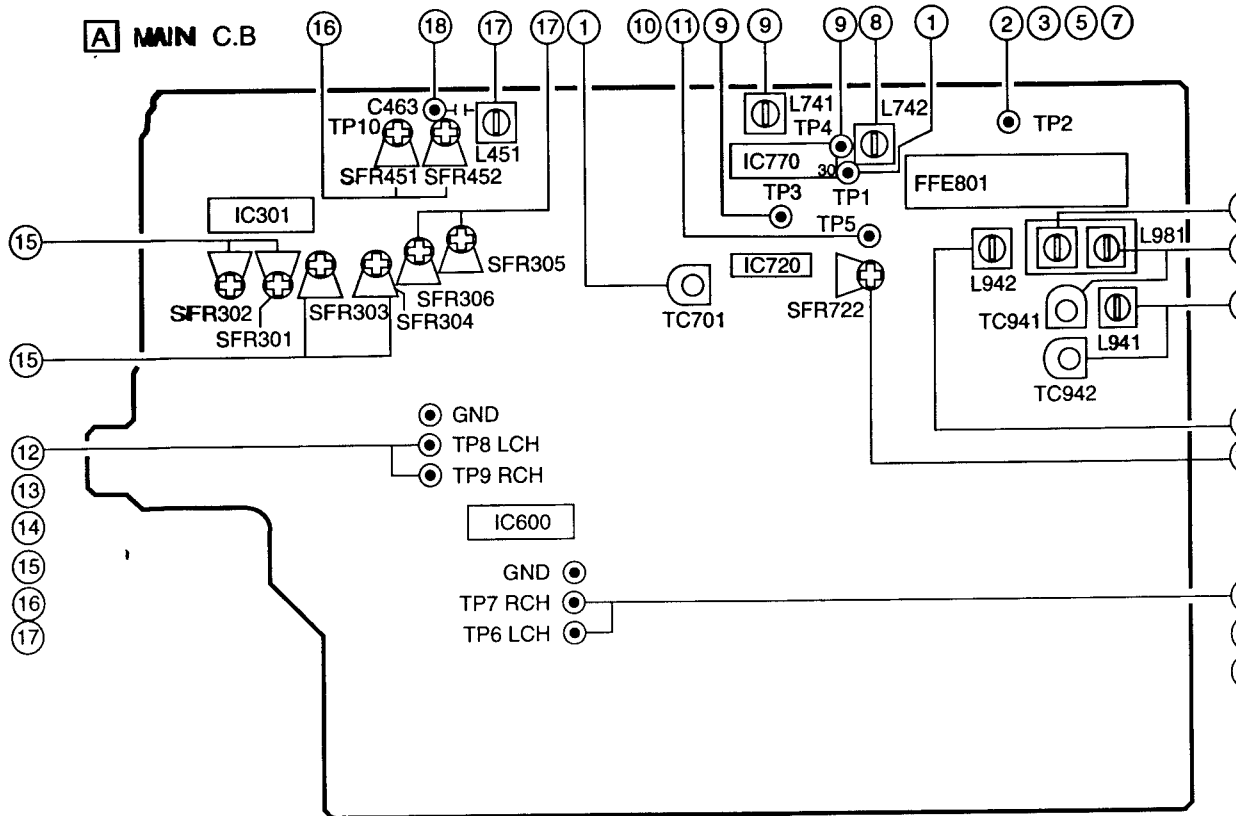
IC, CXA1553P



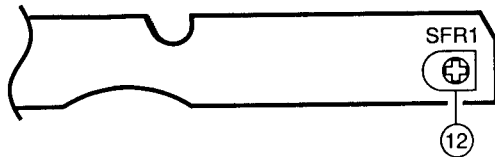
IC, LA1836



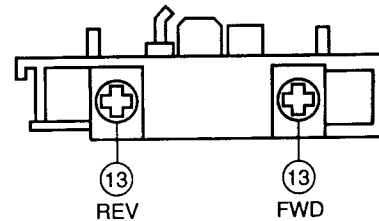
ADJUSTMENT - 1 <TUNER / DECK>



J DECK C.B.

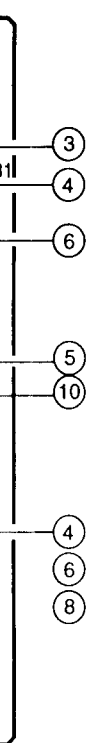


DECK-1 P, DECK-2 R / P / E HEAD



< TUNER SECTION >

1. Clock Frequency Adjustment
 Settings : • Test point : TP1 (CLK IC770 pin30)
 • Adjustment location : TC701
 Method : Set to MW 1710kHz and adjust TC701 so that the test point becomes 2160kHz \pm 0.01kHz.
2. MW VT Check <LH>
 Settings : • Test point : TP2 (VT)
 Method : Set to MW 1710kHz and check that the test point is less than 8.0V.
3. MW VT Adjustment <HE>
 Settings : • Test point : TP2 (VT)
 • Adjustment location : L981
 Method : Set to MW 1710kHz and adjust L981 so that the test point becomes 8.5V \pm 0.05V.
4. MW Tracking Adjustment <HE>
 Settings : • Test point : TP6, TP7
 • Adjustment location :
 L981 600kHz
 TC941 1400kHz
 Method : Set up TC941 to center before adjustment. The level at 600kHz is adjusted to MAX by L981. Then the level at 1400kHz is adjusted to MAX by TC941.
5. SW VT Adjustment <HE>
 Settings : • Test point : TP2 (VT)
 • Adjustment location : L942
 Method : Set to SW 17.9MHz and adjust L942 so that the test point becomes 7.0V \pm 0.05V.



