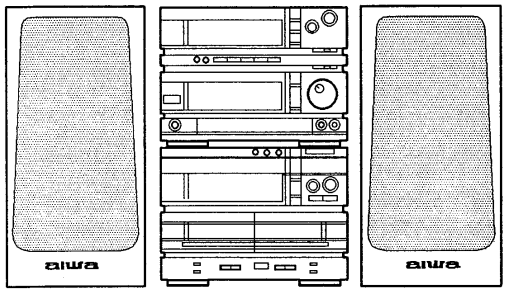
aiwa

NSX - D909

SERVICE MANUAL



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM – 3PR2N
- BASIC CD MECHANISM : KSM – 2101ABM
- TYPE. HE,LH,HR,E,K,Z

SYSTEM	AMPLIFIER TUNER	CASSETTE DECK CD PLAYER	REMOTE CONTROLLER	SPEAKER
NSX – D909	RX – N909	FD – N909	RC – TN909	SX – N909

S/M Code No. 09 – 939 – 026 – 10T

TABLE OF CONTENTS

SPECIFICATIONS

TUNER/AMPLIFIER RX-N909

<FM section>

Frequency range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	1.8 µV (75 ohms) 16.2 dBf
Alternate channel selectivity	50 dB (±400 kHz)
Signal-to-noise ratio	Except Z: STEREO 70 dB MONO 72 dB Z: STEREO 65 dB MONO 68 dB
Harmonic distortion	0.3% (MONO), 1 kHz 0.8% (STEREO), 1 kHz
Frequency response	20 Hz to 15 kHz (+0.5 dB, –3 dB)
Stereo separation	35 dB at 1 kHz
Antenna	75 ohms (unbalanced)

<AM (MW) section>

Frequency range	531 (530) kHz to 1,602 (1,710) kHz
Usable sensitivity	400 µV/m
Selectivity	22 dB (9 kHz)
Signal-to-noise ratio	53 dB (100 dB input)
Antenna	Loop antenna

<LW section> E, K, Z models only

Frequency range	144 kHz to 290 kHz
Sensitivity	1,000 µV/m
Signal-to-noise ratio	47 dB (106 dB input)
Antenna	Loop antenna

<Timer section and general>

Program timer	"Once" and/or "every" (independent setting)
Sleep timer	Capable of setting in 10 minute increments, 99 minutes maximum

<Amplifier section>

Power output	LH, HE, HR: 50 W + 50 W (6 ohms, T.H.D. 10%, 1 kHz) front 10 W + 10 W (16 ohms, T.H.D. 10%, 1 kHz) rear E, K, Z: 35 W + 35 W (6 ohms, T.H.D. 1%, 1 kHz) front 7.5 W + 7.5 W (16 ohms, T.H.D. 1%, 1 kHz) rear
Harmonic distortion	LH, HE, HR: 0.1% (25 W, 1 kHz, 6 ohms) E, K, Z: 0.1% (17.5 W, 1 kHz, 6 ohms)
Input sensitivity (load impedance)	VIDEO 1/DAT: 300 mV (47 kohms with volume) VIDEO 2/AUX: 500 mV (47 kohms with volume)
Power requirements	HE, LH, HR models: 120/220/240 V AC selectable, 50/60 Hz E, Z models: 230 V AC, 50 Hz K model: 240 V AC, 50 Hz
Power consumption	HE, LH, HR: 100 W E, K, Z: 230 W
Dimensions (W × H × D)	HE, LH, HR models: 260 × 198 × 330.5 mm (10.4 × 7.92 × 13.22 in.) E, K, Z models: 260 × 198 × 333.5 mm (10.4 × 7.92 × 13.34 in.)
Weight	7.0 kg (15.43 lbs.)

CASSETTE DECK/COMPACT DISC PLAYER FD-N909

<Cassette deck section>

Track format	4 tracks, 2 channels
Frequency response	Metal tape: 20 – 17,000 Hz CrO_2 tape: 20 – 16,000 Hz Normal tape: 20 – 15,000 Hz
Signal-to-noise ration	73 dB (Dolby C NR ON, metal tape peak level above 5 kHz)
Wow and flutter	0.12% (WRMS) ± 0.19% (WPEAK)
Tape speed	4.8 cm/sec. ($1^7/_8$ ips) 9.5 cm/sec. (double speed)
Recording system	AC bias
Erase system	AC erase
Motor	DC servomotor × 1
Heads	Playback head × 1 (deck 1) Record/playback/erase head × 1 (deck 2)

<Compact disc player section>

Disc	Compact disc
Scanning method	Non-contact optical scanner (with semi-conductor laser)
Laser	Semi-conductor laser (λ = 780 nm)
Rotation speed	Approx. 500 rpm – 200 rpm (CLV)
Error correction	Cross Interleave, Reed Solomon code
D-A conversion	1-bit DAC
Signal-to-noise ratio	90 dB (1 kHz)
Harmonic distortion	0.07% (1 kHz)
Wow/flutter	Unmeasurable
Dimensions (W × H × D)	260 × 198 × 328 mm (10.40 × 7.92 × 13.12 in.)
Weight	4.5 kg (9.9 lbs.)

SPEAKER SX-N909

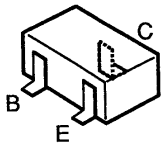
Cabinet type	3-way, bass reflex (EIAJ magnetically shielded)
Impedance	6 ohms
Music power	60 W
Speaker	130 mm cone type woofer 60 mm cone type tweeter 30 mm ceramic type super tweeter
Output sound pressure level	87 dB/W/m
Dimensions (W × H × D)	198 × 396 × 230 mm (7.92 × 15.84 × 9.2 in.)
Weight	4.2 kg (9.24 lbs.)

COMMON SECTION

Power requirements	HE, LH, HR models: 120/220/240 V AC selectable, 50/60 Hz E, Z models: 230 V AC, 50 Hz K model: 240 V AC, 50 Hz
Power consumption	System total HE, LH, HR: 120 W E, K, Z: 245 W
Dimensions (W × H × D)	Vertical placement HE, LH, HR models: 656 × 396 × 330.5 mm (26.24 × 15.84 × 13.22 in.) E, K, Z models: 656 × 396 × 333.5 mm (26.24 × 15.84 × 13.34 in.) Horizontal placement HE, LH, HR models: 916 × 396 × 330.5 mm (36.64 × 15.84 × 13.22 in.) E, K, Z models: 916 × 396 × 333.5 mm (36.64 × 15.84 × 13.34 in.)
Weight	19.9 kg (43.8 lbs.)

- 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.

TRANSISTOR ILLUSTRATION (RX – N909, FD – N909)



2SA1162
2SA1362
2SC2712
2SC2714
2SC3326
DTA114EK
DTA114YK
DTA124
DTA143
DTA144
DTC114YK
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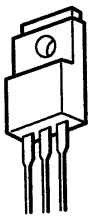
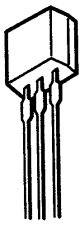
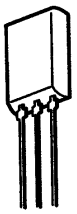


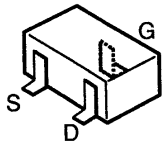
2SB1370



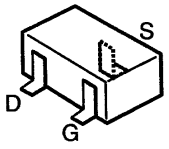
2SA933
2SC1740
DTC114ES
DTC114YS
DTA114TK



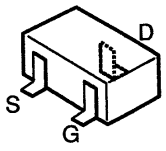
2SD2005



2SK209
2SK368



2SK302



2SK360

MODEL NO.

RX-N909

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
IC			
	82-NT1-630-010		IC, CXP82324
	82-NE6-617-010		IC GP1U581X
	87-002-950-010		IC, BA3826S
	87-027-235-010		IC, NJM-4558D
	87-002-220-010		IC, UPA80C
	87-002-861-010		IC, CXP2201AS
	87-001-607-080		IC, NJM4558M
	87-017-311-080		IC, M65831FP<HR, HE>
	87-002-444-010		IC, BU4094B
	87-002-967-080		IC, BU4052BF
	87-020-982-010		IC, STK-4162MK-2 (*)
	87-002-218-010		IC, XRC5451AP
	87-017-016-010		IC, LM3875
	87-002-278-010		IC, LA2730
	87-020-908-010		IC, NJU4066BD
	87-027-938-010		IC, TC4053BP
	87-001-476-010		IC, TC9154AP
	87-001-131-010		IC, NJM2058BD
	87-002-872-080		IC, MC14053BF
	87-002-901-080		IC, BU4094BF
	87-017-296-080		IC, LA1831M
	87-001-927-080		IC, LC 7218M
	87-017-019-010		IC, CXP81312
	87-017-022-080		IC, NJM2068M-D(T1)
	87-002-214-010		IC, CS5339-KP
	87-017-018-010		IC, CXD2701Q
	87-017-291-010		IC, TMS44C256-10N
	87-002-279-010		IC, SM5840ES
	87-017-446-080		IC, PCM69AU
	87-002-412-080		IC, SN74HC00NS
	87-002-409-080		IC, SN74HC74NS
	87-020-881-080		IC NJM78L05A
	87-020-882-080		IC, NJM79L05
	87-001-536-010		IC, NJM78M05FA
TRANSISTOR			
	89-420-052-080		TR, 2SD2005Q
	87-026-245-080		TR, DTC114ES
	89-112-965-080		TR, 2SA1296GR
	89-327-125-080		C-TR, 2SC2712GR
	87-026-462-080		TR, 2SC1740S(RS)
	89-110-155-080		TR, 2SA1015GR
	87-026-227-080		C-TR, DTA114EK
	89-213-702-010		TR, 2SB1370E
	89-111-625-080		C-TR, 2SA1162GR
	89-332-665-080		TR, 2SC3266GR
	89-318-155-080		TR, 2SC1815GR
	89-333-265-080		C-TR, 2SC3326A
	87-026-213-080		C-TR, DTC114YK T147
	87-026-215-080		TR, DTC114YS
	89-113-187-880		TR, 2SA1318TU
	89-333-317-080		TR, 2SC3331 T
	89-503-025-080		C-FET, 2SK302 GR
	89-327-143-080		C-TR, 2SC2714(O)
	89-503-602-080		C-FET, 2SK360E
	89-333-266-080		C-TR, 2SC3326B<K, Z, E>
	87-026-233-080		TR, DTA114TK
	89-502-094-080		FET, 2SK209Y
	87-026-229-080		C-TR, DTA143XK
	87-026-230-080		C-TR, DTA114YK<K, Z, E>
	87-026-211-080		C-TR, DTA144EK
	87-026-238-080		C-TR, DTC144WK
	89-109-521-080		TR, 2SA952K

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
DIODE			
	87-020-691-080		DIODE, 1SS132
	87-017-163-080		ZENER, HZS 9A1L
	87-017-101-080		ZENER, HZS6C2
	87-001-911-080		ZENER, UTZJ 4.7A
	87-001-290-080		ZENER, HZS6B1L
	87-020-027-080		C-DIODE, 1SS184
	87-002-225-010		DIODE, DBF 40C-K10
	87-001-912-080		ZENER, UTZJ 5.1B
	87-020-125-080		C-DIODE, 1SS181
	87-001-820-010		DIODE, GP15B(F)
	87-001-574-080		DIODE, 1SR139-200 T31
	87-001-919-080		ZENER, UTZJ27C
	87-001-916-080		ZENER, UTZJ10B
	87-027-405-080		ZENER, RD2.2EB<HR, K, Z, E>
	87-027-416-080		ZENER, HZ3C2
	87-001-915-080		ZENER, UTZJ6.8A<HR, K, Z, E>
	87-020-465-080		DIODE, 1SS133 T-72
	87-017-097-080		ZENER, HZS6B1
	87-017-121-080		ZENER, HZS11A1
	87-020-339-080		C-DIODE, 1SS226
MAIN C.B			
C109	81-794-643-090		CAP, E 4700-50V
C110	81-794-643-090		CAP, E 4700-50V
C111	87-010-101-080		CAP, E 220-16 SME
C112	87-010-405-080		CAP, E 10-50 SME
C113	87-010-263-080		CAP, E 100-10
C114	87-015-914-080		CAP, E 47-100
C115	87-010-384-080		CAP, E 100-25 SME<HR, HE, LH>
C115	87-010-385-080		CAP, E 220-25 SME<K, Z, E>
C116	87-010-384-080		CAP, E 100-25 SME<HR, HE, LH>
C116	87-010-385-080		CAP, E 220-25 SME<K, Z, E>
C117	87-010-400-080		CAP, E 0.47-50 SME
C118	87-010-401-080		CAP, E 1-50 SME
C119	87-010-544-080		CAP, E 0.1-50
C120	87-010-235-080		CAP, E 470-16 SME
C121	87-010-101-080		CAP, E 220-16 SME
C122	87-010-374-080		CAP, E 47-10
C123	87-010-374-080		CAP, E 47-10
C124	87-010-260-080		CAP, E 47-25 SME
C125	87-010-405-080		CAP, E 10-50 SME
C126	87-012-140-080		C-CAP, S 470P-50 CH
C127	87-016-110-090		CAP, E 5600-25SME
C128	87-010-374-080		CAP, E 47-10
C129	87-010-405-080		CAP, E 10-50 SME<HE, LH>
C129	87-010-404-080		CAP, E 4.7-50 SME<HR, K, Z, E>
C131	87-018-131-080		CAP, TC-U 1000P
C201	87-010-401-080		CAP, E 1-50 SME
C202	87-010-401-080		CAP, E 1-50 SME
C203	87-010-401-080		CAP, E 1-50 SME
C204	87-010-401-080		CAP, E 1-50 SME
C205	87-010-403-080		CAP, E 3.3-50 SME
C206	87-010-403-080		CAP, E 3.3-50 SME
C207	87-010-380-080		CAP, E 47-16 SME
C208	87-010-380-080		CAP, E 47-16 SME
C209	87-010-401-080		CAP, E 1-50 SME
C210	87-010-401-080		CAP, E 1-50 SME
C211	87-010-402-080		CAP, E 2.2-50 SME
C212	87-010-402-080		CAP, E 2.2-50 SME
C213	87-010-402-080		CAP, E 2.2-50 SME
C214	87-010-402-080		CAP, E 2.2-50 SME
C215	87-010-178-080		C-CAP, S 1000P-50 B
C216	87-010-178-080		C-CAP, S 1000P-50 B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C217	87-010-400-080		CAP, E 0.47-50 SME
C218	87-010-400-080		CAP, E 0.47-50 SME
C219	87-010-405-080		CAP, E 10-50 SME
C220	87-010-405-080		CAP, E 10-50 SME
C221	87-010-374-080		CAP, E 47-10
C222	87-010-374-080		CAP, E 47-10
C223	87-010-315-080		C-CAP, S 27P-50 CH
C224	87-010-315-080		C-CAP, S 27P-50 CH
C225	87-010-260-080		CAP, E 47-25 SME
C226	87-010-260-080		CAP, E 47-25 SME
C229	87-016-247-080		C-CAP, 0.1-50 F
C230	87-016-247-080		C-CAP, 0.1-50 F
C231	87-010-184-080		C-CAP, S 3300P-50 B<Z>
C232	87-010-184-080		C-CAP, S 3300P-50 B<Z>
C233	87-010-197-080		C-CAP, S 0.01-25 B<Z>
C234	87-010-197-080		C-CAP, S 0.01-25 B<Z>
C235	87-010-405-080		CAP, E 10-50 SME
C236	87-010-197-080		C-CAP, S 0.01-25 B
C237	87-010-197-080		C-CAP, S 0.01-25 B
C239	87-010-197-080		C-CAP, S 0.01-25 B
C241	87-010-178-080		C-CAP, S 1000P-50 B
C242	87-010-546-080		CAP, E 0.33-50 SME
C243	87-010-406-080		CAP, E 22-50 SME
C244	87-016-247-080		C-CAP, 0.1-50 F
C246	87-010-405-080		CAP, E 10-50 SME
C247	87-010-405-080		CAP, E 10-50 SME
C248	87-010-408-080		CAP, E 47-50 SME
C251	87-010-197-080		C-CAP, S 0.01-25 B
C260	87-010-178-080		C-CAP, S 1000P-50 B
C261	87-010-198-080		C-CAP, S 0.022-25 B
C301	87-010-405-080		CAP, E 10-50 SME
C302	87-010-405-080		CAP, E 10-50 SME
C303	87-010-405-080		CAP, E 10-50 SME
C304	87-010-405-080		CAP, E 10-50 SME
C305	87-010-182-080		C-CAP, S 2200P-50 B
C307	87-010-182-080		C-CAP, S 2200P-50 B
C309	87-010-189-080		C-CAP, S 8200P-50 B
C311	87-010-189-080		C-CAP, S 8200P-50 B
C313	87-010-189-080		C-CAP, S 8200P-50 B
C315	87-010-186-080		C-CAP, S 4700P-50 B
C316	87-010-186-080		C-CAP, S 4700P-50 B
C317	87-010-186-080		C-CAP, S 4700P-50 B
C318	87-010-186-080		C-CAP, S 4700P-50 B
C321	87-010-322-080		C-CAP, S 100P-50 CH
C322	87-010-322-080		C-CAP, S 100P-50 CH
C323	87-010-404-080		CAP, E 4.7-50 SME
C324	87-010-404-080		CAP, E 4.7-50 SME
C325	87-010-405-080		CAP, E 10-50 SME
C326	87-010-405-080		CAP, E 10-50 SME
C327	87-010-405-080		CAP, E 10-50 SME
C328	87-010-405-080		CAP, E 10-50 SME
C329	87-010-401-080		CAP, E 1-50 SME
C330	87-010-401-080		CAP, E 1-50 SME
C331	87-010-405-080		CAP, E 10-50 SME
C332	87-010-405-080		CAP, E 10-50 SME
C333	87-010-263-080		CAP, E 100-10
C334	87-010-263-080		CAP, E 100-10
C335	87-010-197-080		C-CAP, S 0.01-25 B
C401	87-010-312-080		C-CAP, S 15P-50 CH
C403	87-010-197-080		C-CAP, S 0.01-25 B
C404	87-010-197-080		C-CAP, S 0.01-25 B
C405	87-010-312-080		C-CAP, S 15P-50 CH
C406	87-010-155-080		C-CAP, S 12P-50SL<Z>
C407	87-010-147-080		C-CAP, S 3P-50 CH
C408	87-010-145-080		C-CAP, S 1P-50 CH
C409	87-010-314-080		C-CAP, S 22P-50 CH
C410	87-010-154-080		C-CAP, S 10P-50 CH
C411	87-010-312-080		C-CAP, S 15P-50 CH
C412	87-010-312-080		C-CAP, S 15P-50 CH
C413	87-010-197-080		C-CAP, S 0.01-25 B
C414	87-010-146-080		C-CAP, S 2P-50 CH
C415	87-010-148-080		C-CAP, S 4P-50 CH<Z>
C416	87-010-154-080		C-CAP, S 10P-50 CH<EXCEPT Z>
C416	87-010-149-080		C-CAP, S 5P-50 CH<Z>
C417	87-010-197-080		C-CAP, S 0.01-25 B
C418	87-012-156-080		C-CAP, S220P CH
C419	87-010-197-080		C-CAP, S 0.01-25 B
C422	87-010-149-080		C-CAP, S 5P-50 CH
C423	87-010-400-080		CAP, E 0.47-50 SME
C451	87-010-316-080		C-CAP, S 33P-50 CH<K, Z, E>
C452	87-010-197-080		C-CAP, S 0.01-25 B
C453	87-010-544-080		CAP, E 0.1-50
C454	87-010-154-080		C-CAP, S 10P-50 CH<HR, HE, LH>
C454	87-010-314-080		C-CAP. S 22P-50 CH<K, Z, E>
C455	87-010-174-080		C-CAP, S 470P-50 SL<K, Z, E>
C456	87-010-169-080		C-CAP, S 180P-50 SL<K, Z, E>
C457	87-010-175-080		C-CAP, S 560P-50 SL<K, Z, E>
C458	87-010-197-080		C-CAP, S 0.01-25 B<K, Z, E>
C459	87-010-197-080		C-CAP, S 0.01-25 B<K, Z, E>
C460	87-010-197-080		C-CAP, S 0.01-25 B
C471	87-010-197-080		C-CAP, S 0.01-25 B
C472	87-010-197-080		C-CAP, S 0.01-25 B
C473	87-010-197-080		C-CAP, S 0.01-25 B
C474	87-010-197-080		C-CAP, S 0.01-25 B
C475	87-010-196-080		C-CAP, S 0.1-25 F
C476	87-010-197-080		C-CAP, S 0.01-25 B
C477	87-010-197-080		C-CAP, S 0.01-25 B
C478	87-010-197-080		C-CAP, S 0.01-25 B<K, E>
C501	87-010-197-080		C-CAP, S 0.01-25 B
C502	87-010-197-080		C-CAP, S 0.01-25 B
C503	87-010-405-080		CAP, E 10-50 SME
C504	87-010-194-080		C-CAP, S 0.047-25 F
C505	87-010-401-080		CAP, E 1-50 SME
C506	87-010-402-080		CAP, E 2.2-50 SME
C507	87-010-178-080		C-CAP, S 1000P-50 B
C508	87-010-314-080		C-CAP, S 22P-50 CH
C509	87-010-403-080		CAP, E 3.3-50 SME
C510	87-010-382-080		CAP, E 22-25 SME
C511	87-010-194-080		C-CAP, S 0.047-25 F
C512	87-010-213-080		C-CAP, S 0.015-25 B
C513	87-010-178-080		C-CAP, S 1000P-50 B<EXCEPT Z>
C514	87-010-401-080		CAP, E 1-50 SME
C515	87-010-426-080		C-CAP, S 0.012-25 B
C516	87-010-426-080		C-CAP, S 0.012-25 B
C517	87-010-401-080		CAP, E 1-50 SME
C518	87-010-263-080		CAP, E 100-10
C519	87-010-194-080		C-CAP, S 0.047-25 F
C520	87-010-403-080		CAP, E 3.3-50 SME
C521	87-010-403-080		CAP, E 3.3-50 SME
C551	87-010-186-080		C-CAP, S 4700P-50 B
C552	87-010-400-080		CAP, E 0.47-50 SME
C553	87-010-384-080		CAP, E 100-25 SME
C554	87-010-315-080		C-CAP, S 27P-50 CH
C555	87-010-263-080		CAP, E 100-10
C556	87-010-197-080		C-CAP, S 0.01-25 B
C557	87-010-178-080		C-CAP, S 1000P-50 B
C558	87-010-178-080		C-CAP, S 1000P-50 B
C559	87-010-178-080		C-CAP, S 1000P-50 B
C560	87-010-178-080		C-CAP, S 1000P-50 B
C564	87-010-314-080		C-CAP, S 22P-50 CH
C571	87-010-179-080		C-CAP, S 1200P-50 B<Z>
C572	87-010-403-080		CAP, E 3.3-50 SME<Z>
C601	87-010-263-080		CAP, E 100-10
C602	87-010-263-080		CAP, E 100-10
C603	87-010-260-080		CAP, E 47-25 SME
C604	87-010-263-080		CAP, E 100-10
C605	87-010-401-080		CAP, E 1-50 SME
C606	87-010-401-080		CAP, E 1-50 SME
C607	87-010-179-080		C-CAP, S 1200P-50 B
C608	87-010-179-080		C-CAP, S 1200P-50 B
C609	87-010-184-080		C-CAP, S 3300P-50 B
C610	87-010-184-080		C-CAP, S 3300P-50 B
CF501	87-008-261-010		FLTR, SFE10.7MA5-A<EXCEPT Z>
CF501	87-008-423-010		FLTR, SFE10.7MS3G-A<Z>
CF502	87-008-261-010		FLTR, SFE10.7MA5-A<EXCEPT Z>
CF502	87-008-423-010		FLTR, SFE10.7MS3G-A<Z>
CF503	87-008-500-010		FLTR, CDA10.7MG43A-A
CF504	84-508-618-010		VIB, CER CSB 456 F15