6. SW Tracking Adjustment <HE>
 Settings : • Test point : TP6, TP7
 • Adjustment location :
 L941 5.9MHz
 TC942 17.9MHz
 Method : Set up TC942 to center before adjustment.
 The level at 5.9MHz is adjusted to MAX by L941. Then the level at 17.9MHz is adjusted to MAX by TC942.
7. FM VT Check
 Settings : • Test point : TP2 (VT)
 Method : Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 1.0V (87.5MHz) and less than 8.0V (108.MHz).
8. AM IF Adjustment <LH>
 Settings : • Test point : TP6, TP7
 • Adjustment location :
 L742 450kHz
9. DC Balance / Mono Distortion Adjustment
 Settings : • Test point : TP3, TP4 (DC balance)
 : TP6, TP7 (Distortion)
 • Adjustment location : L741
 • Input level : 54dB
 Method : Set to FM 98.0MHz and adjust L741 so that the voltage between TP3 and TP4 becomes $0V \pm 0.04V$.
 Next, check that the distortion is less than 1.3%.
10. Auto Stop Level Adjustment
 Settings : • Test point : TP5
 • Adjustment location : SFR722
 • Input level : 18dB
 Method : Set to FM 98.0 MHz and adjust voltage low (about 0.01V) by SFR722. After that voltage high (about 7.0V) by 2dB down.
11. Auto Stop Level Check
 MW
 Settings : • Test point : TP5
 • Input level : 50dB
 Method : Set to MW 1000kHz (LH), MW 999kHz (HE) and check that the test point is 40 ~ 65dB.
 SW<HE>
 Settings : • Test point : TP5
 • Input level : 65dB
 Method : Set to SW 12.0MHz and check that the test point is less than 65 dB.
 FM
 Settings : • Test point : TP5
 • Input level : 18dB
 Method : Set to FM 98.0MHz and check that the test point is $20 \text{ dB} \pm 5 \text{ dB}$.

< DECK SECTION >

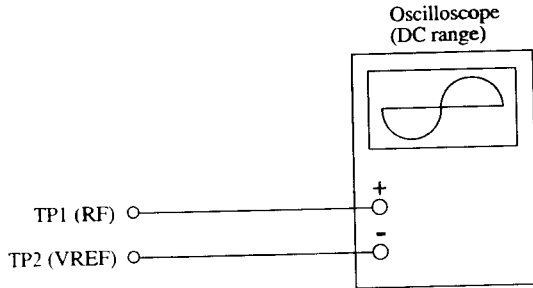
12. Tape Speed Adjustment
 Settings : • Test tape : TTA-100
 • Test point : TP8, TP9
 • Adjustment location : SFR1
 Method : Play back the test tape and adjust SFR1 so that the frequency counter reads $3000\text{Hz} \pm 5\text{Hz}$.
13. Head Azimuth Adjustment
 Settings : • Test tape : TTA-300
 • Test point : TP8, TP9
 • Adjustment location : Head azimuth adjustment screw
 Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD and REV PLAY mode.
14. PB Frequency Response Check (DECK 1, DECK 2)
 Settings : • Test tape : TTA-300
 • Test point : TP8, TP9
 Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is $\pm 2\text{dB}$.
15. PB Sensitivity Adjustment (DECK 1, DECK 2)
 Settings : • Test tape : TTA-200
 • Test point : TP8, TP9
 • Adjustment location :
 SFR301 (DECK 1, Lch)
 SFR302 (DECK 1, Rch)
 SFR303 (DECK 2, Lch)
 SFR304 (DECK 2, Rch)
 Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes $300\text{mV} \pm 10\text{mV}$.
16. REC/PB Frequency Response Adjustment
 Settings : • Test tape : TTA-602
 • Test point : TP8, TP9
 • Input signal : 1kHz / 10kHz (LINE IN)
 • Adjustment location : SFR451 (Lch)
 SFR452 (Rch)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 171mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes $0\text{dB} \pm 0.5\text{dB}$ with respect to that of the 1kHz signal.
17. REC/PB Sensitivity Adjustment
 Settings : • Test tape : TTA-602
 • Test point : TP8, TP9
 • Input signal : 1kHz (LINE IN)
 • Adjustment location : SFR305 (Lch)
 SFR306 (Rch)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 17mV. Record and play back the 1kHz signals and adjust SFRs so that the output is $17\text{mV} \pm 0.5\text{dB}$.
18. Bias OSC Frequency Adjustment
 Settings : • Test tape : TTA-615
 • Test point : TP10 (C463)
 • Adjustment location : L451
 Method : Set to the REC mode. Adjust L451 so that the frequency counter of the test point becomes minimum.

Note :

Connect a probe (10:1) of the oscilloscope or the frequency counter to a test point TP2(VREF).

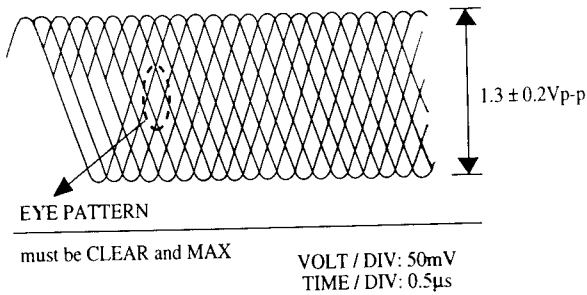
1. Focus Bias Adjustment

Make the focus bias adjustment when replacing and repairing the optical block.

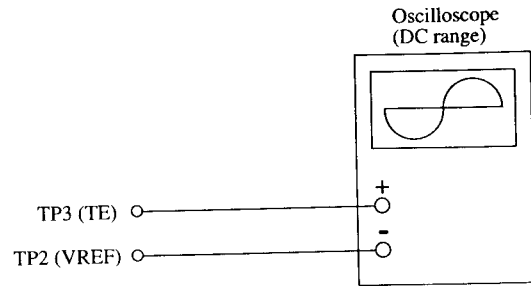


- 1) Connect an oscilloscope to the test points TP1 (RF) and TP2 (VREF).
- 2) Turn on the power switch.
- 3) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
- 4) Adjust SFR11 so that RF signal of the test point TP1 (RF) is MAX and CLEARREST.

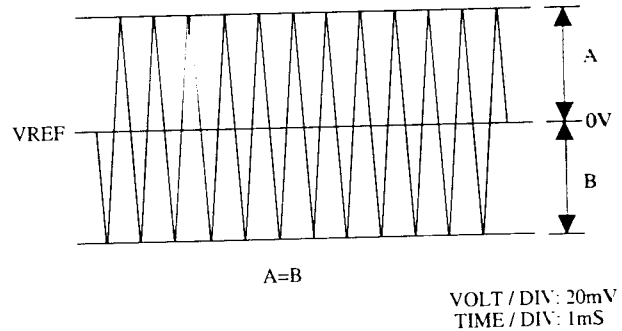
RF signal waveform



2. Tracking Balance Adjustment

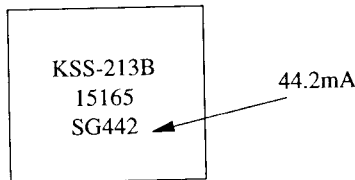


- 1) Connect an oscilloscope to the test points TP3 (TE) and TP2 (VREF).
- 2) Active the CD test mode.
- 3) Insert test disc TCD-782 (YEDS-18) and set the traverse mode (No.4) of CD test mode.
- 4) Adjust SFR12 so that the waveform on the oscilloscope is vertically symmetrical as shown in the figure below.
- 5) After the adjustment is completed, remove the connected lead wires from the terminals.



Note:

The current of the laser can be checked with the voltages on both sides of R28 (10Ω). The difference for the specified value shown on the level must be within ± 6.0mA.



$$\text{Laser current } I_{op} = \frac{\text{Voltage across R28}}{10\Omega}$$

3. Tracking Gain Adjustment

A servo analyzer is necessary in order to perform this adjustment exactly. However, this gain has a margin, so even if it is slightly off, there is no problem.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when 2-axis device operates.

However, as these gains are reciprocate, the adjustment is performed at the point where both gains are satisfied.

- When gain is raised, the noise increases when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.

When the gain adjustment is not satisfied, the symptoms below appear.

Symptoms \ Gain	(Focus)	Tracking
• The time until music starts becomes longer for STOP → ▶PLAY or automatic selection (◀◀, ▶▶ buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
• Music does not start and disc continues to rotate for STOP → ▶PLAY or automatic selection (◀◀, ▶▶ buttons pressed.)	—	low
• Disc stops to rotate shortly after STOP → ▶PLAY.	low or high	—
• Sound is interrupted during PLAY. Or time counter display stops.	—	low
• More noises during the 2-axis device operation.	high	high

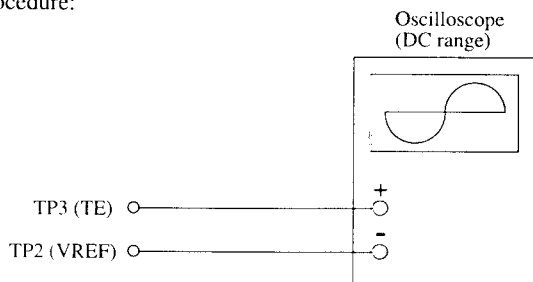
The following is simple adjustment method.

— Simple adjustment —

Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment.

If the positions after the simple adjustment are only a little different, return the controls to the original position.

Procedure:



1) Keep the set horizontal. (If the set is not kept horizontally,

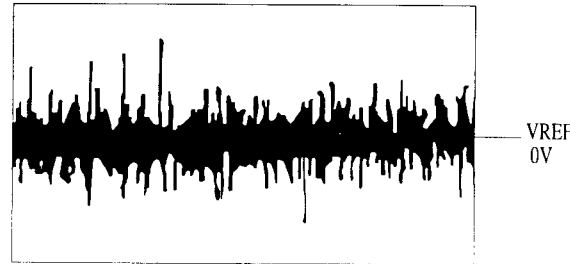
this adjustment cannot be performed due to the gravity against the 2-axis device.)