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
D401	87-026-360-080		C-VARI CAP, KV1430
D402	87-026-360-080		C-VARI CAP, KV1430
D403	87-026-360-080		C-VARI CAP, KV1430<Z>
D404	87-026-360-080		C-VARI CAP, KV1430
D451	81-754-634-010		VARI-CAP, KV1260<K, Z, E>
J202	80-MT3-616-010		JACK, PIN 2P<EXCEPT Z>
J202	80-MT3-631-010		JACK, PIN 2P EARTH<Z>
J203	87-033-215-010		TERMINAL SP 4P R (*)
J301	81-669-655-010		JACK, 6.3 W/S AU
J401	81-631-646-010		ANT TERM 2P PAL<K, Z, E>
J401	87-033-214-010		ANT TERM 4P(JT)<HR, HE, LH>
L201	87-005-366-010		COIL, 1UH<Z>
L202	87-005-366-010		COIL, 1UH<Z>
L203	87-005-366-010		COIL, 1UH<Z>
L401	87-006-209-010		COIL, ANT FM 3/4T, L5
L402	87-006-210-010		COIL, ANT FM2-3/4TSL5
L403	87-006-200-010		COIL, RF FM 3-1/2T, L5
L404	87-006-201-010		COIL, RF FM3-1/2TS, L5
L405	87-006-201-010		COIL, RF FM3-1/2TS, L5<Z>
L406	87-006-205-010		COIL, OSC FM(7K)
L407	87-003-231-080		C-COIL, S 1UH
L408	87-008-427-010		COIL, FM IFT
L451	81-MX4-620-010		AM PACK 3, S<HR, HE, LH>
L451	87-006-207-010		COIL, ANT MW (3B)<K, Z, E>
L452	87-006-208-010		COIL, ANT LW<K, Z, E>
L453	82-794-687-010		COIL, OSC<K, Z, E>
L454	82-794-688-010		COIL, OSC LW<K, Z, E>
L501	82-NT1-659-010		FLTR, CFAZ4502NT
L503	87-003-241-080		C-COIL, S 4.7UH K
L504	82-NT1-633-010		FLTR, AMTI-BIRDIE<Z>
L551	87-003-241-080		C-COIL, S 4.7UH K
L601	81-631-643-010		COIL, 1 POLE MPX
L602	81-631-643-010		COIL, 1 POLE MPX
⚠R107	87-029-016-010		FUSE, RES 22-1/2W<HR, K, Z, E>
R108	87-022-538-010		RES, M/O 27-1W<HE, LH>
R109	87-022-538-010		RES, M/O 27-1W<HE, LH>
R110	87-022-538-010		RES, M/O 27-1W<HE, LH>
R111	87-022-538-010		RES, M/O 27-1W<HE, LH>
R145	87-022-050-080		RES, METAL 1W-0.22J
R146	87-022-050-080		RES, METAL 1W-0.22J
R186	87-022-200-080		RES, METAL 0.56-1W
R187	87-022-538-010		RES, M/O 27-1W<HE, LH>
⚠R188	87-029-366-010		FUSE, RES 4.7-1/2W FM<HE, LH>
⚠R188	87-029-089-010		FUSE, RES 4.7-1/4W<HR, K, Z, E>
R255	87-022-050-080		RES, METAL 1W-0.22J
R256	87-022-050-080		RES, METAL 1W-0.22J
R257	87-022-050-080		RES, METAL 1W-0.22J
R258	87-022-050-080		RES, METAL 1W-0.22J
RY101	87-045-335-010		RELAY, G5Z-2A 12VDC
RY201	87-045-307-010		RELAY, LZ-12WM-K
SF401	87-030-105-010		FLTR, BPMB6A<Z>
TC401	87-011-219-080		CAP TRIMMER 10P
TC402	87-011-219-080		CAP TRIMMER 10P
TC403	87-011-219-080		CAP TRIMMER 10P<Z>
TC451	87-011-220-080		CAP TRIMMER 20P VCT<K, Z, E>
TC452	87-011-221-080		TRIMER, 30P VCT 51<K, Z, E>
W101	82-NT1-640-010		F-CABLE, 7P-2.5
W102	81-MV3-626-010		CORD, FG 15P<HE, LH>
W102	82-NT1-644-010		CORD, FG 15P<HR, K, Z, E>
X551	87-030-122-010		VIB, XTAL 7.2MHZ

FRONT C.B

C3	87-010-197-080		C-CAP, S 0.01-25 B
C4	87-010-263-080		CAP, E 100-10
C5	87-010-178-080		C-CAP, S 1000P-50 B
C6	87-010-182-080		C-CAP, S 2200P-50 B
C8	87-010-404-080		CAP, E 4.7-50 SME
C9	87-010-179-080		C-CAP, S 1200P-50 B
C10	87-010-400-080		CAP, E 0.47-50 SME
C11	87-012-145-080		C-CAP S 270P-50CH
C12	87-010-544-080		CAP, E 0.1-50 SME
C13	87-010-405-080		CAP, E 10-50 SME
C14	87-010-405-080		CAP, E 10-50 SME
C15	87-010-178-080		C-CAP, S 1000P-50 B
C16	87-010-401-080		CAP, E 1-50 SME
C17	87-015-785-080		C-CAP, 0.1-25 F
C18	87-010-405-080		CAP, E 10-50 SME
C19	87-010-405-080		CAP, E 10-50 SME
C20	87-010-405-080		CAP, E 10-50 SME
C21	87-010-401-080		CAP, E 1-50 SME
C22	87-012-140-080		C-CAP, S 470P-50 CH
C30	87-010-221-080		CAP, E 470-10
C31	87-010-178-080		C-CAP, S 1000P-50 B
C32	87-010-404-080		CAP, E 4.7-50 SME
C35	87-015-785-080		C-CAP, 0.1-25 F
C36	87-010-405-080		CAP, E 10-50 SME
C37	87-010-405-080		CAP, E 10-50 SME
C40	87-010-405-080		CAP, E 10-50 SME
C41	87-010-196-080		C-CAP, S 0.1-25 F
C80	87-010-221-080		CAP, E 470-10
C81	87-010-221-080		CAP, E 470-10
C101	87-010-193-080		C-CAP, S 0.033-25 F<HR, HE>
C102	87-010-178-080		C-CAP, S 1000P-50 B<HR, HE>
C104	87-010-260-080		CAP, E 47-25 SME<HR, HE>
C108	87-010-178-080		C-CAP, S 1000P-50 B<HR, HE>
C109	87-010-187-080		C-CAP, S 5600P-50 B<HR, HE>
C110	87-010-401-080		CAP, E 1-50 SME
C111	87-018-133-080		CAP, TC-U 4700P-16 X<HR, HE>
C112	87-010-197-080		C-CAP, S 0.01-25 B<HR, HE>
C114	87-010-187-080		C-CAP, S 5600P-50 B<HR, HE>
C125	87-012-154-080		C-CAP, S 150P-50 CH
C126	87-010-197-080		C-CAP, S 0.01-25 B
C127	87-010-178-080		C-CAP, S 1000P-50 B
C128	87-012-154-080		C-CAP, S 150P-50 CH
C132	87-010-196-080		C-CAP, S 0.1-25 F
C133	87-015-883-080		C-CAP, 0.022-25 B
C182	87-010-197-080		C-CAP, S 0.01-25 B
C983	87-015-819-080		C-CAP, 0.01-50 BK
C984	87-015-819-080		C-CAP, 0.01-50 BK
C985	87-010-197-080		C-CAP, S 0.01-25 B
C986	87-010-197-080		C-CAP, S 0.01-25 B
C990	87-010-197-080		C-CAP, S 0.01-25 B
C991	87-010-197-080		C-CAP, S 0.01-25 B
C993	87-015-819-080		C-CAP, 0.01-50 BK
C994	87-010-197-080		C-CAP, S 0.01-25 B
C995	87-015-819-080		C-CAP, 0.01-50 BK
C996	87-015-627-080		C-CAP, 1000P-50 B
CF1	87-008-497-080		CERA LOCK CST7.68MTW
CF2	89-MX1-704-080		CERA LOCK(MU)3.9MHZ
CF101	87-008-496-080		CERA LOCK CST2.09MG<HR, HE>
D14	87-017-376-080		LED, SEL6514C TP6
D15	87-017-376-080		LED, SEL6514C TP6
D16	87-017-376-080		LED, SEL6514C TP6
D17	87-017-376-080		LED, SEL6514C TP6
D18	87-017-376-080		LED, SEL6514C TP6
D19	87-017-376-080		LED, SEL6514C TP6
D20	87-017-376-080		LED, SEL6514C TP6
D42	87-017-369-080		LED, SEL 2510C TP-6
D43	87-017-369-080		LED, SEL 2510C TP-6
FL1	82-VP2-615-010		FL, BJ124GK
FL2	82-NT1-631-010		FL, 9BT-119GK
J1	81-MX4-630-010		JACK, 3.5
L1	87-003-102-080		COIL, 10UH
L2	87-003-152-080		COIL, 100UH
L10	87-003-102-080		COIL, 10UH
L11	87-003-102-080		COIL, 10UH
L13	87-005-152-080		COIL, 10UH
SW1	87-036-215-080		SW, TACT EVQ-21404M
SW2	87-036-215-080		SW, TACT EVQ-21404M
SW3	87-036-215-080		SW, TACT EVQ-21404M
SW4	87-036-215-080		SW, TACT EVQ-21404M
SW5	87-036-215-080		SW, TACT EVQ-21404M
SW6	87-036-215-080		SW, TACT EVQ-21404M
SW7	87-036-215-080		SW, TACT EVQ-21404M
SW8	87-036-215-080		SW, TACT EVQ-21404M
SW9	87-036-215-080		SW, TACT EVQ-21404M
SW10	87-036-215-080		SW, TACT EVQ-21404M

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
SW11	87-036-215-080		SW, TACT EVQ-21404M
SW12	87-036-215-080		SW, TACT EVQ-21404M
SW13	87-036-215-080		SW, TACT EVQ-21404M
SW14	87-036-215-080		SW, TACT EVQ-21404M
SW15	87-036-215-080		SW, TACT EVQ-21404M
VR1	81-MT3-633-010		VR 10KA RK11K1130
VR2	82-NT1-650-010		VOL, SLIDE 100KW
VR101	82-NT1-651-010		VOL, SLIDE 10KB<HR, HE>
VOL C. B			
C204	87-018-134-080		CAP, TC-U 0. 01-16 Y
C207	87-010-405-080		CAP, E 10-50 SME
C208	87-010-405-080		CAP, E 10-50 SME
C209	87-012-154-080		C-CAP, S 150P-50 CH
C210	87-012-154-080		C-CAP, S 150P-50 CH
C213	87-010-401-080		CAP, E 1-50 SME
C214	87-010-401-080		CAP, E 1-50 SME
C215	87-010-404-080		CAP, E 4. 7-50 SME
C216	87-010-404-080		CAP, E 4. 7-50 SME
C217	87-010-183-080		C-CAP, S 2700P-50 B
C218	87-010-183-080		C-CAP, S 2700P-50 B
C219	87-012-155-080		C-CAP, S 180P-50 CH
C220	87-012-155-080		C-CAP, S 180P-50 CH
C221	87-010-405-080		CAP, E 10-50 SME
C222	87-010-405-080		CAP, E 10-50 SME
C225	87-010-400-080		CAP, E 0. 47-50 SME
C226	87-010-400-080		CAP, E 0. 47-50 SME
C227	87-010-404-080		CAP, E 4. 7-50 SME
C228	87-010-404-080		CAP, E 4. 7-50 SME
C229	87-010-405-080		CAP, E 10-50 SME
C230	87-010-405-080		CAP, E 10-50 SME
C231	87-010-405-080		CAP, E 10-50 SME
C232	87-010-401-080		CAP, E 1-50 SME
C233	87-010-401-080		CAP, E 1-50 SME
C234	87-010-401-080		CAP, E 1-50 SME
C237	87-010-101-080		CAP, E 220-16 SME
C238	87-015-819-080		C-CAP 0. 01
C239	87-010-405-080		CAP, E 10-50 SME
C240	87-010-263-080		CAP, E 100-10
C241	87-010-546-080		CAP, E 0. 33-50 SME
C244	87-010-401-080		CAP, E 1-50 SME
C245	87-010-101-080		CAP, E 220-16 SME
C246	87-010-406-080		CAP, E 22-50 SME
C247	87-010-112-080		CAP, E 100-16
C248	87-010-186-080		C-CAP, S 4700P-50 B
C250	87-010-189-080		C-CAP, S 8200P-50 B
C251	87-010-405-080		CAP, E 10-50 SME
C252	87-010-197-080		C-CAP, S 0. 01-25 B
C255	87-018-127-080		CAP, TC-U 470P-50 B
C256	87-010-321-080		C-CAP, S 82P-50 CH
C257	87-010-184-080		C-CAP, S 3300P-50 B
C258	87-010-405-080		CAP, E 10-50 SME
C259	87-010-405-080		CAP, E 10-50 SME
C260	87-010-197-080		C-CAP, S 0. 01-25 B
C261	87-010-197-080		C-CAP, S 0. 01-25 B
C262	87-010-197-080		C-CAP, S 0. 01-25 B
C264	87-010-404-080		CAP, E 4. 7-50 SME
C269	87-010-404-080		CAP, E 4. 7-50 SME
C281	87-010-405-080		CAP, E 10-50 SME
C282	87-010-405-080		CAP, E 10-50 SME
C285	87-010-405-080		CAP, E 10-50 SME
C286	87-010-263-080		CAP, E 100-10
C301	87-012-145-080		C-CAP S 270P-50CH<HR, K, Z, E>
C302	87-012-145-080		C-CAP S 270P-50CH<HR, K, Z, E>
C303	87-010-405-080		CAP, E 10-50 SME
C304	87-010-405-080		CAP, E 10-50 SME
C307	87-010-405-080		CAP, E 10-50 SME
C308	87-010-405-080		CAP, E 10-50 SME
C312	87-010-404-080		CAP, E 4. 7-50 SME
C313	87-010-374-080		CAP, E 47-10
C314	87-010-374-080		CAP, E 47-10
C351	87-010-197-080		C-CAP, S 0. 01-25 B
C981	87-010-194-080		C-CAP, S 0. 047-25 F
C982	87-010-194-080		C-CAP, S 0. 047-25 F
⚠R244	87-029-017-090		RES, FUSE 10-1/4W
VR201	82-NT1-632-010		VR, MOT 50KBX4, 100KC
TRAY C. B			
SW801	87-036-215-080		SW, TACT EVQ-21404M
SW802	87-036-215-080		SW, TACT EVQ-21404M
SW803	87-036-215-080		SW, TACT EVQ-21404M
SW804	87-036-215-080		SW, TACT EVQ-21404M
SW805	87-036-215-080		SW, TACT EVQ-21404M
SW806	87-036-215-080		SW, TACT EVQ-21404M
SW807	87-036-215-080		SW, TACT EVQ-21404M
SW808	87-036-215-080		SW, TACT EVQ-21404M
SW809	87-036-215-080		SW, TACT EVQ-21404M
SW810	87-036-215-080		SW, TACT EVQ-21404M
SW811	87-036-215-080		SW, TACT EVQ-21404M
SW812	87-036-215-080		SW, TACT EVQ-21404M
SW813	87-036-215-080		SW, TACT EVQ-21404M
SW814	87-036-215-080		SW, TACT EVQ-21404M
SW815	87-036-215-080		SW, TACT EVQ-21404M
SW816	87-036-215-080		SW, TACT EVQ-21404M
SW817	87-036-215-080		SW, TACT EVQ-21404M
SW818	87-036-215-080		SW, TACT EVQ-21404M
SW819	87-036-215-080		SW, TACT EVQ-21404M
SW820	87-036-215-080		SW, TACT EVQ-21404M
SW821	87-036-215-080		SW, TACT EVQ-21404M
SW822	87-036-215-080		SW, TACT EVQ-21404M
SW823	87-036-215-080		SW, TACT EVQ-21404M
SW824	87-036-215-080		SW, TACT EVQ-21404M
SW825	87-036-215-080		SW, TACT EVQ-21404M
SW826	87-036-215-080		SW, TACT EVQ-21404M
SW827	87-036-215-080		SW, TACT EVQ-21404M
SW828	87-036-110-010		SW, PUSH SPPB 62
SW829	87-036-110-010		SW, PUSH SPPB 62
MOTOR C. B			
C401	87-010-263-080		CAP, E 100-10
C402	87-010-263-080		CAP, E 100-10
PT-1 C. B			
⚠	87-033-213-080		CLAMP, FUSE SMK<HR, HE, LH>
⚠F101	87-035-366-010		FUSE, 2. 5A 250V T E/K<HR, HE, LH>
PT-2 C. B			
R998	87-022-184-080		RES, METAL 0. 33-1W<HE, LH>
R998	87-022-050-080		RES, METAL 1W-0. 22J
SW C. B			
SW901	87-036-173-010		SW, SL 2-2-4 SDKG<HR, HE, LH>
DSP C. B			
C902	87-010-194-080		C-CAP, S 0. 047-25 F
C903	87-012-349-080		C-CAP, S 1000P-50 CH
C904	87-012-349-080		C-CAP, S 1000P-50 CH
C905	87-010-234-080		CAP, E 47-16 5L
C906	87-010-234-080		CAP, E 47-16 5L
C907	87-012-349-080		C-CAP, S 1000P-50 CH
C908	87-012-349-080		C-CAP, S 1000P-50 CH
C911	87-016-264-080		C-CAP, TN4. 7-6. 3 F95Q
C912	87-010-805-080		C-CAP, S 1-16F
C913	87-010-079-080		CAP, E 100-6. 3 5L
C915	87-016-264-080		C-CAP, TN4. 7-6. 3 F95Q
C916	87-010-196-080		C-CAP, S 0. 1-25 F
C917	87-010-196-080		C-CAP, S 0. 1-25 F
C918	87-010-293-080		C-CAP, 47P-50 CH
C919	87-010-196-080		C-CAP, S 0. 1-25 F
C920	87-010-197-080		C-CAP, S 0. 01-25 B
C921	87-010-075-080		CAP, E 10-16 5L

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C922	87-010-075-080		CAP, E 10-16 5L
C923	87-010-318-080		C-CAP, S 47P-50 CH
C924	87-010-318-080		C-CAP, S 47P-50 CH
C925	87-010-196-080		C-CAP, S 0.1-25 F
C926	87-010-071-080		CAP, E 1-50 5L
C927	87-010-075-080		CAP, E 10-16 5L
C928	87-010-197-080		C-CAP, S 0.01-25 B
C929	87-010-196-080		C-CAP, S 0.1-25 F
C930	87-010-196-080		C-CAP, S 0.1-25 F
C931	87-010-075-080		CAP, E 10-16 5L
C933	87-010-322-080		C-CAP, S 100P-50 CH
C934	87-010-194-080		C-CAP, S 0.047-25 F
C936	87-010-197-080		C-CAP, S 0.01-25 B
C937	87-010-317-080		C-CAP, S 39P-50 CH
C938	87-010-317-080		C-CAP, S 39P-50 CH
C940	87-010-197-080		C-CAP, S 0.01-25 B
C941	87-010-318-080		C-CAP, S 47P-50 CH
C942	87-010-074-080		CAP, E 4.7-35 5L
C943	87-010-197-080		C-CAP, S 0.01-25 B
C944	87-010-194-080		C-CAP, S 0.047-25 F
C945	87-010-197-080		C-CAP, S 0.01-25 B
C946	87-010-074-080		CAP, E 4.7-35 5L
C947	87-010-197-080		C-CAP, S 0.01-25 B
C948	87-010-074-080		CAP, E 4.7-35 5L
C949	87-010-074-080		CAP, E 4.7-35 5L
C951	87-010-197-080		C-CAP, S 0.01-25 B
C952	87-015-819-080		C-CAP 0.01
C956	87-010-197-080		C-CAP, S 0.01-25 B
C960	87-010-194-080		C-CAP, S 0.047-25 F
C961	87-012-157-080		C-CAP, S 330P-50 CH
C966	87-010-805-080		C-CAP, S 1-16F
C967	87-010-075-080		CAP, E 10-16 5L
C970	87-010-079-080		CAP, E 100-6.3 5L
C971	87-016-264-080		C-CAP, TN4.7-6.3 F95Q
C972	87-016-264-080		C-CAP, TN4.7-6.3 F95Q
C973	87-010-197-080		C-CAP, S 0.01-25 B
C974	87-010-071-080		CAP, E 1-50 5L
C975	87-010-197-080		C-CAP, S 0.01-25 B
C977	87-010-194-080		C-CAP, S 0.047-25 F
C979	87-010-079-080		CAP, E 100-6.3 5L
C980	87-010-079-080		CAP, E 100-6.3 5L
C981	87-010-079-080		CAP, E 100-6.3 5L
C982	87-010-079-080		CAP, E 100-6.3 5L
C985	87-010-234-080		CAP, E 47-16 5L
C987	87-010-307-080		C-CAP, 680P-50 CH
C988	87-010-176-080		C-CAP, S 680P-50 SL
C989	87-010-183-080		C-CAP, S 2700P-50 B
C990	87-010-183-080		C-CAP, S 2700P-50 B
C992	87-010-234-080		CAP, E 47-16 5L
C993	87-010-074-080		CAP, E 4.7-35 5L
C994	87-010-074-080		CAP, E 4.7-35 5L
C997	87-010-320-080		C-CAP, S 68P-50 CH
C998	87-010-320-080		C-CAP, S 68P-50 CH
C999	87-010-320-080		C-CAP, S 68P-50 CH
FB1	87-005-512-080		C-COIL, BLM21A05
FB2	87-005-512-080		C-COIL, BLM21A05
FB7	87-005-512-080		C-COIL, BLM21A05
FB3	87-008-372-080		FLTR, EMI BL 0IRNI
FB4	87-008-372-080		FLTR, EMI BL 0IRNI
FB5	87-008-372-080		FLTR, EMI BL 0IRNI
FB6	87-008-372-080		FLTR, EMI BL 0IRNI
L901	87-005-153-080		COIL, 47UH
L903	87-005-153-080		COIL, 47UH
L904	87-005-153-080		COIL, 47UH
X901	87-030-146-010		VIB, XTAL 22.5792MHZ
X902	87-008-394-080		CF CST 4.19MGW

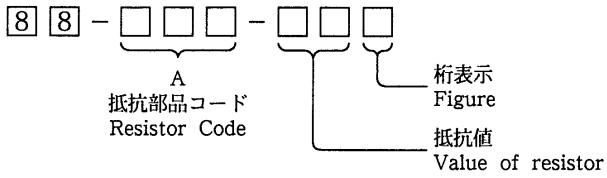
IC C. B<HR, K, Z, E>

MISCELLANEOUS

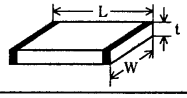
⚠	87-034-727-010	AC CORD ASSY, D<LH>
⚠	87-050-016-010	AC CORD ASSY, E<Z, E>
⚠	87-050-034-010	AC CORD ASSY, E<HR>
⚠	87-050-029-010	AC CORD ASSY, K 3P<K>
⚠	82-187-797-010	AC POWER CORD E Z ON<HE>
⚠	87-085-184-010	BUSHING, AC CORD D<LH>
⚠	87-085-185-010	BUSHING, AC CORD E<EXCEPT LH>
	89-VT5-202-010	BUSHING, FG CORD
FC1	82-NT1-641-010	F-CABLE 5P-1.25
⚠PT101	82-NT1-608-010	PT, 2NT-1 EKZ<K, Z, E>
⚠PT101	82-NT1-606-010	PT, 2NT-1 H<HE, LH>
⚠PT101	82-NT1-609-010	PT, 2NT-1 HR<HR>
WIRE1	82-NT1-641-010	F-CABLE 5P-1.25

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

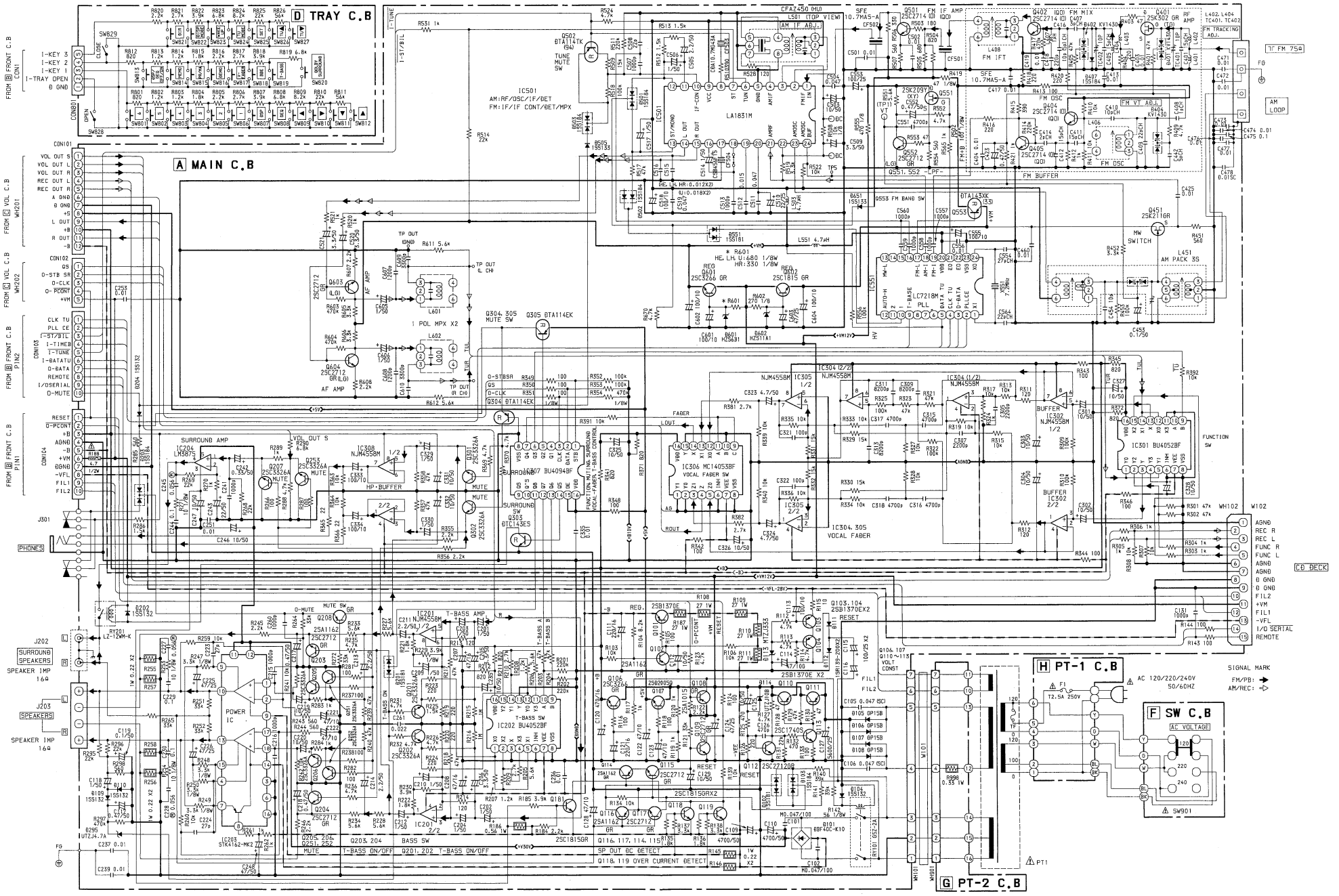
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



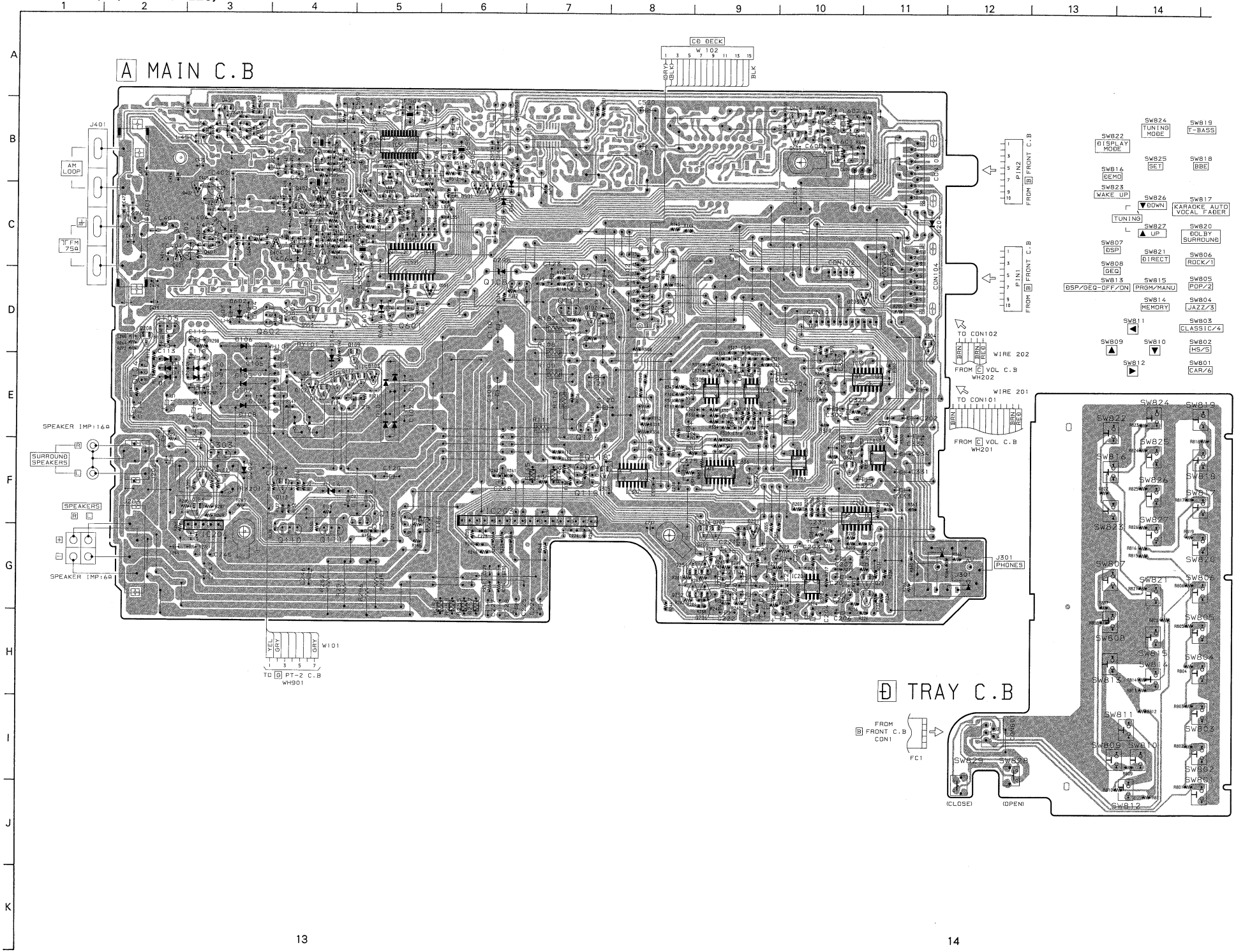
チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions／寸法 (mm)				Resistor Code : A 抵抗コード : A
				Form/外形	L	W	t	
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3126	±5%	CJ		3.2	1.6	0.5 ~0.7	128

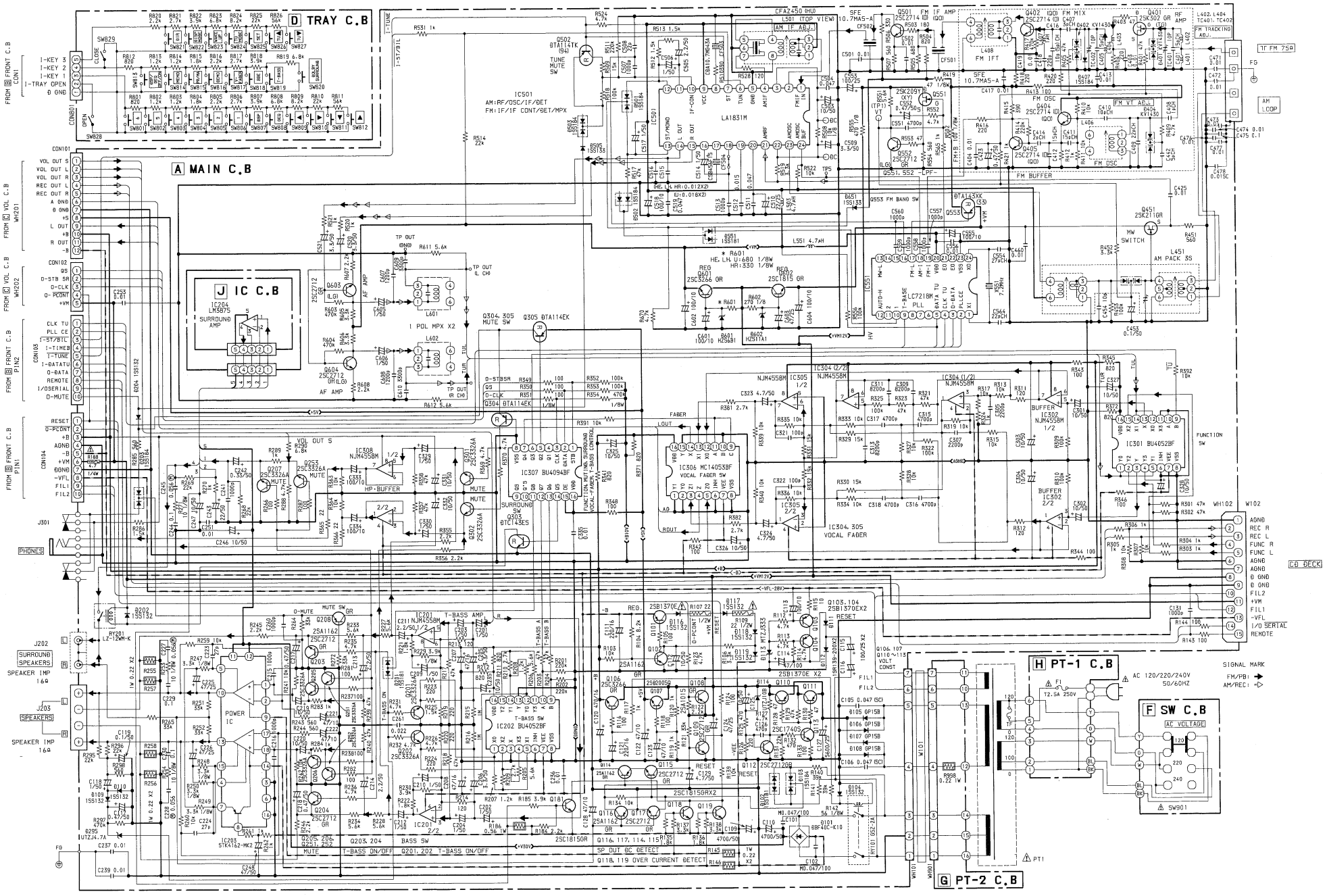
SCHEMATIC DIAGRAM – 1 (HE, LH MODELS)