2) Insert test disc TCD-782 (YEDS-18) and play back the second composition.

3) Connect an oscilloscope to TP2 (VREF) and TP3(TE).

4) Adjust SFR13 so that the waveform appears as shown in the figure below.

(tracking gain adjustment)

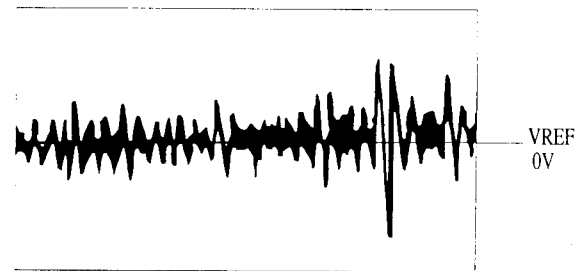


VOLT/DIV: 50 mV
TIME/DIV: 1 mS

• Incorrect example

Low tracking gain

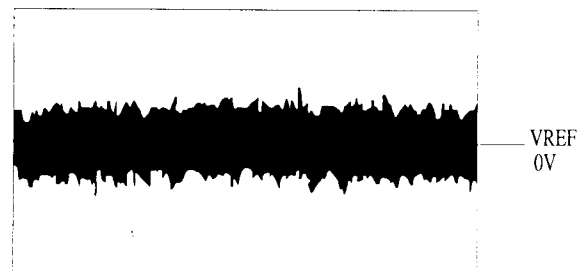
(The fundamental wave appears as compare with the waveform adjusted)



VOLT/DIV: 50 mV
TIME/DIV: 1 mS

High tracking gain

(The frequency of the fundamental wave is higher than in low gain)



VOLT/DIV: 50 mV
TIME/DIV: 1 mS

TEST MODE

1. How to Activate CD Test Mode
- 1) Insert the AC plug while pressing the function CD button.
All FL display tubes will light up, and the test mode will be activated.

2. How to cancel CD Test Mode
Either one of the following operations will cancel the CD test mode.
 - Press the function button (except CD button).
 - Press the power switch button. • Disconnect the AC plug.

3. CD Test Mode Functions
When test mode is activated, the following mode functions from No. 1 to No. 5 can be used by pressing the operation keys.

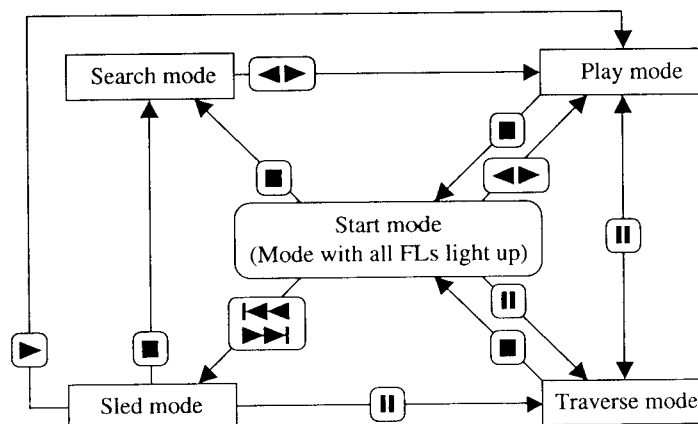
Mode / No.	Operation	FL display	Operation	Contents
Start mode No. 1	Test mode activation	All FL light up	• Active the test mode. (CD block power supply ON)	All FL displays light up
Search mode No. 2	■ key		• Laser diode illuminated under normal circumstances • Continual focus search * NOTE 1 (The pickup lens repeats the full-swing up-down motion.) * Avoid continual searches that last for more than 10 minutes.	• Laser current measurement (Across R28 resistor) FOCUS SERVO • Check focus search waveform • Check focus error waveform * FOK / FZC are not monitored in the search mode.
Play mode No. 3	◀▶ key		• Normal playback • Focus search is continued if TOC cannot be read * NOTE 1	FOCUS SERVO / TRACKING SERVO CLV SERVO / SLED SERVO Check FOK / FZC
Traverse mode No. 4	key		• During normal disc playback Press once; tracking servo OFF Press twice; tracking servo ON * NOTE 2	TRACKING SERVO ON / OFF Tracking balance (traverse) adjustment TP2 (VREF), TP3 (TE)
Sled mode No. 5	◀◀ key ▶▶ key	All FL light up	• Pickup moves to the outermost track • Pickup moves to the innermost track * NOTE 3 (During playback, machine operates normally.)	SLED SERVO Check SLED mechanism operation

* NOTE 1: There are cases when the tracking servo cannot be locked owing to the protection circuit being operated when heat builds up in the driver IC if the focus search is operated continually for more than 10 minutes. In these cases, the power supply should be switched off for 10 minutes until heat has been reduced and then re-started.

* NOTE 2: Do not press the ◀◀ or ▶▶ keys when the machine is in the || status is active. If they are pressed, playback will not be possible after the || status has been canceled. If the ◀◀ or ▶▶ keys are pressed in the || status, press the ■ key and return to start mode (No. 1).