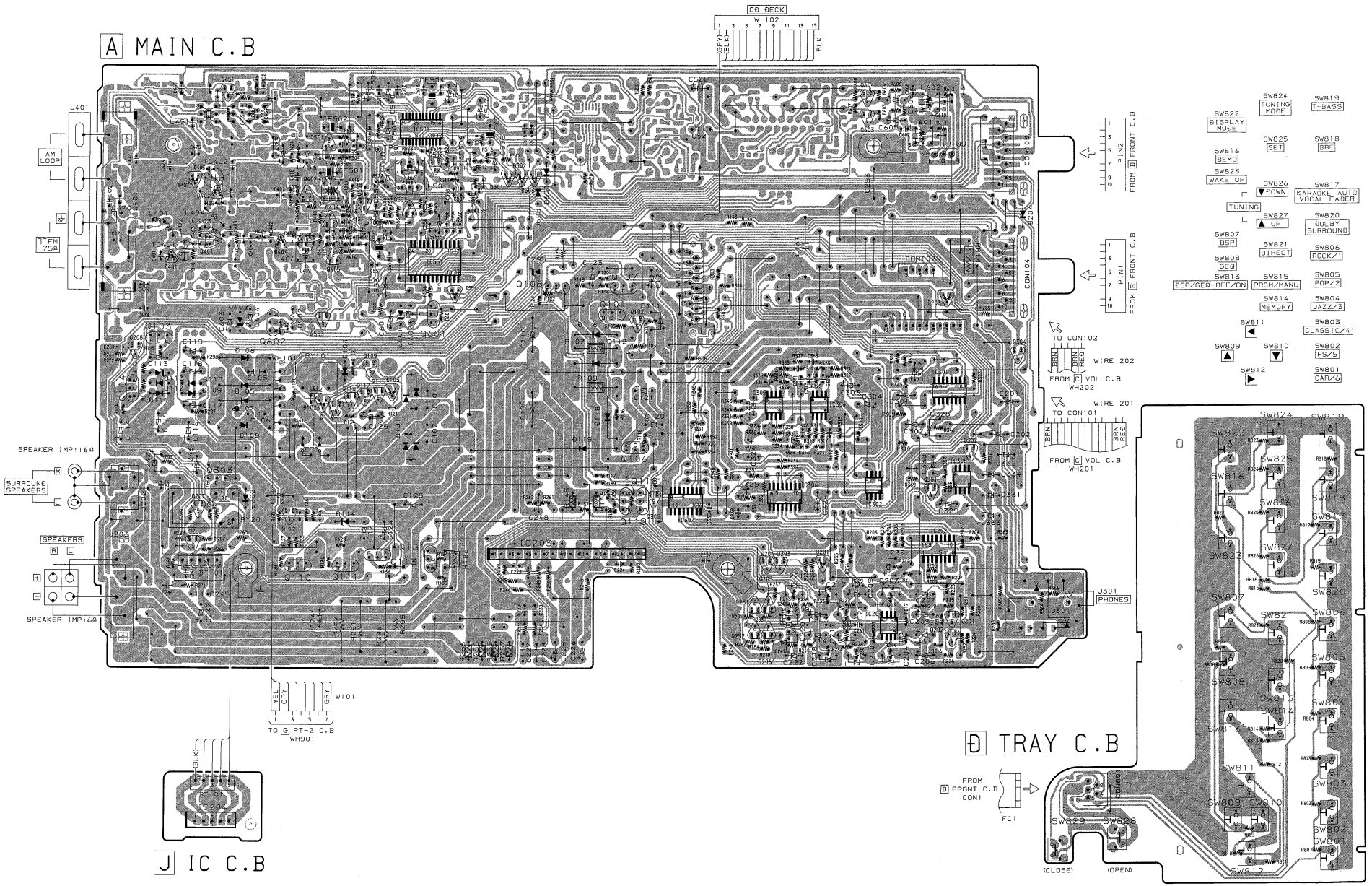


WIRING – 1 (HE, LH MODELS)

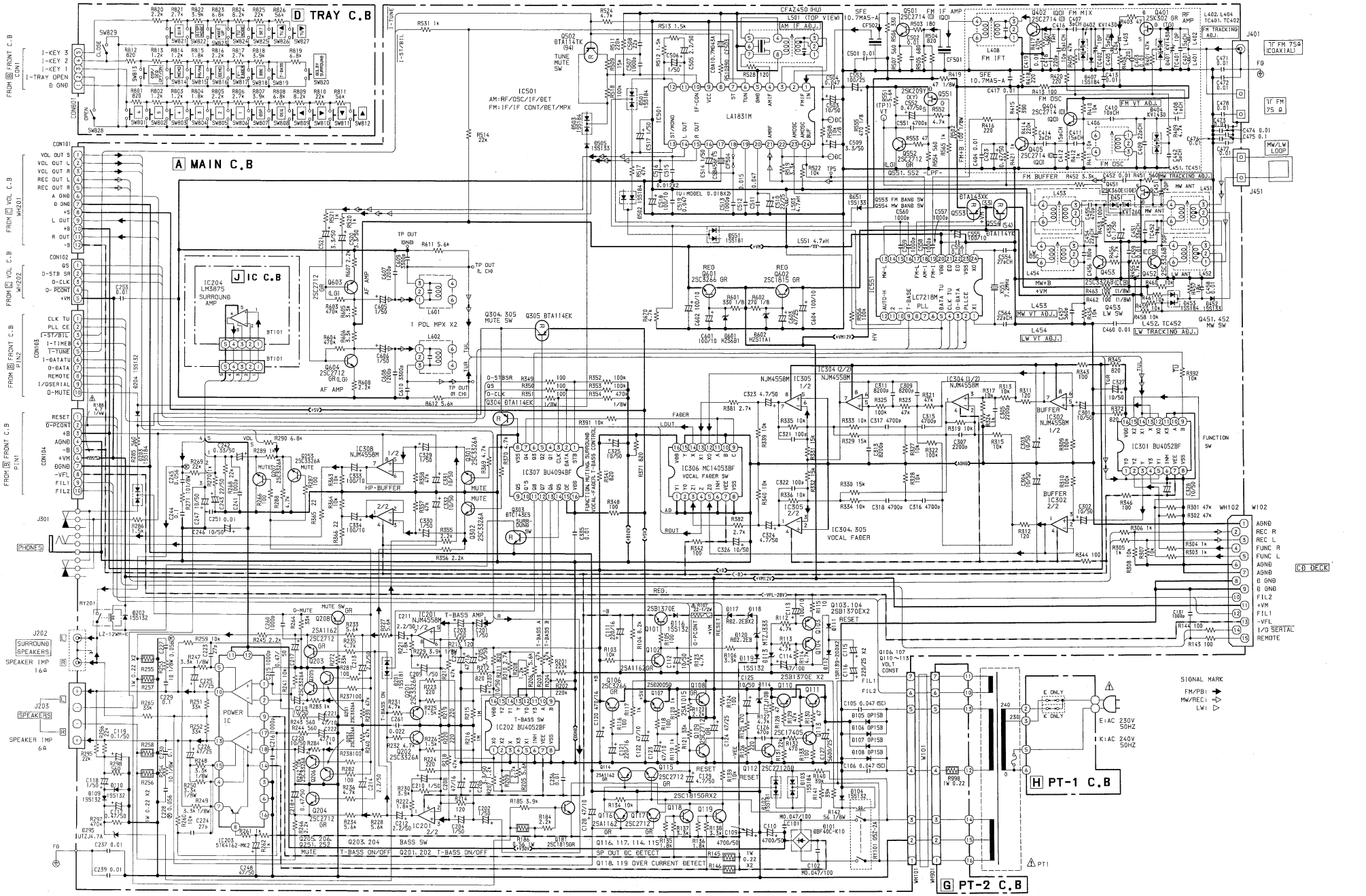


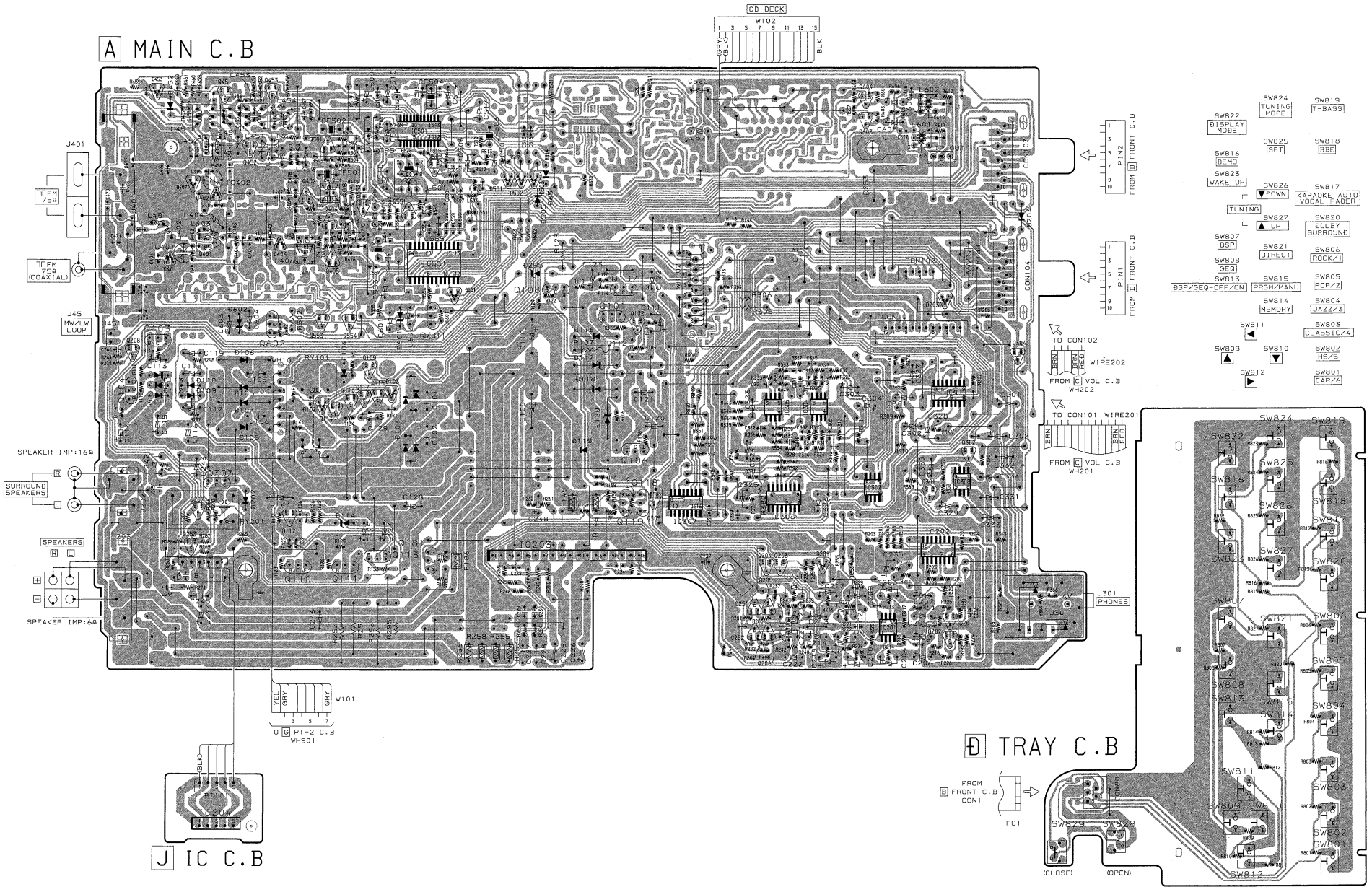
SCHEMATIC DIAGRAM – 2 (HR MODEL)



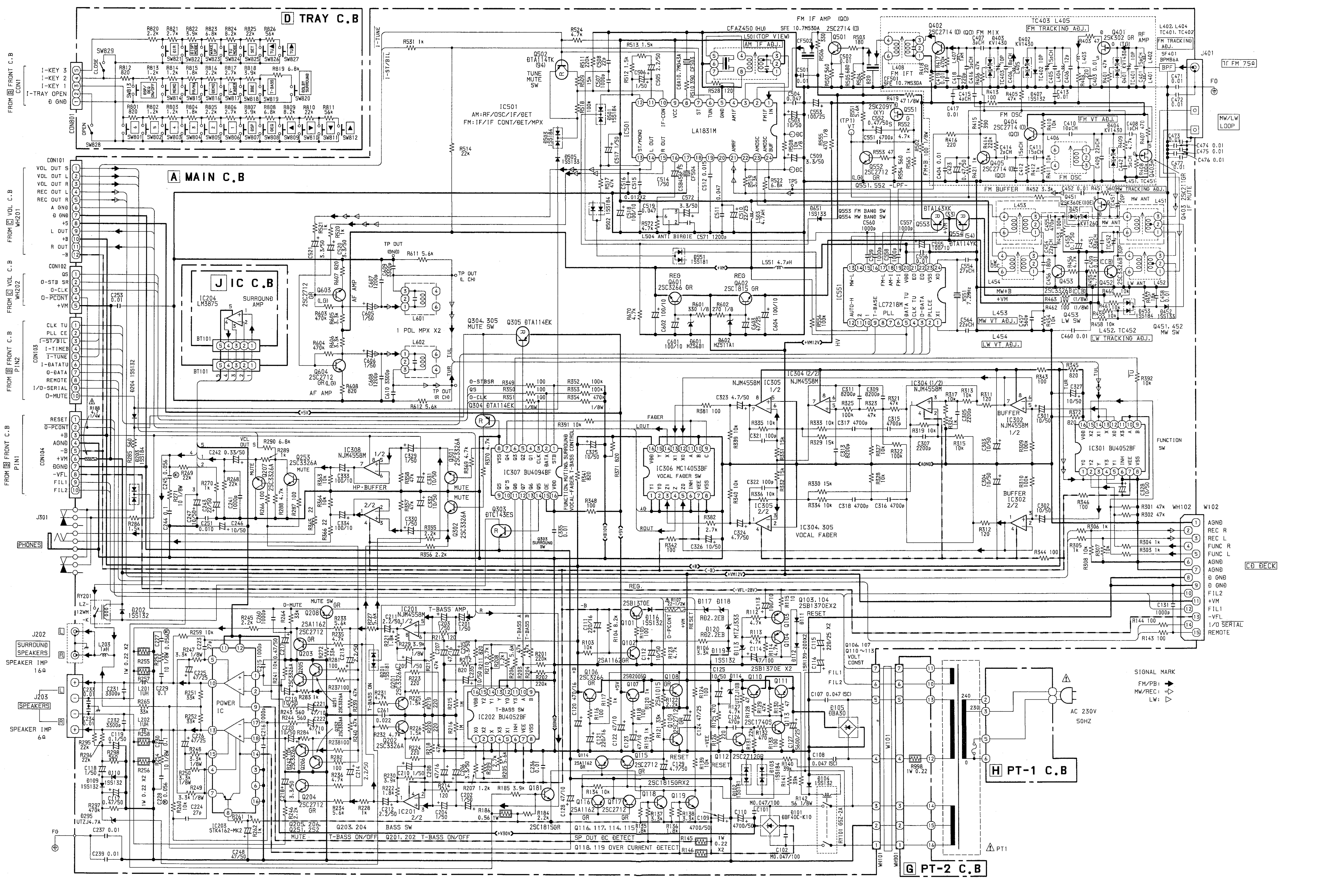

A MAIN C.B
CD DECK
W102
J401
AM LOOP
TFM 75Ω
SPEAKER IMP:16Ω
SURROUND SPEAKERS
SPEAKERS
R L
SPEAKER IMP:8Ω
W101
TO G PT-2 C.B
WH901
J IC C.B
FROM B FRONT C.B CON2
FROM B FRONT C.B CON1
TO CON102
WIRE 202
FROM C VOL C.B
WH202
WIRE 201
TO CON101
FROM C VOL C.B
WH201
J301
PHONES
Đ TRAY C.B
FROM B FRONT C.B CON1
FC1
(CLOSE)
(OPEN)
SW824 TUNING MODE
SW819 T-BASS
SW822 DISPLAY MODE
SW825 SET
SW818 BBE
SW816 DEMO
SW823 WAKE UP
SW826 ▼DOWN
SW817 KARAOKE AUTO VOCAL FADER
TUNING
SW827 ▲UP
SW820 DOLBY SURROUND
SW807 DSP
SW821 DIRECT
SW806 ROCK/1
SW808 GEQ
SW813 DSP/GEQ-OFF/ON
SW815 PRGM/MANU
SW805 POP/2
SW814 MEMORY
SW804 JAZZ/3
SW811 ◀
SW803 CLASSIC/4
SW809 ▲
SW810 ▼
SW802 HS/5
SW812 ▶
SW801 CAR/6

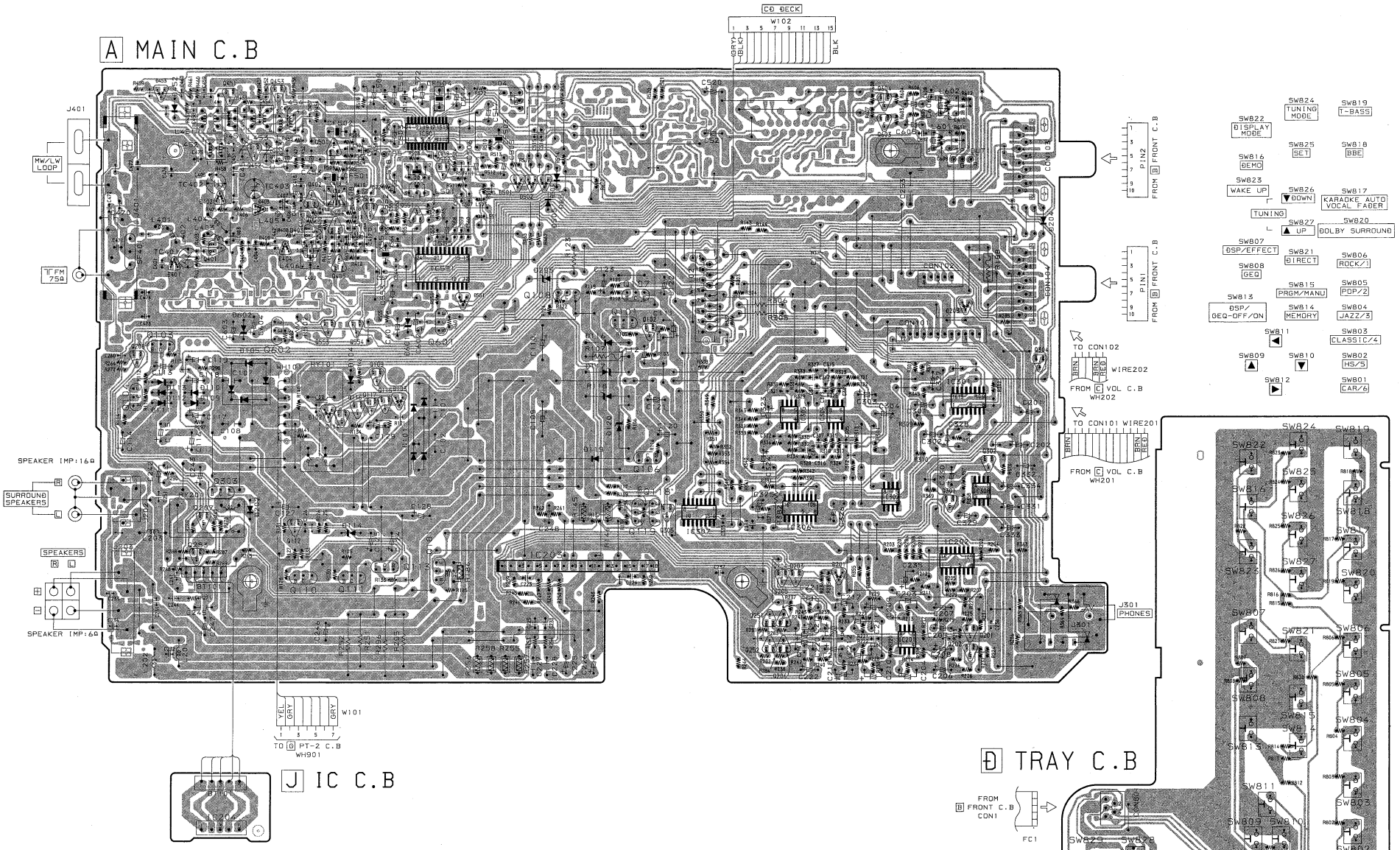
SCHEMATIC DIAGRAM – 3 (E, K MODELS)