* NOTE 3: When pressing the ◀◀ or ▶▶ keys, take care to avoid damage to the gears. Because the sled motor is activated when the ◀◀ or ▶▶ keys are pressed, even when the pick-up is at the outermost or innermost track.

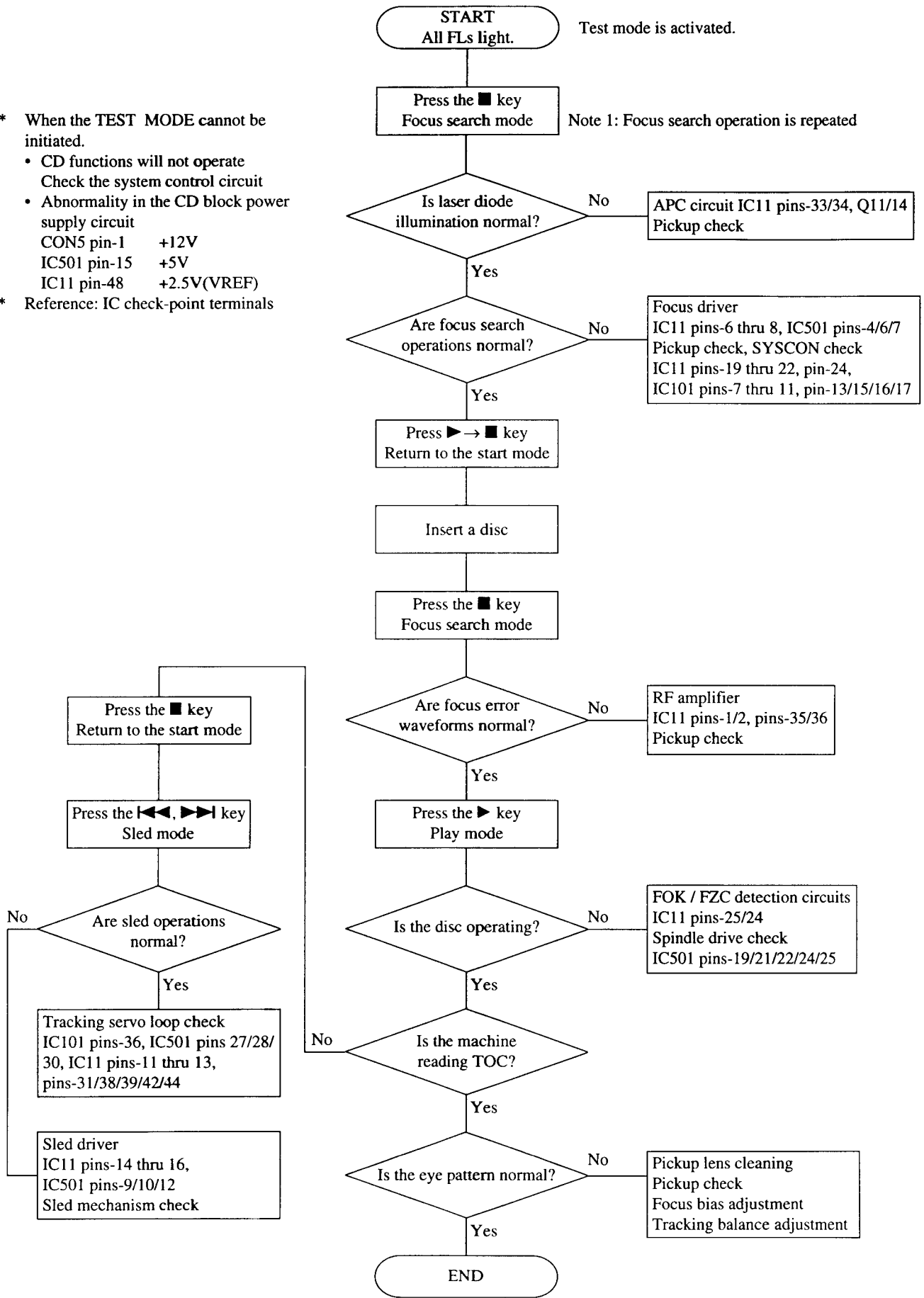
4. Operation Outline
 - The operation of each mode is carried out in the direction of the arrows from the start mode as indicated in the following illustration.
 - When DISC DIRECT key is pressed, test mode is operated same as pressing the PLAY key.
 - When CD tray is opened by OPEN / CLOSE key while play and traverse modes, test mode goes back start mode.