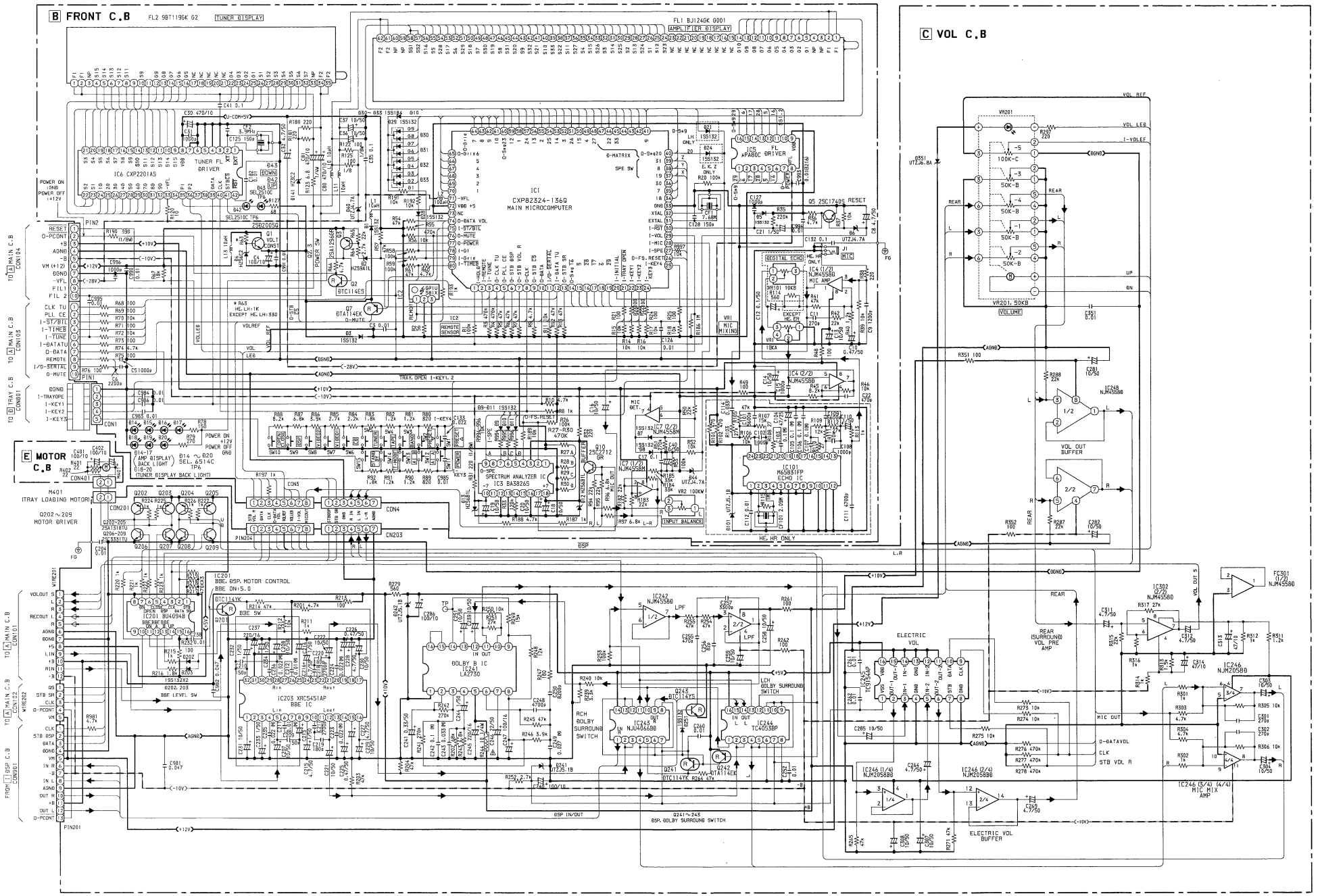

A MAIN C.B
CD DECK
W102
J401
FM 75Ω
FM 75Ω (COAXIAL)
J451
MW/LW LOOP
SPEAKER IMP:16Ω
SURROUND SPEAKERS
SPEAKERS
SPEAKER IMP:6Ω
J301
PHONES
TO CON102
WIRE202
FROM C VOL C.B WH202
TO CON101 WIRE201
FROM C VOL C.B WH201
FROM B FRONT C.B PIN2
FROM B FRONT C.B PIN1
SW824 TUNING MODE
SW819 T-BASS
SW822 DISPLAY MODE
SW825 SET
SW818 BBE
SW816 DEMO
SW823 WAKE UP
SW824 ▼DOWN
SW817 KARAOKE AUTO VOCAL FADER
TUNING
SW827 ▲UP
SW820 DOLBY SURROUND
SW807 DSP
SW821 DIRECT
SW806 ROCK/1
SW808 GEQ
SW815 PRGM/MANU
SW805 POP/2
SW813 DSP/GEQ-OFF/ON
SW814 MEMORY
SW804 JAZZ/3
SW811 ◀
SW803 CLASSIC/4
SW809 ▲
SW810 ▼
SW802 HS/5
SW812 ▶
SW801 CAR/6
W101
TO G PT-2 C.B WH901
J IC C.B
D TRAY C.B
FROM B FRONT C.B CON1
FC1
(CLOSE)
(OPEN)

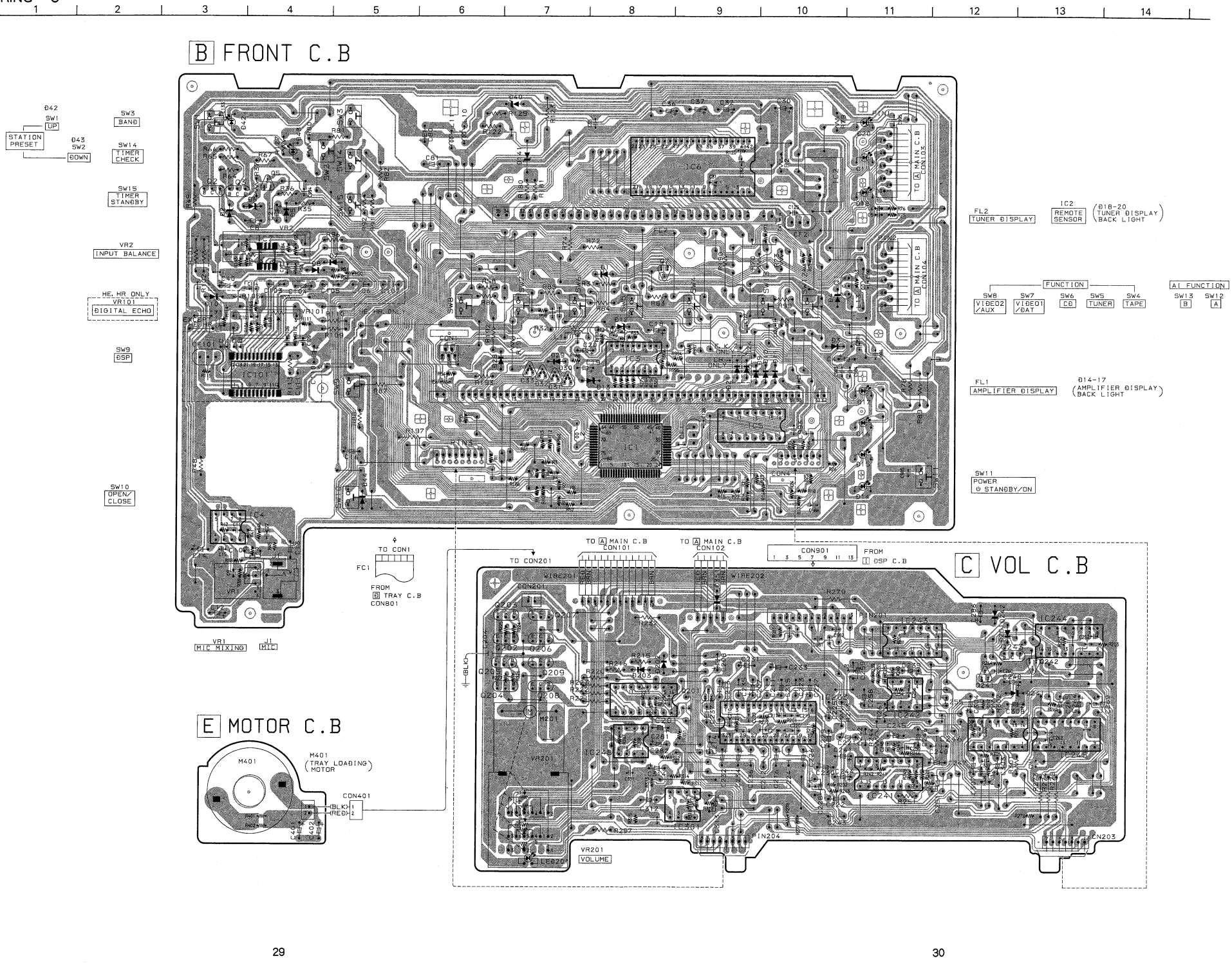
SCHEMATIC DIAGRAM – 4 (Z MODEL)

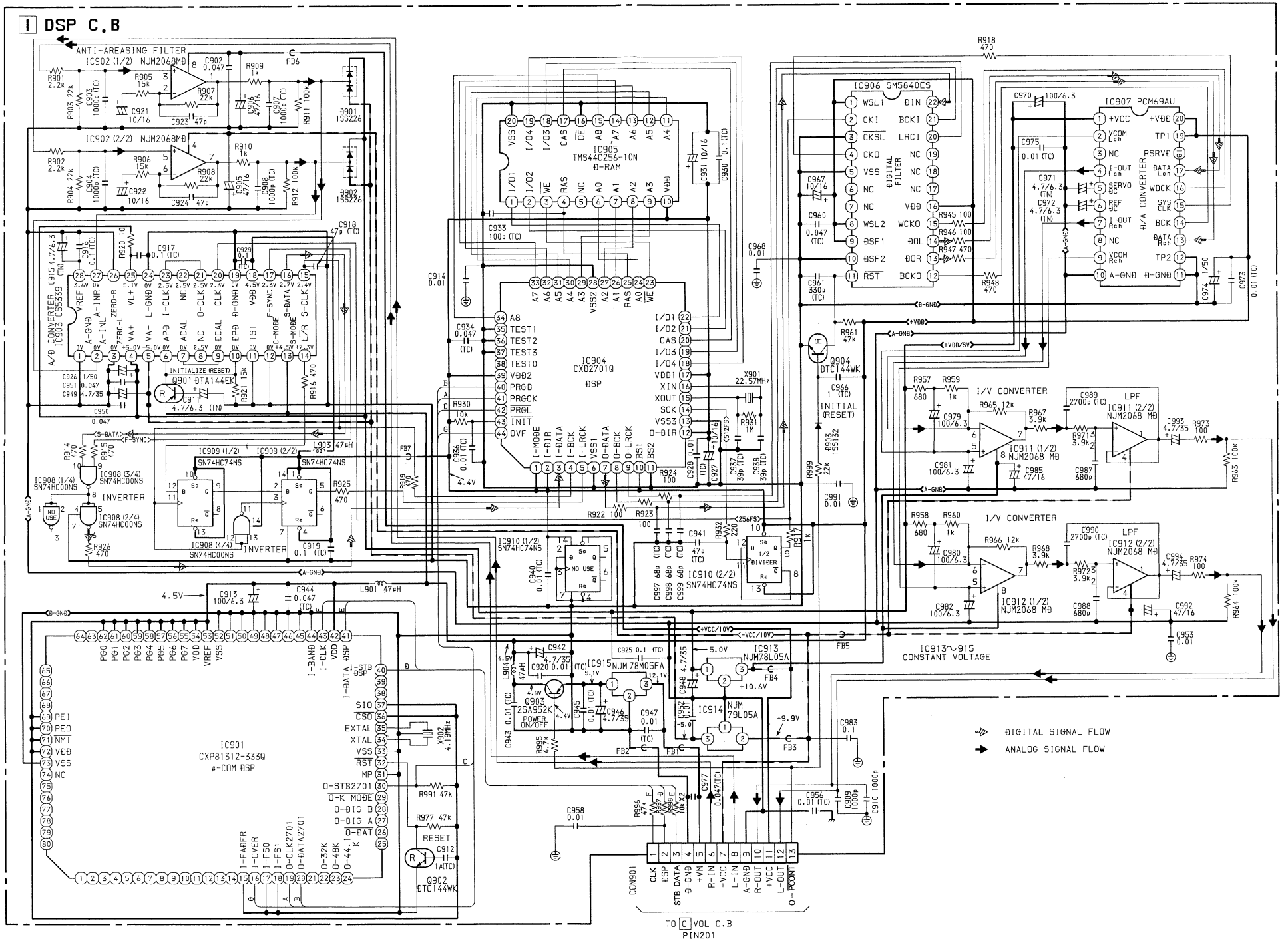


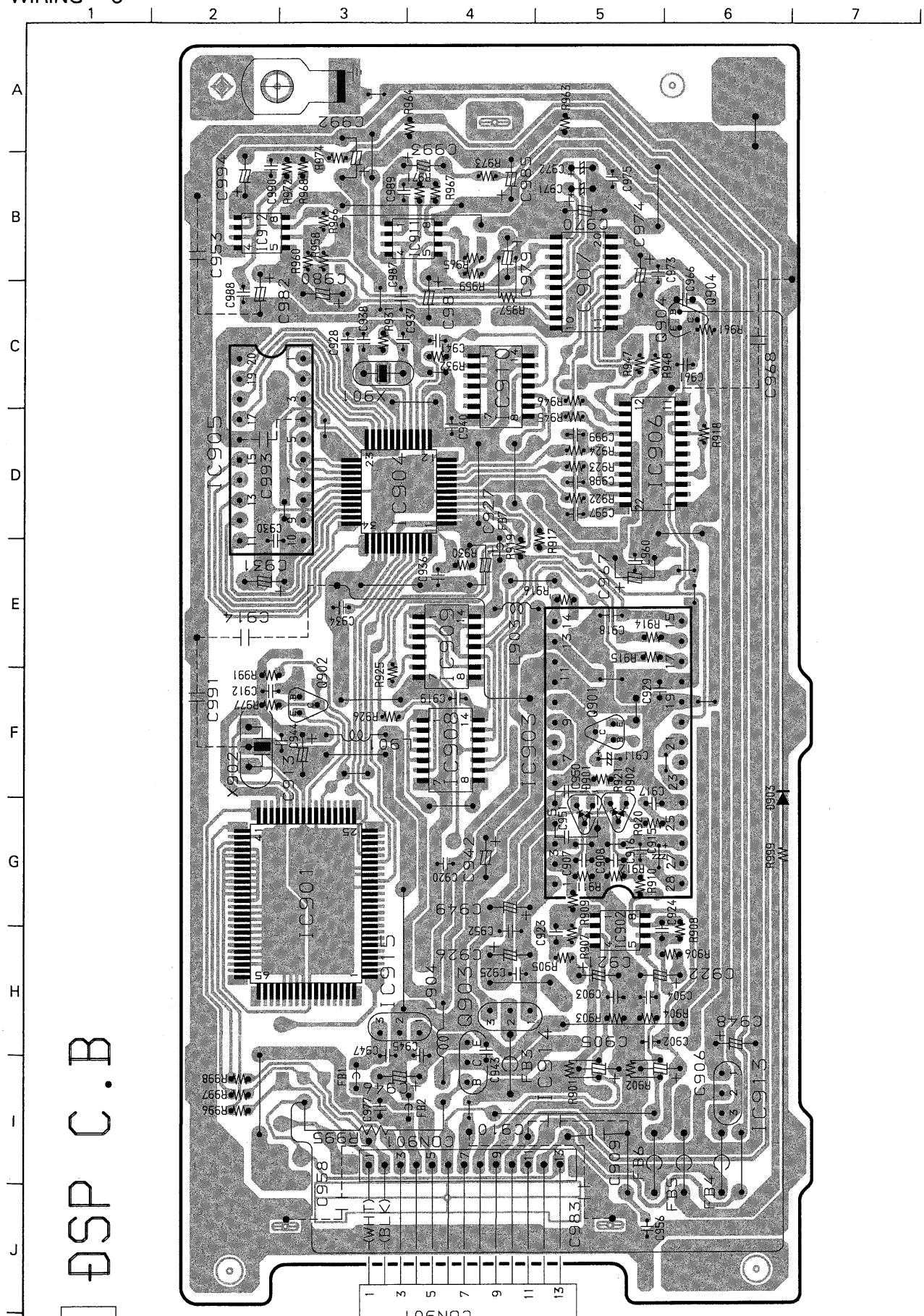

A MAIN C.B
CD DECK
W102
J401
MW/LW LOOP
FM 75Ω
SPEAKER IMP:16Ω
SURROUND SPEAKERS
SPEAKERS
SPEAKER IMP:6Ω
W101
TO G PT-2 C.B
WH901
J IC C.B
FROM B FRONT C.B CON2
FROM B FRONT C.B CON1
TO CON102
WIRE202
FROM C VOL C.B
WH202
TO CON101 WIRE201
FROM C VOL C.B
WH201
J301
PHONES
D TRAY C.B
FROM B FRONT C.B CON1
FC1
(CLOSE)
(OPEN)
SW824 TUNING MODE
SW819 T-BASS
SW822 DISPLAY MODE
SW825 SET
SW818 BBE
SW816 DEMO
SW823 WAKE UP
SW826 DOWN
SW817 KARAOKE AUTO VOCAL FADER
TUNING
SW827 UP
SW820 DOLBY SURROUND
SW807 DSP/EFFECT
SW821 DIRECT
SW806 ROCK/1
SW808 GEQ
SW815 PRGM/MANU
SW805 POP/2
SW813 DSP/ GEQ-OFF/ON
SW814 MEMORY
SW804 JAZZ/3
SW811
SW803 CLASSIC/4
SW809
SW810
SW802 HS/5
SW812
SW801 CAR/6

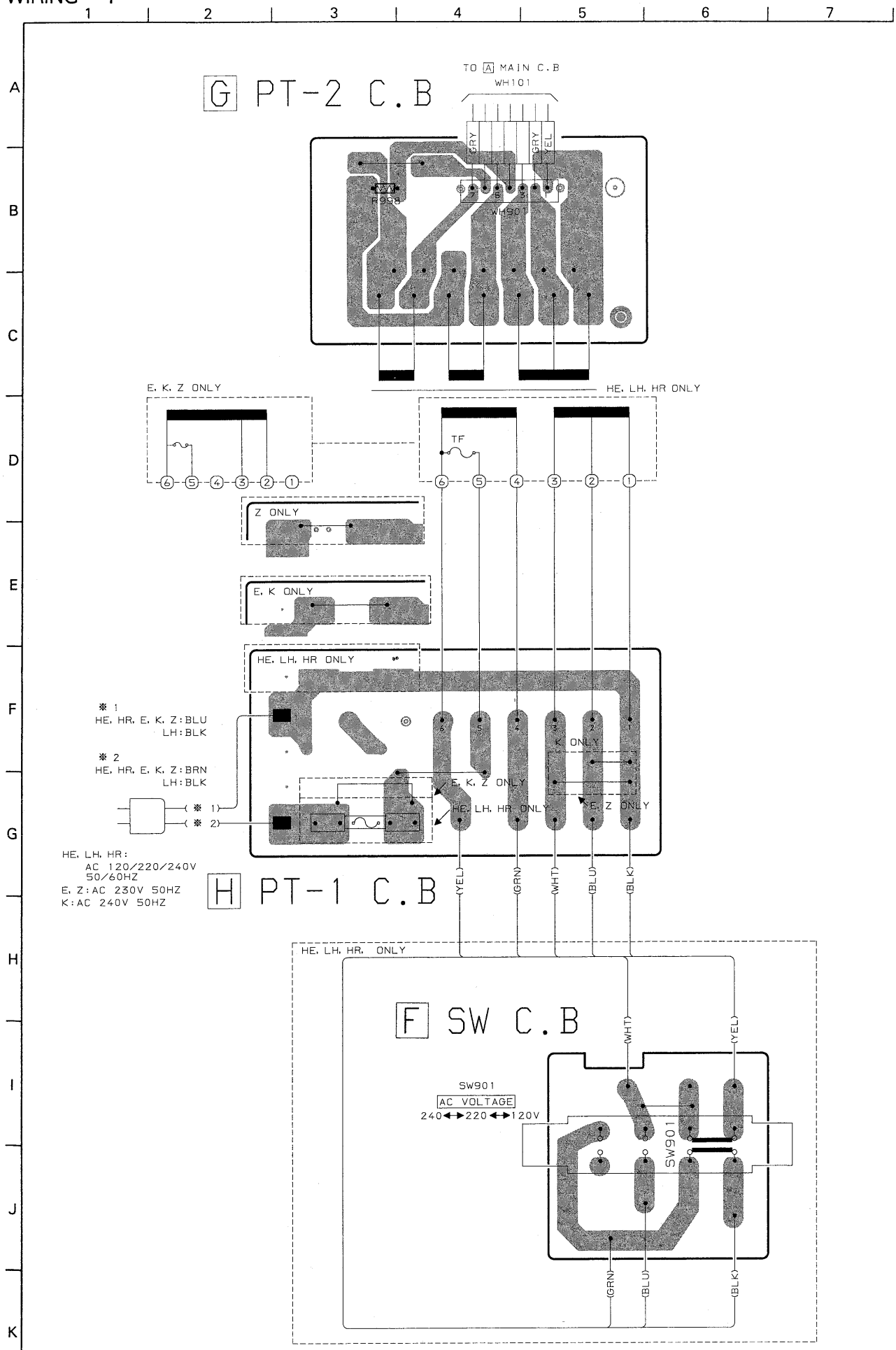
SCHEMATIC DIAGRAM – 5




B FRONT C.B
D42
SW1
UP
STATION PRESET
D43
SW2
DOWN
SW3
BAND
SW14
TIMER CHECK
SW15
TIMER STANDBY
VR2
INPUT BALANCE
HE, HR ONLY
VR101
DIGITAL ECHO
SW9
DSP
SW10
OPEN/CLOSE
VR1
MIC MIXING
J1
MIC
TO CON1
FC1
FROM D TRAY C.B
CON801
TO A MAIN C.B CON103
TO A MAIN C.B CON104
TO A MAIN C.B CON101
TO A MAIN C.B CON102
TO CON201
CON901
FROM D DSP C.B
C VOL C.B
WIRE201
WIRE202
CON201
VR201
VOLUME
PIN201
PIN204
CON203
E MOTOR C.B
M401
M401 (TRAY LOADING MOTOR)
CON401
(BLK)
(RED)
FL2
TUNER DISPLAY
IC2
REMOTE SENSOR
D18-20
TUNER DISPLAY BACK LIGHT
FUNCTION
SW8
VIDEO2 /AUX
SW7
VIDEO1 /SAT
SW6
CD
SW5
TUNER
SW4
TAPE
AI FUNCTION
SW13
B
SW12
A
FL1
AMPLIFIER DISPLAY
D14-17
AMPLIFIER DISPLAY BACK LIGHT
SW11
POWER
STANDBY/ON