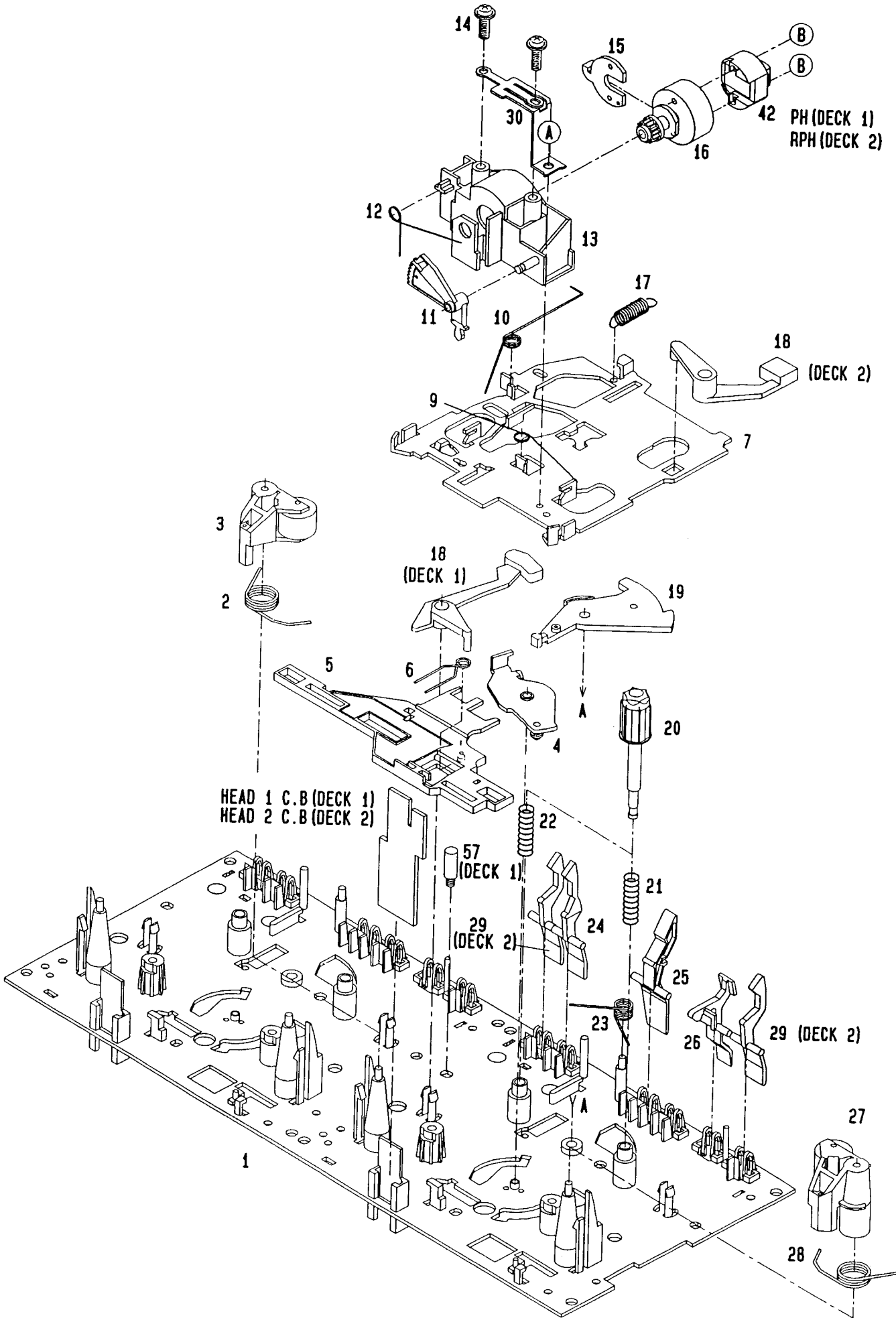
CD TROUBLE-SHOOTING

Flow Chart

- * When the TEST MODE cannot be initiated.
 - CD functions will not operate
 - Check the system control circuit
 - Abnormality in the CD block power supply circuit
 - CON5 pin-1 +12V
 - IC501 pin-15 +5V
 - IC11 pin-48 +2.5V(VREF)
- * Reference: IC check-point terminals