I DSP C.B
ANTI-AREASING FILTER
IC902 (1/2) NJM2068MD
IC902 (2/2) NJM2068MD
IC905 TMS44C256-10N D-RAM
IC904 CXD2701Q DSP
IC906 SM5840ES
DIGITAL FILTER
IC907 PCM69AU
D/A CONVERTER
A/D CONVERTER IC903 CS5339
IC901 CXP81312-333Q μ-COM DSP
INITIALIZE (RESET)
Q901 DTA144EK
Q902 DTC144WK
Q903 2SA952K POWER ON/OFF
Q904 DTC144WK
INITIAL (RESET)
I/V CONVERTER
LPF
IC911 (1/2) 8 NJM2068 MD
IC912 (2/2) NJM2068 MD
IC913~915 CONSTANT VOLTAGE
IC913 NJM78L05A
IC914 NJM 79L05A
IC915 NJM 78M05FA
INVERTER
IC908 (1/4) SN74HC00NS
IC908 (2/4) SN74HC00NS
IC908 (3/4) SN74HC00NS
IC908 (4/4) SN74HC00NS
IC909 (1/2) SN74HC74NS
IC909 (2/2) SN74HC74NS
IC910 (1/2) SN74HC74NS
IC910 (2/2) SN74HC74NS
RESET
CON901
TO C VOL C.B PIN201
DIGITAL SIGNAL FLOW
ANALOG SIGNAL FLOW

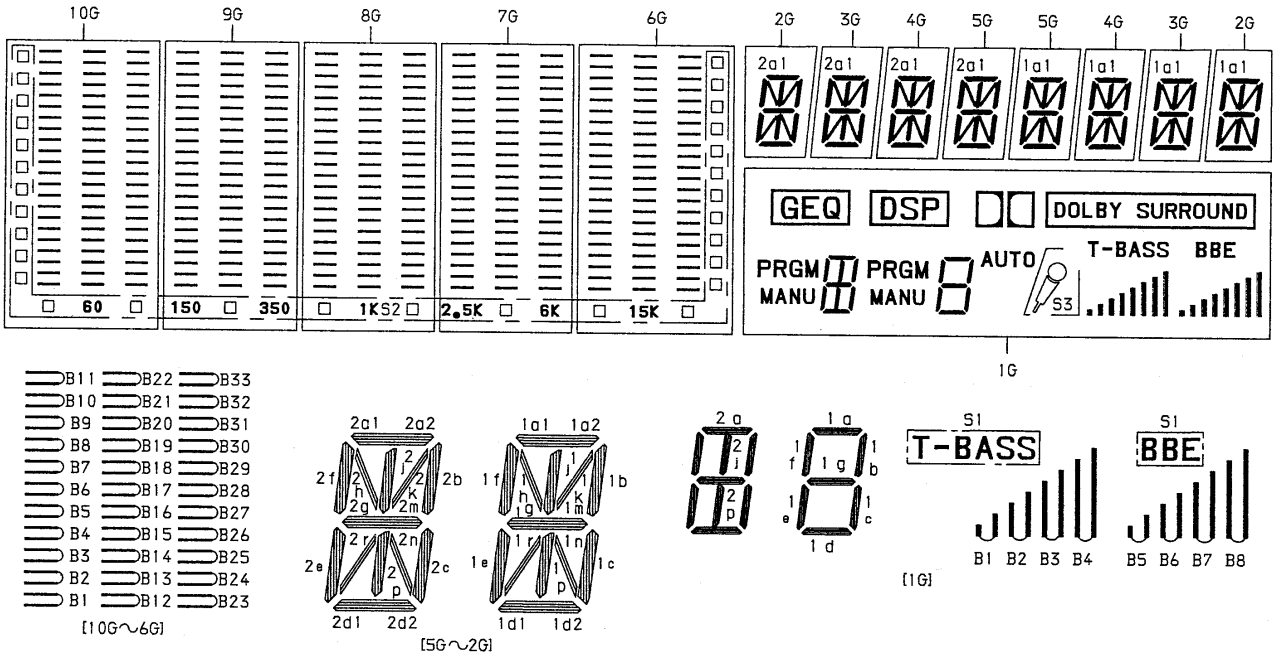

1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
K
DSP C.B
IC901
IC902
IC903
IC904
IC905
IC906
IC907
IC908
IC909
IC910
IC911
IC912
IC913
IC914
IC915
CON901
TO VOL C.B
PIN201


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
K
G PT-2 C.B
TO A MAIN C.B
WH101
GRY
GRY
YEL
R998
WH901
E, K, Z ONLY
HE, LH, HR ONLY
TF
Z ONLY
E, K ONLY
HE, LH, HR ONLY
※ 1
HE, HR, E, K, Z : BLU
LH : BLK
※ 2
HE, HR, E, K, Z : BRN
LH : BLK
K ONLY
E, K, Z ONLY
HE, LH, HR ONLY
E, Z ONLY
HE, LH, HR :
AC 120/220/240V
50/60HZ
E, Z : AC 230V 50HZ
K : AC 240V 50HZ
H PT-1 C.B
(YEL)
(GRN)
(WHT)
(BLU)
(BLK)
HE, LH, HR, ONLY
F SW C.B
SW901
AC VOLTAGE
240◄►220◄►120V
SW901
(WHT)
(YEL)
(GRN)
(BLU)
(BLK)

FL (DISPLAY)

FL, BJ124GK

GRID ASSIGNMENT

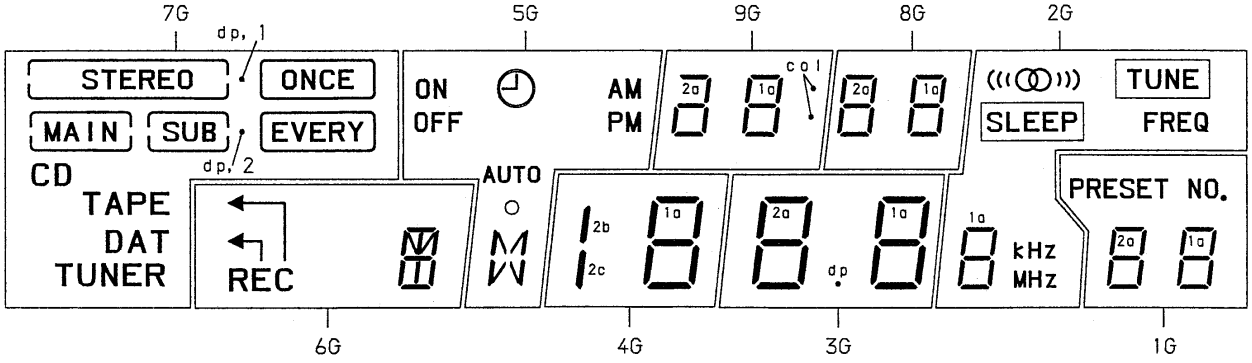


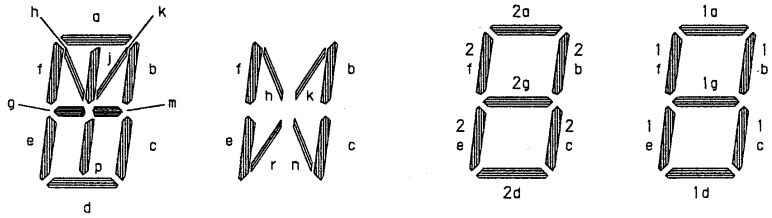
ANODE CONNECTION

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
S1	B1	B1	B1	B1	B1	1a2	1a2	1a2	1a2	B6
S2	B2	B2	B2	B2	B2	1k	1k	1k	1k	B3
S3	B3	B3	B3	B3	B3	1g	1g	1g	1g	**SURROUND**
S4	B4	B4	B4	B4	B4	1e	1e	1e	1e	**AUTO**
S5	B5	B5	B5	B5	B5	1p	1p	1p	1p	1a, 1d
S6	B6	B6	B6	B6	B6	2d2	2d2	2d2	2d2	[GEQ]
S7	B7	B7	B7	B7	B7	2n	2n	2n	2n	2b
S8	B8	B8	B8	B8	B8	2c	2c	2c	2c	[DSP]
S9	B9	B9	B9	B9	B9	2f	2f	2f	2f	2d
S10	B10	B10	B10	B10	B10	2h	2h	2h	2h	**PRGM** [GEQ]
S11	B11	B11	B11	B11	B11	2a1	2a1	2a1	2a1	1f
S12	B12	B12	B12	B12	B12	1a1	1a1	1a1	1a1	B7
S13	B13	B13	B13	B13	B13	1h	1h	1h	1h	B4
S14	B14	B14	B14	B14	B14	1f	1f	1f	1f	B1
S15	B15	B15	B15	B15	B15	1c	1c	1c	1c	[DOLBY]
S16	B16	B16	B16	B16	B16	1n	1n	1n	1n	1b
S17	B17	B17	B17	B17	B17	1d2	1d2	1d2	1d2	1e
S18	B18	B18	B18	B18	B18	2p	2p	2p	2p	2c
S19	B19	B19	B19	B19	B19	2e	2e	2e	2e	**PRGM** [DSP]
S20	B20	B20	B20	B20	B20	2g	2g	2g	2g	2g
S21	B21	B21	B21	B21	B21	2k	2k	2k	2k	2f
S22	B22	B22	B22	B22	B22	2a2	2a2	2a2	2a2	-
S23	B23	B23	B23	B23	B23	-	-	-	-	B8
S24	B24	B24	B24	B24	B24	1j	1j	1j	1j	B5
S25	B25	B25	B25	B25	B25	1b	1b	1b	1b	B2
S26	B26	B26	B26	B26	B26	1m	1m	1m	1m	S3
S27	B27	B27	B27	B27	B27	1r	1r	1r	1r	1c
S28	B28	B28	B28	B28	B28	1d1	1d1	1d1	1d1	1g
S29	B29	B29	B29	B29	B29	2d1	2d1	2d1	2d1	2a
S30	B30	B30	B30	B30	B30	2r	2r	2r	2r	**MANU** [DSP]
S31	B31	B31	B31	B31	B31	2m	2m	2m	2m	2j, 2p
S32	B32	B32	B32	B32	B32	2b	2b	2b	2b	2e
S33	B33	B33	B33	B33	B33	2j	2j	2j	2j	**MANU** [GEQ]
SS1	S2	S2	S2	S2	S2	-	-	-	-	-
SS2	-	-	-	-	-	-	-	-	-	**GEQ DSP** S1

FL, 9 – BT – 119GK

GRID ASSIGNMENT



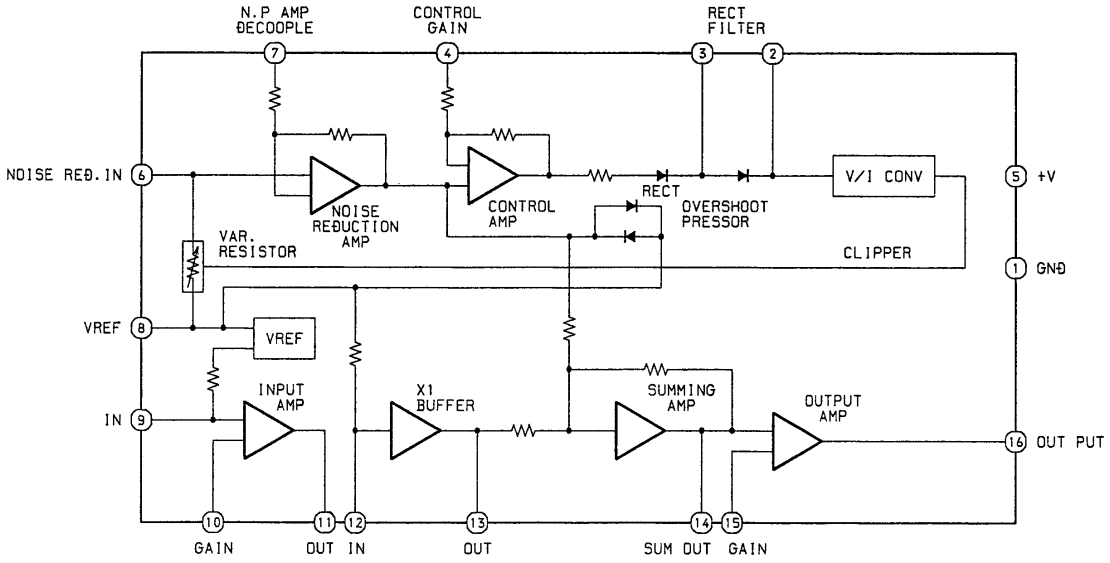


ANODE CONNECTION

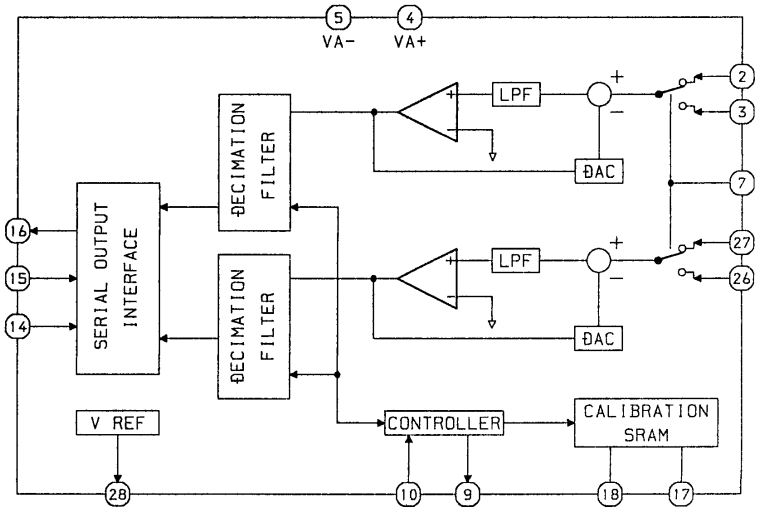
	9G	8G	7G	6G	5G	4G	3G	2G	1G
S1	1a	1a	**STEREO**	a	**ON**	1a	1a	1a	1a
S2	1b	1b	dp1	b	b	1b	1b	1b	1b
S3	1c	1c	dp2	c	c	1c	1c	1c	1c
S4	1d	1d	**DAT**	d	**PM**	1d	1d	1d	1d
S5	1e	1e	**TAPE**	e	e	1e	1e	1e	1e
S6	1f	1f	**MAIN**	f	f	1f	1f	1f	1f
S7	1g	1g	**SUB**	g, m	◷	1g	1g	1g	1g
S8	2a, 2g 2d, 2e	2a	(STEREO)	h	h	–	2a	**TUNE**	2a
S9	2b	2b	**ONCE**	j, p	k	2b, 2c	2b	**FREQ**	2b
S10	2c	2c	**EVERY**	–	**OFF**	–	2c	**SLEEP**	2c
S11	–	2d	**TUNER**	**REC**	r	–	2d	((◎))	2d
S12	–	2e	**CD**	(DAT)◁	n	–	2e	**KHZ**	2e
S13	col	2f	(MAIN)	k	**AUTO**	–	2f	**MHZ**	2f
S14	–	2g	(SUB)	(TAPE)◁	**AM**	–	2g	–	2g
S15	–	–	–	–	o	–	dp	–	**PRESET NO.**

IC BLOCK DIAGRAM

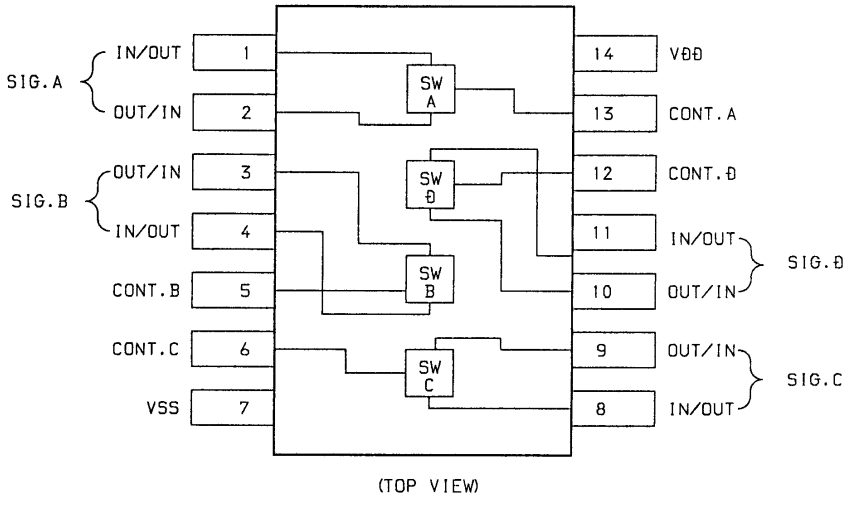
IC,LA2730



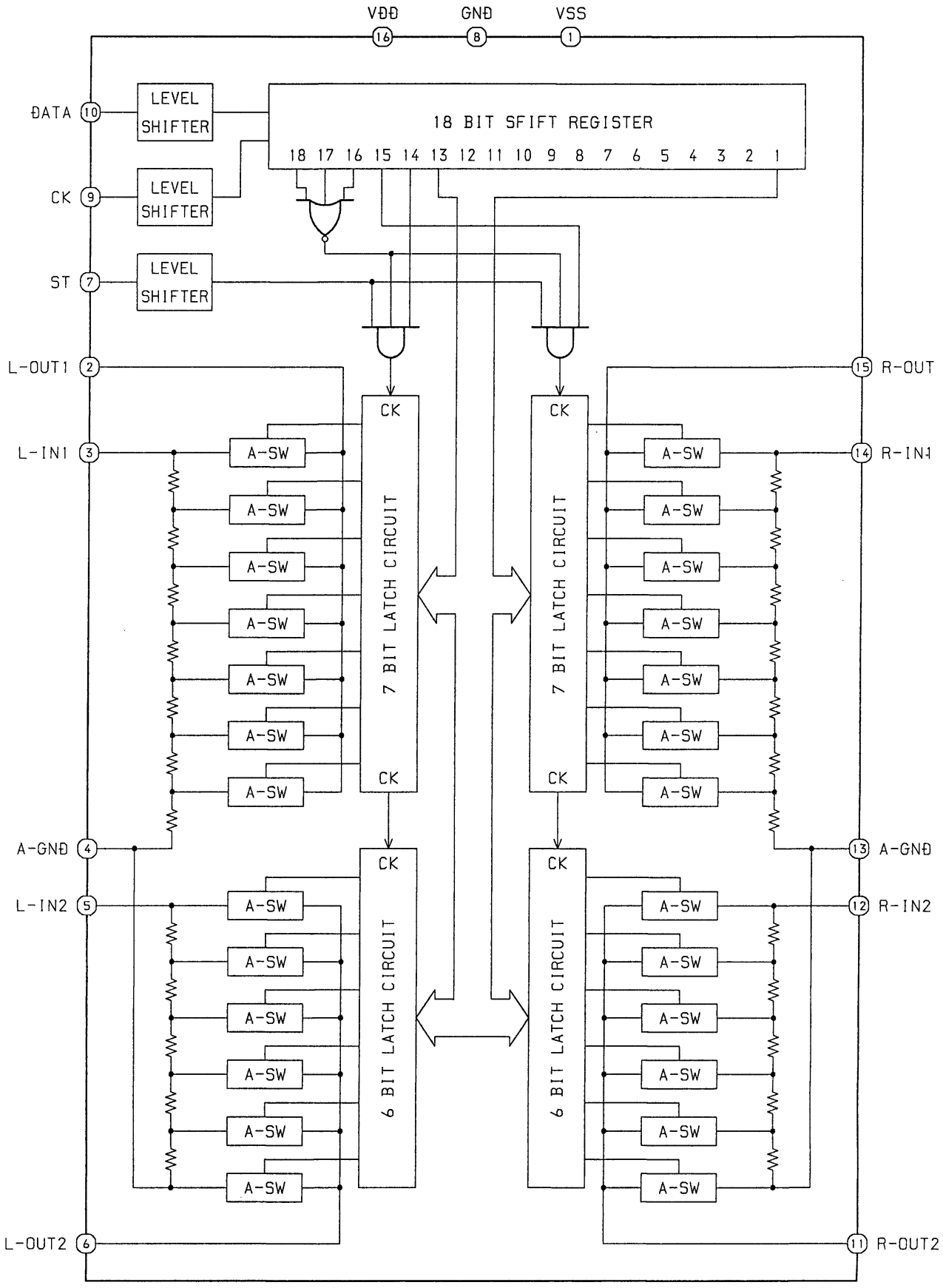
IC,CS5339 – KP



IC,NJU4066BD



IC,TC9154AP


VDD
GND
VSS
16
8
1
DATA
10
CK
9
ST
7
LEVEL SHIFTER
LEVEL SHIFTER
LEVEL SHIFTER
18 BIT SFIFT REGISTER
18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
L-OUT1
2
L-IN1
3
A-GND
4
L-IN2
5
L-OUT2
6
R-OUT
15
R-IN1
14
A-GND
13
R-IN2
12
R-OUT2
11
A-SW
CK
7 BIT LATCH CIRCUIT
6 BIT LATCH CIRCUIT

IC DESCRIPTION

IC, SM5840ES

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>WSL1</td><td>I</td><td>Input/output data word length select pin 1(Connected to + VDD)
<table>
<tr><th colspan="2">Pin level</th><th>Noise shaper</th><th colspan="2">Onput/output word length</th></tr>
<tr><th>WSL1</th><th>WSL2</th><th></th><th>Input bit no.</th><th>Output bit no.</th></tr>
<tr><td>H</td><td>H</td><td>OFF</td><td>18bit</td><td>20bit</td></tr>
<tr><td>H</td><td>L</td><td>ON</td><td>18bit</td><td>18bit</td></tr>
<tr><td>L</td><td>H</td><td>ON</td><td>16bit</td><td>18bit</td></tr>
<tr><td>L</td><td>L</td><td>ON</td><td>16bit</td><td>16bit</td></tr>
</table></td></tr>
<tr><td>2</td><td>CKI</td><td>I</td><td>System clock input.</td></tr>
<tr><td>3</td><td>$\overline{CKSL}$</td><td>I</td><td>System clock input (H : 384fs, L : 256fs). (Connected to GND)</td></tr>
<tr><td>4</td><td>CKO</td><td>O</td><td>System clock output (the CKI clock is buffered and output).</td></tr>
<tr><td>5</td><td>VSS</td><td>–</td><td>GND.</td></tr>
<tr><td>6</td><td>NC</td><td>–</td><td>Not connected.</td></tr>
<tr><td>7</td><td>NC</td><td>–</td><td>Not connected.</td></tr>
<tr><td>8</td><td>WSL2</td><td>I</td><td>Input/output data word length select pin 2.(Conneted to VDD)</td></tr>
<tr><td>9</td><td>DSF1</td><td>I</td><td>Deemphasis select pin 1. (Connected to + VDD)
<table>
<tr><th colspan="2">Pin level</th><th colspan="2">Deemphasis</th></tr>
<tr><th>DSF1</th><th>DSF2</th><th>ON/OFF select</th><th>fs select</th></tr>
<tr><td>L</td><td>L</td><td>ON</td><td>44.1kHz</td></tr>
<tr><td>L</td><td>H</td><td>ON</td><td>48.0kHz</td></tr>
<tr><td>H</td><td>H</td><td>ON</td><td>32.0kHz</td></tr>
<tr><td>H</td><td>L</td><td>OFF</td><td>–</td></tr>
</table></td></tr>
<tr><td>10</td><td>DSF2</td><td>I</td><td>Deemphasis select pin 2. (Connected to + GND)</td></tr>
<tr><td>11</td><td>$\overline{RST}$</td><td>I</td><td>System reset.</td></tr>
<tr><td>12</td><td>BCKO</td><td>O</td><td>Output bit clock.</td></tr>
<tr><td>13</td><td>DOR</td><td>O</td><td>Rch 8fs data output.</td></tr>
<tr><td>14</td><td>DOL</td><td>O</td><td>Lch 8fs data output.</td></tr>
<tr><td>15</td><td>WCKO</td><td>O</td><td>Output word clock.</td></tr>
<tr><td>16</td><td>VDD</td><td>–</td><td>Power pin.</td></tr>
<tr><td>17</td><td>NC</td><td>–</td><td>Not connected.</td></tr>
<tr><td>18</td><td>NC</td><td>–</td><td>Not connected.</td></tr>
<tr><td>19</td><td>NC</td><td>–</td><td>Not connected.</td></tr>
<tr><td>20</td><td>LRCI</td><td>I</td><td>Input data sample rate (fs) clock.</td></tr>
<tr><td>21</td><td>BCKI</td><td>I</td><td>Input bit clock.</td></tr>
<tr><td>22</td><td>DIN</td><td>I</td><td>Input data.</td></tr>
</table>

IC, CXD2701Q

Pin No.	Pin Name	I/O	Description
1	I-MODE	I	Input data format setting terminal. (Connected to VDD)
2	I-DIR	I	
3	I-DATA	I	1-sampling 2-channel serial data input terminal. Data formatted as 2's complement.
4	I-BCK	I	Serial data transmission clock input.

Pin No.	Pin Name	I/O	Description
5	I-LRCK	I	Serial I/O sampling clock input. L channel data transmission when "H", R channel data transmission when "L".
6	VSS1	—	GND.
7	O-DATA	O	Serial data output. (2's complement)
8	O-BCK	O	Bit clock output. 64 slots.
9	O-LRCK	O	Serial data sampling clock output.
10	BS1	I	Output data bit quantity setting terminal. (Connected to VDD)
11	BS2	I	Output data bit quantity setting terminal. (Connected to GND)
12	O-DIR	I	Output data format setting terminal. (Connected to VDD)
13	VSS3	—	GND.
14	SCK	O	System clock output. fsck = fxt = 512fs
15	XOUT	O	X'tal oscillation circuit output. (22.57MHz)
16	XIN	I	X'tal oscillation circuit input. fxt = 512fs (22.57MHz)
17	VDD1	—	Power supply. (+5V)
18	I/O4	I/O	Data input/output for external dynamic RAM.
19	I/O3	I/O	
20	CAS	O	Column address strobe output for external dynamic RAM.
21	I/O2	I/O	Data input/output for external dynamic RAM.
22	I/O1	I/O	
23	$\overline{WE}$	O	Write enable output for external dynamic RAM. "L" active.
24	A0	O	Address output for external dynamic RAM.
25	RAS	O	Row address strobe for external dynamic RAM.
26	A1	O	Address output for external dynamic RAM.
27	A2	O	
28	VSS2	—	GND.
29 ∫ 34	A3 ∫ A8	O	Address output for external dynamic RAM.
35	TEST1	I	Test terminal. (Connected to GND)
36	TEST2	I	
37	TEST3	I	
38	TEST0	O	Test terminal. (Not used)
39	VDD2	—	Power supply. (+5V)
40	PRGD	I	Serial data input to receive commands, coefficients and control signals from microcomputer.
41	PRGCK	I	Serial clock input for PRGD data. Data is latched at the starting edge of the clock.
42	$\overline{PRGL}$	I	Input to latch serial data from microcomputer in IC. "L" active.
43	$\overline{INIT}$	I	Initializing input. "L" active. Put in sync again at leading edge.
44	OVF	O	Not used.

IC, CXP81312-333Q

Pin No.	Pin Name	I/O	Description
1 ∫ 14	NC	O	Not used.
15	I-FADER	I	Connected to GND.
16	I-OVER	I	Not used.
17	I-FS0	I	Connected to GND.

Pin No.	Pin Name	I/O	Description
18	I-FS1	I	Connected to GND.
19	O-CLK2701	O	Clock signal for CXD2701 control.
20	O-DATA2701	O	Serial data for CXD2701 control.
21	NC	O	Not used.
22	O-32K	O	Not used.
23	O-48K	O	Not used.
24	O-44.1K	O	Not used.
25	NC	O	Not used.
26	$\overline{\text{O-DAT}}$	O	Not used.
27	O-DIG A	O	Not used.
28	O-DIG B	O	Not used.
29	$\overline{\text{O-K MODE}}$	O	Not used.
30	O-STB2701	O	Strobe signal for CXD2701 control.
31	MP	O	Not used. (connected to GND)
32	$\overline{\text{RST}}$	I	Reset signal for microcomputer.
33	VSS	—	GND.
34	XTAL	I	X'tal terminal. (4.19MHz)
35	EXTAL	—	
36	$\overline{\text{CSO}}$	I	Connected to VDD.
37	SIO	I	Connected to VDD.
38	SOO	O	Not used.
39	$\overline{\text{SCKO}}$	O	Not used.
40	I-STB DSP	I	Strobe signal input from main microcomputer.
41	I-DATA DSP	I	Data input from main microcomputer.
42	VDD	I	Connected to VDD.
43	I-CLK	I	Clock input from main microcomputer.
44	I-BAND	I	Connected to GND.
45 ∫ 51		I	Connected to GND.
52	VSS	—	GND.
53	VREF	—	Connected to VDD.
54	VDD	—	Power supply. (+4.5V)
55 ∫ 62	PG7 ∫ PG0	I	Connected to VDD.
63 ∫ 68		O	Not used.
69	PEI	I	Connected to VDD.
70	PEO	I	Connected to VDD.
71	$\overline{\text{NMI}}$	I	Connected to VDD.
72	VDD	—	Power supply. (+4.5V)
73	VSS	—	GND.
74 ∫ 80		O	Not used.

IC, PCM69AU

Pin No.	Pin Name	I/O	Description
1	+VCC	—	Power supply. (+5V)
2	V COM (L)	O	V common for L-channel.
3	NC	—	Not used.
4	I-OUT (L)	O	Current output for L-channel.
5	SERVO DC	—	Servo filter. Bypassed via capacitor to GND.
6	REF DC	—	Reference filter. Bypassed via capacitor to GND.
7	I-OUT (R)	O	Current output for R-channel.
8	NC	—	Not used.
9	V COM (R)	O	V common for R-channel.
10	A GND	—	Analog GND.
11	D GND	—	Digital GND.
12	TP2	I	Test terminal 2. (Connected to GND)
13	DATA (R)	I	Data input for R-channel.
14	BCK	I	Bit clock input.
15	SYS-CLK	I	System clock input.
16	WDCK	I	Word clock input.
17	DATA (L)	I	Data input for L-channel.
18	RSRVD	I	Test terminal 3. (Not used)
19	TP1	I	Test terminal 1. (Connected to VDD)
20	+VDD	—	Power supply. (+4.5V)

IC, TMS44C256-10N

Pin No.	Pin Name	I/O	Description
1	I/O1	I/O	Data input/output.
2	I/O2	I/O	
3	WE	—	Write enable output.
4	RAS	—	Row address strobe signal.
5	NC	—	Not used.
6 ∫ 9	A0 ∫ A3	I	Address input.
10	VDD	—	Power supply. (+4.5V)
11 ∫ 15	A4 ∫ A8	I	Address input.
16	OE	—	Output enable signal. (Connected to GND)
17	CAS	—	Column address strobe signal.
18	I/O3	I/O	Data input/output.
19	I/O4	I/O	
20	VSS	—	GND.

IC, CXP2201AS

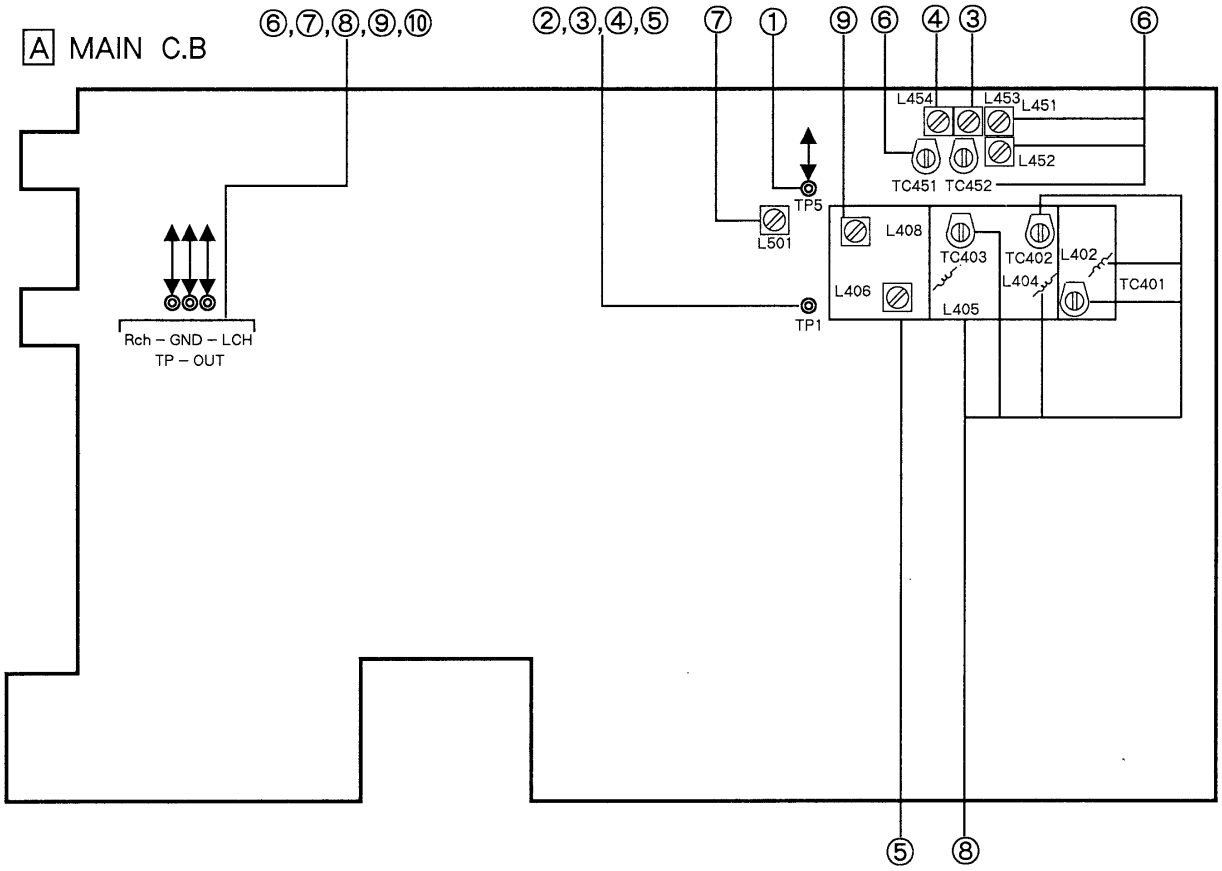
Pin No.	Pin Name	I/O	Description
1	EXT	I	Ceramic connector for system clock oscillator use. When using an external clock, input to EXT, and leave XT open. (3.9MHz)
2	XT	O	
3	VSS	—	Connected to GND.
4～7	K0～K3	I	Key input. (Connected to GND)
8	VDD	—	Power supply. (+5V)
9～23	S15～S1	O	Exclusive segment output. (with built-in pull-down resistor)
24～32	1G～9G	O	Exclusive timing output. (with built-in pull-down resistor)
33	−VFL	—	Load power supply for FDP. (-28V)
34	————	O	Not used.
35, 36	P1, P2	O	Port I/O. (large-current output)
37	KD	O	Not used.
38	FL SI	I	Serial data input. (Not used)
39	DATA	O	Serial data output.
40	CLK	I	Serial data clock input.
41	STB $\overline{CS}$	I	Chip select input.
42	$\overline{RST}$	I	Reset. (with built-in pull-up resistor and power-on reset circuit)

IC, CXP82324 − 136Q

Pin No.	Pin Name	I/O	Description
1	I−$\overline{HOLD}$	I	The present state is backed up when "L" is input.
2	I−REMOTE	I	Remote control signal input.
3	I−$\overline{TUNE}$	I	Frequency display and sending data to PLL are stopped during tuner reception (when "L" is input).
4	O−CLK TU	O	TU PLL clock.
5	O−PLL CE	O	TU PLL chip enable.
6	O−STB DSP	O	DSP chip enable.
7	O−STB VOL R	O	REAR electronic volume clip enable.
8	O−CLK	O	CLK for shift register and DSP.
9	O−STB $\overline{CS}$	O	TUNER FL driver clip enable.
10	O−DATA	O	Data for shift register, TU and electronic GEQ.
11	I/O−SERIAL	I/O	I/O for FD communication.
12	I−DATA TU	I	Data input from TU PLL.
13	O−STB SR	O	Shift register chip enable.
14	O−Seg $\overline{16}$	O	Segment expand port to light FL.
15	O−Seg $\overline{5}$	O	Segment expand port to light FL.
16	O−Seg $\overline{28}$	O	Segment expand port to light FL.
17	O−Seg $\overline{17}$	O	Segment expand port to light FL.
18	O−Seg $\overline{6}$	O	Segment expand port to light FL.
19	O−Seg $\overline{29}$	O	Segment expand port to light FL.
20	I−INITIAL	I	Input to initially set the micro-computer shipment destination.
21	I−$\overline{TRAY\ OPEN}$	I	CONTROL TRAY OPEN detect switch input. "L" when TRAY OPEN.
22～25	I−KEY 1～4	I	KEY A/D input.
26	O−FS・RESET	O	SPECTRUM ANALYZER IC RESET output.
27	I−SPE	I	SPECTRUM ANALYZER IC OUT input.
28	I−MIC	I	MIC LEVEL input.

Pin No.	Pin Name	I/O	Description
29	O-DATA DSP	O	DSP DATA.
30	I-$\overline{\text{RST}}$	I	RESET input. Reset when "L".
31	EXTAL	O	Oscillation crystal connection pin. (7.68MHz)
32	XTAL	I	Oscillation crystal connection pin. (7.68MHz)
33	GND	—	GND.
34	O-Seg 18	O	Segment output to light FL.
35	O-Seg 7	O	Segment output to light FL.
36	O-Seg 30	O	Segment output to light FL.
37	O-Seg 19	O	Segment output to light FL.
38	O-Seg 8	O	Segment output to light FL.
39	O-Seg 31	O	Segment output to light FL.
40	O-Seg 20	O	Segment output and the initial set D-MATRIX output to light FL.
41	O-Seg 9	O	Segment output and the initial set D-MATRIX output to light FL.
42	O-Seg 32	O	Segment output to light FL.
43	O-Seg 21	O	Segment output to light FL.
44	O-Seg 10	O	Segment output to light FL.
45	O-Seg 33	O	Segment output to light FL.
46	O-Seg 22	O	Segment output to light FL.
47	O-Seg 11	O	Segment output to light FL.
48	O-Seg 27	O	Segment output to light FL.
49	O-Seg 4	O	Segment output to light FL.
50	O-Seg 15	O	Segment output to light FL.
51	O-Seg 26	O	Segment output to light FL.
52	O-Seg 3	O	Segment output to light FL.
53	O-Seg 14	O	Segment output to light FL.
54	O-Seg 25	O	Segment output to light FL.
55	O-Seg 2	O	Segment output to light FL.
56	O-Seg 13	O	Segment output to light FL.
57	O-Seg 24	O	Segment output to light FL.
58	O-Seg 1	O	Segment output to light FL.
59	O-Seg 12	O	Segment output to light FL.
60	O-Seg 23	O	Segment output to light FL.
61～70	Grid 10～1	O	Grid output to light FL.
71	-VFL	I	-VFL input for FL (-28V).
72	VDD	I	+5V micro-computer power supply.
73	NC	I	Connected to VDD.
74	O-DATA VOL	O	REAR electronic volume DATA.
75	I-$\overline{\text{ST/BIL}}$	I	FL stereo bilingual mark lights when "L" is input.
76	O-$\overline{\text{MUTE}}$	O	Muting output.
77	O-$\overline{\text{POWER}}$	O	"L" output during power ON.
78	I-G1	I	Timing-1 input to light FL.
79	I-Grid	I	Timing-2 input to light FL.
80	I-$\overline{\text{TIME B}}$	I	CLK (8Hz) input for clock.