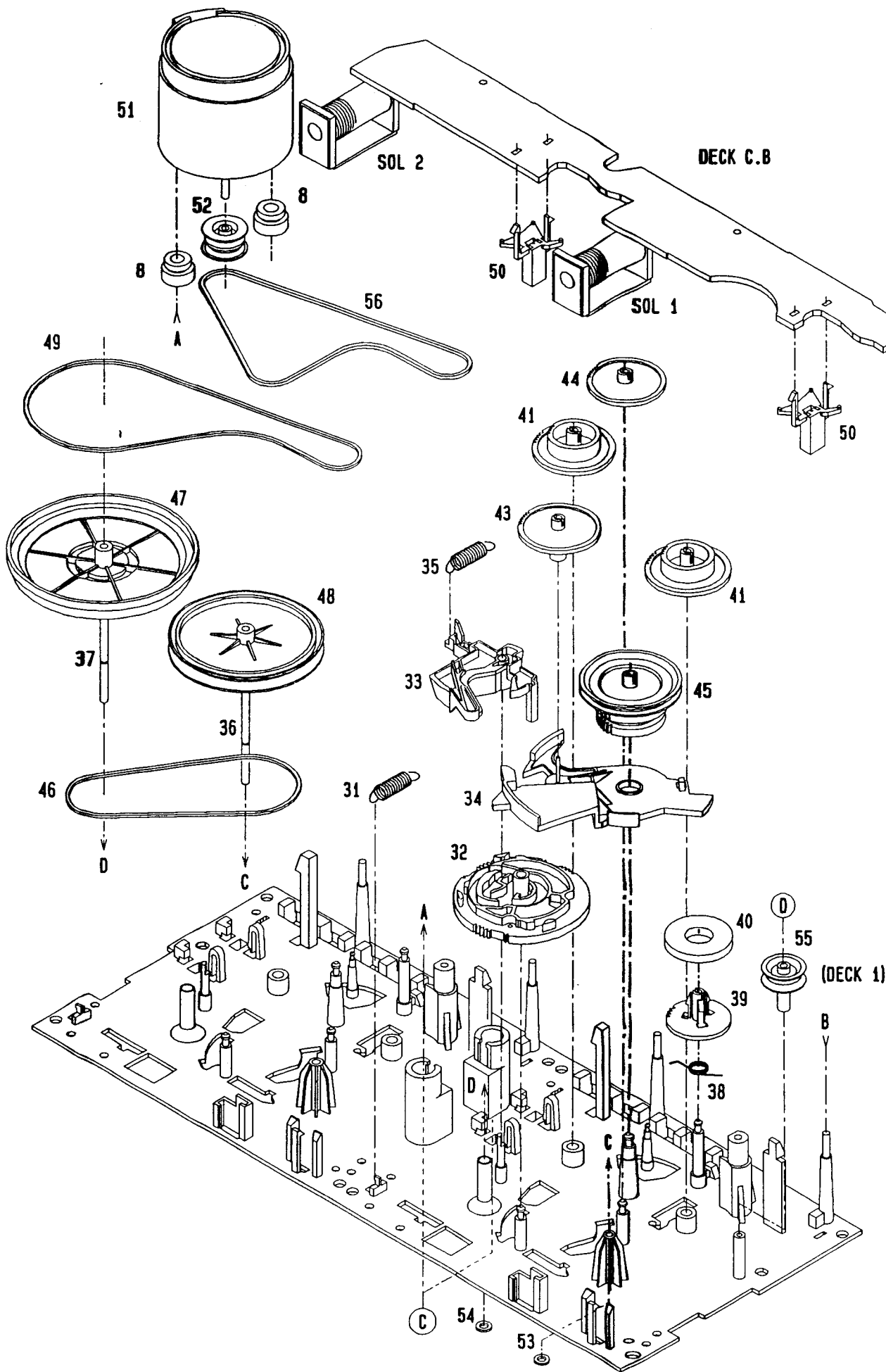


TAPE MECHANISM EXPLODED VIEW 1 / 1



C701
52
9F
335
203
05

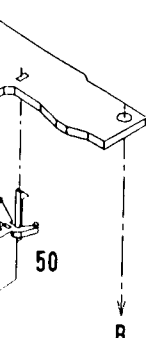
FT
E
LEB
-1
-2
SP
ER
E



TAPE MECHANISM PART LIST 1 / 1

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

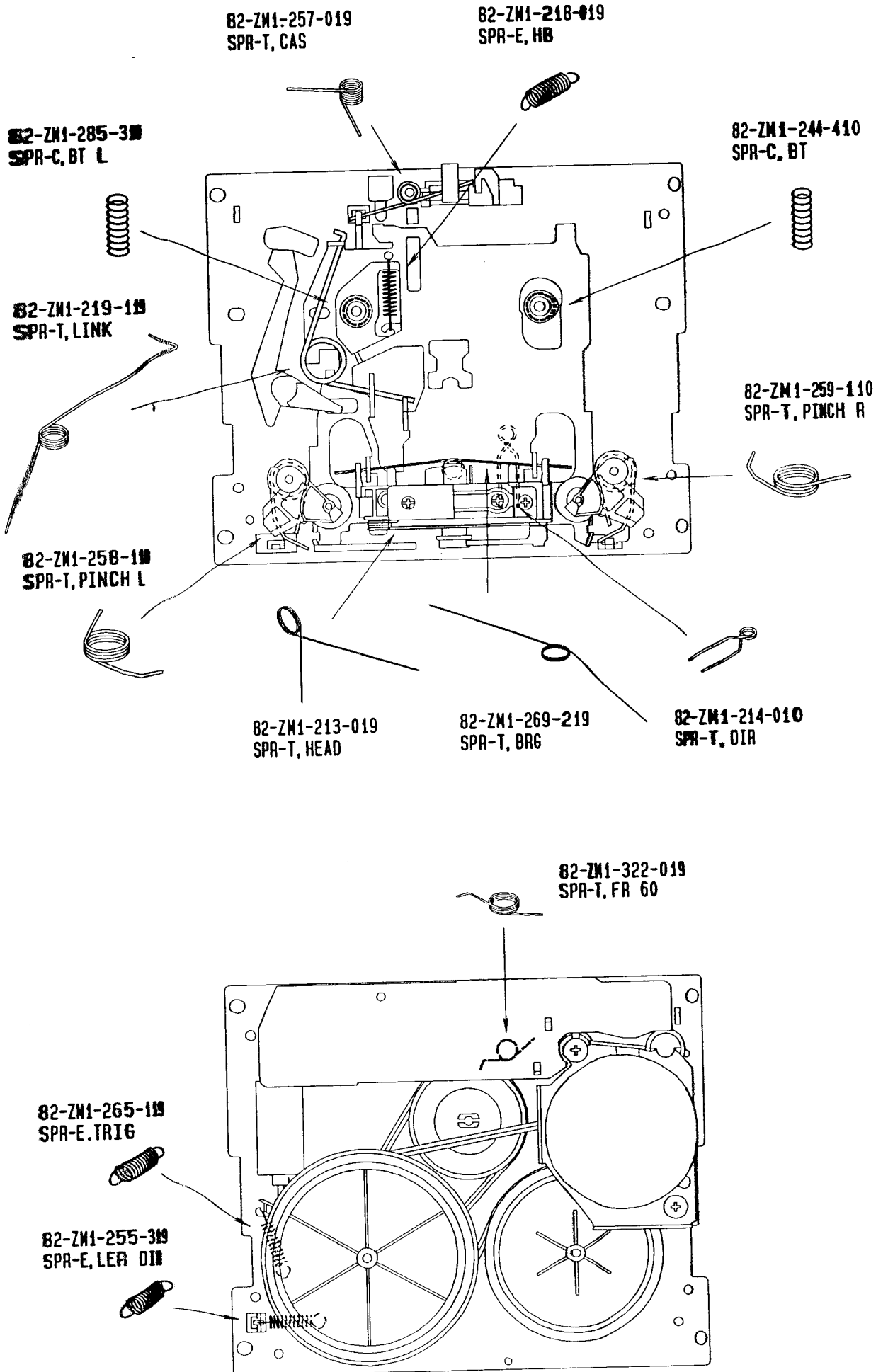
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2	35	82-ZM1-265-119		SPR-E,TRIG
2	82-ZM1-258-110		SPR-T,PINCH L	36	82-ZM1-236-019		CAPSTAN N 2-41.5
3	82-ZM1-345-019		LVR ASSY,PINCH L W	37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
4	82-ZM1-333-010		PLATE,LINK 2	38	82-ZM1-322-019		SPR-T,FR60
5	82-ZM1-266-11K		LVR,DIR	39	82-ZM1-220-219		GEAR,IDLER
6	82-ZM1-214-010		SPR-T,DIR	40	82-ZM3-616-019		RING MAGNET 4
7	82-ZM1-206-81K		CHAS,HEAD	41	82-ZM1-216-31K		GEAR,REEL
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2	42	87-046-355-019		HEAD,PH HADKH2529B(PH)
9	82-ZM1-269-219		SPR-T,BRG	42	87-046-356-019		HEAD,RPH HADKH5581B(RPH)
10	82-ZM1-219-119		SPR-T,LINK	43	82-ZM1-225-21K		GEAR,FR
11	82-ZM1-210-119		GEAR,H T	44	82-ZM1-226-019		GEAR,REW
12	82-ZM1-213-019		SPR-T,HEAD	45	82-ZM1-228-810		SLIP DISK ASSY
13	82-ZM1-207-619		GUIDE,TAPE	46	82-ZM1-338-010		BELT FR4
14	82-ZM1-283-310		S-SCREW,AZIMUTH	47	82-ZM1-238-81K		FLY-WHL ASSY,R (DECK 2)
15	82-ZM1-314-119		PLATE,HEAD	47	82-ZM3-210-71K		FLY-WHL ASSY,R2 (DECK 1)
16	82-ZM1-208-119		HLDR,HEAD	48	82-ZM1-235-51K		FLY-WHL ASSY,L (DECK 2)
17	82-ZM1-218-019		SPR-E,HB	48	82-ZM3-208-61K		FLY-WHL ASSY,L2 (DECK 1)
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)	49	82-ZM3-329-210		BELT,SBU R2
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)	50	82-ZM1-245-210		HLDR,IC
19	82-ZM1-222-21K		LVR,PLAY	51	87-045-347-019		MOT,SHU2L 70(M1)
20	82-ZM1-217-319		REEL TABLE	52	82-ZM3-221-010		PULLEY,MOT 2M
21	82-ZM1-244-510		SPR-C,BT	53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
22	82-ZM1-285-310		SPR-C,BT L	54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
23	82-ZM1-257-019		SPR-T,CAS	55	82-ZM3-304-110		PULLEY,COUPLER (DECK 1)
24	82-ZM1-241-319		LVR,MC	56	82-ZM3-328-110		BELT,SBU P2
25	82-ZM1-242-019		LVR,CAS	57	82-ZM3-216-019		SHAFT,COUPLER N(DECK 1)
26	82-ZM1-243-019		LVR,STOP	A	82-ZM1-315-010		S-SCREW,GVIDE TAPE
27	82-ZM1-346-019		LVR ASSY,PINCH R W	B	80-ZM6-207-019		V+1.6-7
28	82-ZM1-259-110		SPR-T,PINCH R	C	82-ZM3-318-019		S-SCRW MOTOR M2
29	82-ZM1-240-11K		LVR,REC (DECK 2)	D	87-067-972-019		PW,1.05-3-0.25 SLT
30	82-ZM1-298-010		SPR-P,EARTH				
31	82-ZM1-255-319		SPR-E,LVR DIR				
32	82-ZM3-305-01K		GEAR,CAM M2				
33	82-ZM1-227-21K		LVR,TRIG				
34	82-ZM3-306-11K		LVR,FR M2				



(DECK 1)



SPRING APPLICATION POSITION



CD MECHANISM EXPLODED VIEW 1 / 2