ADJUSTMENT (TUNER)



〈TUNER SECTION〉

Initialized condition

GEQ VR : OFF
BBE SW : OFF
MIC VR : Minimum
BALANCE : Center
MAIN VR : Variable
DOLBY NR SW : OFF
T – BASS : OFF

1. Clock Check

Settings : • Test point : TP5

Method : Set to MW 1602kHz (HE,HR,E,K,Z), 1710kHz (LH) and check so that the test point is 2052kHz ± 0.05kHz (HE,HR,E,K,Z), 2160kHz ± 0.05kHz (LH).

2. MW VT Check (HE,LH ONLY)

Settings : • Test point : TP1

Method : Set to MW 531kHz and check so that the test point is 1.1V ± 0.2V.

3. MW VT Adjustment (E,K,Z ONLY)

Settings : • Test point : TP1
• Adjustment location : L453

Method : Set to MW 531kHz and adjust L453 so that the test point becomes 1.1V ± 0.05V.

4. LW VT Adjustment (E,K,Z ONLY)

Settings : • Test point : TP1
• Adjustment location : L454

Method : Set to LW 144kHz and adjust L454 so that the test point becomes 1.3V ± 0.05V.

5. FM VT Adjustment

Settings : • Test point : TP1
• Adjustment location : L406

Method : Set to FM 108MHz and adjust L406 so that the test point becomes 9.4V ± 0.05V.

6. MW, LW Tracking Adjustment (E,K,Z ONLY)

Settings : • Test point : TP – OUT

MW

L451 ····· 603kHz
TC451 ····· 1404kHz

LW

L452 ····· 144kHz
TC452 ····· 290kHz

7. AM IF Adjustment
   Settings : • Test point : TP – OUT
   L501 ····· 450kHz
8. FM Tracking Adjustment
   Settings : • Test point : TP – OUT
   TC401,TC402 ····· 108MHz
   TC403 ····· 108MHZ (Z)
   L402,L404 ····· 87.5MHz
   L405 ····· 87.5MHZ (Z)

9. FM IF Adjustment
   Settings : • Test point : TP – OUT
   L408 ····· 10.7MHz

10. FM Separation Check
    Settings : • Test point : TP – OUT
    Method : Set to FM 98.0MHz and check the separation at TP – OUT is more than 27dB.

PRACTICAL SERVICE FIGURE (TUNER)

TUNER SECTION

< FM SECTION >

IHF Sensitivity :	4dB ± 4dB (87.5MHz)
	8dB ± 4dB (87.5MHz) (Z model)
(THD 3%)	4dB ± 4dB (98.0MHz)
	6dB ± 4dB (98.0MHz) (Z model)
	4dB ± 4dB (108.0MHz)
	6dB ± 4dB (108.0MHz) (Z model)
S/N 50dB Quieting sensitivity :	
	36dB ± 5dB (87.5/98.0/108.0MHz)
(46dB Z MODEL)	Less than 44dB (87.5/90.0/108.0MHz)
Signal to noise ratio :	(MONO) More than 78dB (98.0MHz)
	(STEREO) More than 64dB (98.0MHz)
Distortion :	(MONO) Less than 0.6% (98.0MHz)
	(STEREO) Less than 0.8% (98.0MHz)
Stereo separation :	More than 25dB (98.0MHz)
Intermediate frequency :	10.7MHz

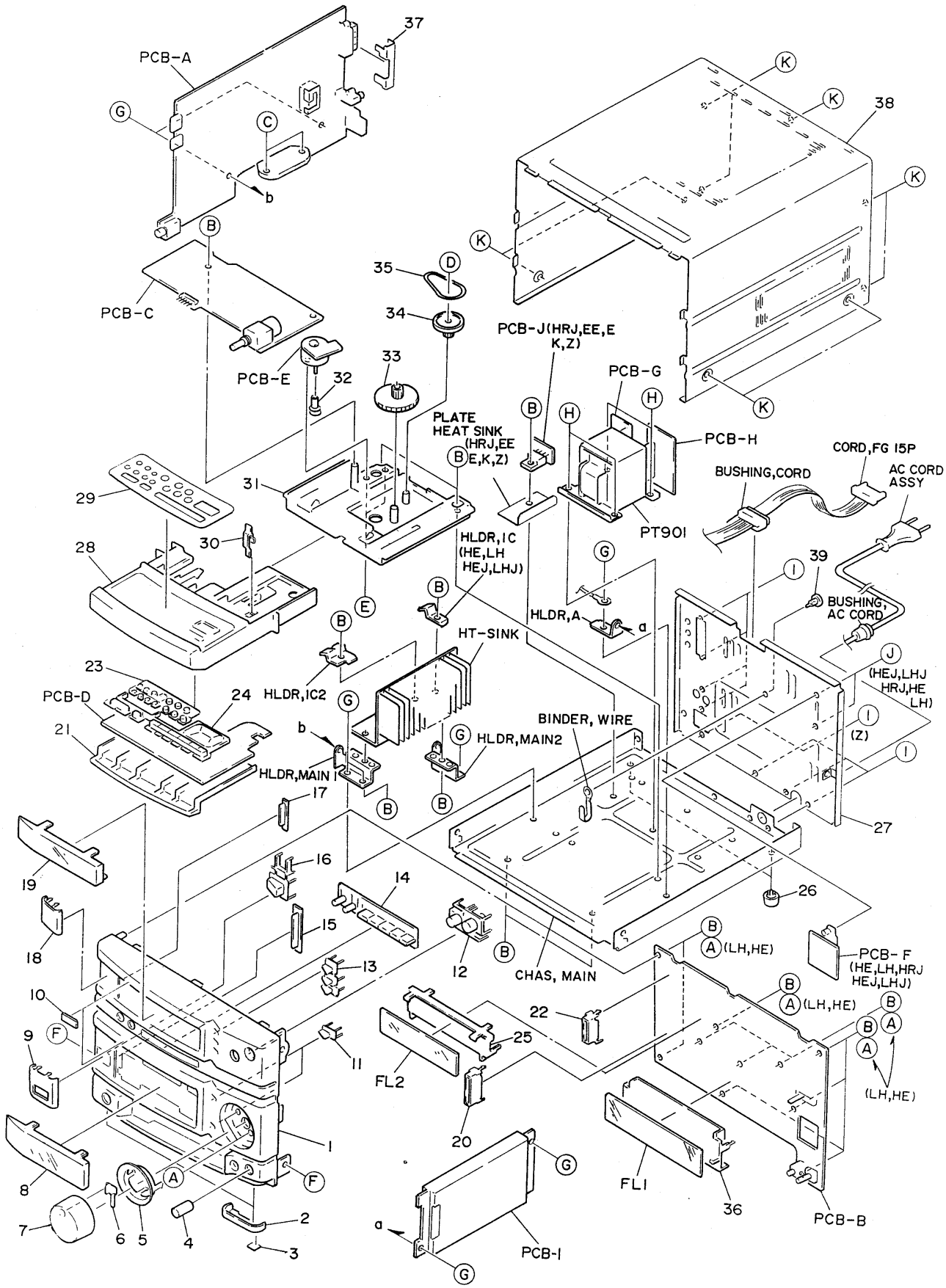
< AM (MW) SECTION >

Sensitivity :	56dB ± 5dB (603kHz)
(S/N 20dB)	53dB ± 5dB (999kHz)
	53dB ± 5dB (1404kHz)
Distortion :	Less than 1.5% (999kHz)
Stereo separation :	More than 25dB (1kHz)
Intermediate frequency :	450kHz

< LW SECTION > (E,K,Z)

Sensitivity :	65dB ± 5dB (144kHz)
(S/N 20dB)	62dB ± 5dB (198kHz)
	62dB ± 5dB (290kHz)
Distortion :	Less than 1.5% (198kHz)
Intermediate frequency :	450kHz

MECHANICAL EXPLODED VIEW 1/1 (RX – N909)



MECHANICAL PARTS LIST 1／1 (RX－N909)

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	82-NT1-001-210		CAB, FR〈LHJ, K, EE, Z, E, LH〉
1	82-NT1-002-210		CAB, FR(HE)〈HEJ, HRJ, HE〉
2	82-NT1-036-010		RING, FOOT
3	80-VT1-202-010		FELT, 12.5-15.5-2
4	80-MT3-014-010		KNOB MIC
5	82-NT1-030-010		RING, VOL
6	82-NE6-016-010		IND, MAIN(VOL)
7	82-NT1-051-010		KNOB, MAIN
8	82-NT1-028-010		WINDOW, AMP
9	82-NT1-045-010		DUMMY, POWER
10	81-MX4-032-010		BADGE, AIWA N
11	82-NT1-037-010		KEY, DSP
12	82-NT1-018-010		KEY, UP/DOWN
13	82-NT1-019-010		KEY, TU
14	82-NT1-020-010		KEY, FUN
15	82-NT1-026-010		IND, AMP
16	82-NT1-015-010		KEY, POWER
17	82-NT1-027-010		IND, TU
18	82-NT1-017-010		DUMMY
19	82-NT1-029-010		WINDOW, TU
20	82-NT1-207-010		GUIDE, LED
21	82-NT1-202-010		PLATE, BOTTOM
22	82-NT1-219-010		GUIDE, LED 2
23	82-NT1-023-110		KEY, GE
24	82-NT1-022-010		KEY, T-BASS
25	82-NT1-220-010		GUIDE, FL TU
26	87-085-213-010		FOOT, H12.5
27	82-NT1-008-010		PANEL REAR(HEJBN)〈HEJ〉
27	82-NT1-050-010		PANEL, REAR(HRJBN)〈HRJ〉
27	82-NT1-012-010		PANEL, REAR(KBNE)〈K〉
27	82-NT1-009-010		PANEL, REAR(LHJBN)〈LHJ〉
27	82-NT1-013-010		PANEL, REAR(ZBNE)〈Z〉
27	82-NT1-056-010		PANEL, REAR(HEB)〈HE〉
27	82-NT1-057-010		PANEL, REAR(LHB)〈LH〉
27	82-NT1-011-010		PANRL, REAR(EBNE)〈EE, E〉
28	82-NT1-049-010		CAB, TRAY〈K, EE, Z, E〉
28	82-NT1-048-010		CAB, TRAY〈HEJ, LHJ, HRJ, HE, LH〉
29	82-NT1-034-110		PLATE, TRAY〈EXCEPT HE, LH〉
29	82-NT1-034-010		PLATE, TRAY〈HE, LH〉
30	81-MT3-211-010		LEVER, OPEN
31	82-NT1-203-110		HLDR, TRAY〈EXCEPT HE, LH〉
31	82-NT1-203-010		HLDR, TRAY〈HE, LH〉
32	89-VW5-206-010		PULLEY MOTOR
33	82-NT1-204-010		GEAR, LOADING
34	82-NT1-205-010		PULLEY, LOADING
35	80-VW1-217-010		BELT, SQ 1.5
36	82-NT1-208-010		GUIDE, FL AMP
37	81-653-648-010		ANT TERM EARTH PAL〈K, EE, Z, E〉
37	81-653-638-110		ANT TERM EARTH〈HEJ, LHJ, HRJ, HE, LH
38	82-NT1-006-010		CAB, STEEL〈HEJ, LHJ, HRJ, HE, LH〉
38	82-NT1-063-010		CAB, STEEL (G)〈K, EE, Z, E〉
39	87-084-077-010		NYLON RIVET 3.5-4.5
A	87-067-703-010		BVT2+3-10 (W/O SLOT)
B	87-067-579-010		BVT2+3-8W/O SLOT
C	87-067-581-010		BVT2+3-15W/O SLOT
D	87-861-095-410		VFT2+3-8 SLOT
E	87-261-073-410		V+2.6-6
F	87-591-094-410		QIT+3-6
G	87-067-688-010		BVTT+3-6
H	87-078-019-010		S-SCREW, IT+4-6
I	87-067-660-010		BVT2+3-8W/O SLOT BLK
J	80-VP2-202-010		S-SCREW, VT2〈HEJ, LHJ, HRJ, HE, LH〉
K	87-743-094-410		UT2+3-6 W/O SLOT BLK

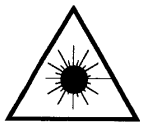
MODEL NO.

FD-N909

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

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

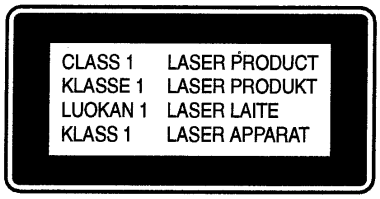
VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

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 laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

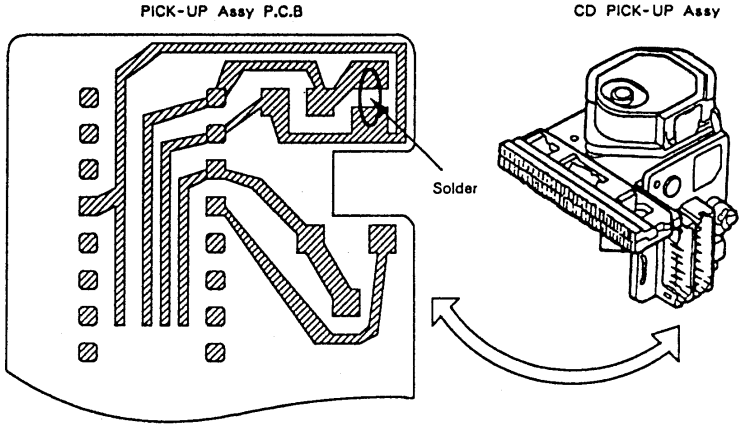
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



Precaution to replace Optical block (KSS – 210A)

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

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



ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
IC			
	87-020-793-080		IC, CXA-1081M
	87-020-794-110		IC, CXA-1082BQ
	87-001-944-010		IC, CXD-1167Q
	87-002-639-089		IC, BA6296FA
	87-017-194-010		IC, PLT104
	87-017-022-089		IC, NJM2068M-D(T1)
	87-002-881-080		IC, SM5871AS
	87-001-607-089		IC, NJM4558M
	87-001-224-089		IC, NJU4066BM
	82-NV1-625-110		IC, UPD78043GF-032
	87-002-394-019		IC, LB1641
	87-017-023-089		IC, NJU4052BM
	87-001-908-019		IC, CXA1332S
	87-002-872-080		IC, MC14053BF
	87-020-730-089		IC, TC4069 UBF
	87-002-901-089		IC, BU4094 BF
	87-001-334-010		IC, LB9051A
TRANSISTOR			
	87-026-463-010		TR, 2SA933S
	89-109-521-089		TR, 2SA952K
	89-327-125-089		C-TR, 2SC2712GR
	87-026-210-089		C-TR, DTC144EK T147
	87-026-238-089		C-TR, DTC144WK
	89-113-625-089		C-TR, 2SA1362GR(TAPG)
	89-213-702-019		TR, 2SB1370E
	89-333-317-889		TR, 2SC3331TU
	89-320-011-089		TR, 2SC2001K
	87-026-235-089		C-TR, DTC114EK
	89-503-685-089		C-FET, 2SK368GR
	87-026-233-089		TR, DTA114TK
	89-328-785-089		TR, 2SC2878-A (E2-M)
	87-026-228-089		C-TR, DTA124EK
	89-318-155-089		TR, 2SC1815GR
DIODE			
	87-002-564-089		DIODE, 1SS133 RA
	87-020-465-089		DIODE, 1SS133 T-72
	87-017-097-059		ZENER, HZS6B1 RA
	87-002-836-089		DIODE, 1A3-J
	87-017-121-089		ZENER, HZS11A1
	87-020-123-089		DIODE, DS446-AT(TA)
	87-001-290-089		ZENER, HZS6B1L
	87-017-097-089		ZENER, HZS6B1
	87-001-559-089		DIODE, ISS131 T-72
CD C.B			
C1	87-010-184-089		C-CAP, S 3300P-50 B
C2	87-010-263-089		CAP, E 100-10
C3	87-010-178-089		C-CAP, S 1000P-50 B
C4	87-010-374-089		CAP, E 47-10
C5	87-010-248-089		CAP, E 220-10 SME
C6	87-010-197-089		C-CAP, S 0.01-25 B
C7	87-010-193-089		C-CAP, S 0.033-25 F
C8	87-010-193-089		C-CAP, S 0.033-25 F
C9	87-010-197-089		C-CAP, S 0.01-25 B
C10	87-010-400-089		CAP, E 0.47-50 SME
C11	87-010-248-089		CAP, E 220-10 SME
C13	87-010-197-089		C-CAP, S 0.01-25 B
C14	87-010-193-089		C-CAP, S 0.033-25 F
C15	87-010-197-089		C-CAP, S 0.01-25 B
C16	87-010-184-089		C-CAP, S 3300P-50 B
C17	87-010-196-089		C-CAP, S 0.1-25 F
C18	87-010-193-089		C-CAP, S 0.033-25 F
C19	87-010-405-089		CAP, E 10-50 SME
C20	87-010-196-089		C-CAP, S 0.1-25 F
C21	87-010-382-089		CAP, E 22-25 SME
C22	87-010-401-089		CAP, E 1-50 SME
C24	87-010-197-089		C-CAP, S 0.01-25 B
C25	87-010-263-089		CAP, E 100-10
C26	87-010-197-089		C-CAP, S 0.01-25 B
C27	87-010-263-089		CAP, E 100-10
C28	87-010-197-089		C-CAP, S 0.01-25 B
C29	87-010-404-089		CAP, E 4.7-50 SME
C30	87-010-374-089		CAP, E 47-10
C31	87-010-178-089		C-CAP, S 1000P-50 B
C32	87-012-157-089		C-CAP, S 330P-50 CH
C33	87-010-193-089		C-CAP, S 0.033-25 F
C34	87-010-400-089		CAP, E 0.47-50 SME
C35	87-010-197-089		C-CAP, S 0.01-25 B
C36	87-010-197-089		C-CAP, S 0.01-25 B
C37	87-010-404-089		CAP, E 4.7-50 SME
C38	87-010-263-089		CAP, E 100-10
C39	87-010-197-089		C-CAP, S 0.01-25 B
C40	87-010-193-089		C-CAP, S 0.033-25 F
C41	87-010-221-089		CAP, E 470-10
C42	87-010-197-089		C-CAP, S 0.01-25 B
C43	87-010-221-089		CAP, E 470-10
C44	87-010-197-089		C-CAP, S 0.01-25 B
C45	87-010-248-089		CAP, E 220-10 SME
C46	87-010-197-089		C-CAP, S 0.01-25 B
C47	87-010-196-089		C-CAP, S 0.1-25 F
C48	87-010-196-089		C-CAP, S 0.1-25 F
C49	87-010-196-089		C-CAP, S 0.1-25 F
C50	87-010-196-089		C-CAP, S 0.1-25 F
C51	87-010-197-089		C-CAP, S 0.01-25 B
C52	87-010-263-089		CAP, E 100-10
C53	87-010-197-089		C-CAP, S 0.01-25 B
C54	87-010-314-089		C-CAP, S 22P-50 CH
C55	87-010-314-089		C-CAP, S 22P-50 CH
C56	87-010-316-089		C-CAP, S 33P-50 CH
C101	87-010-263-089		CAP, E 100-10
C102	87-010-197-089		C-CAP, S 0.01-25 B
C103	87-010-263-089		CAP, E 100-10
C104	87-010-263-089		CAP, E 100-10
C105	87-010-196-089		C-CAP, S 0.1-25 F
C106	87-010-316-089		C-CAP, S 33P-50 CH
C107	87-010-316-089		C-CAP, S 33P-50 CH
C108	87-010-197-089		C-CAP, S 0.01-25 B
C109	87-012-154-089		C-CAP, S 150P-50 CH
C110	87-012-154-089		C-CAP, S 150P-50 CH
C111	87-012-157-089		C-CAP, S 330P-50 CH
C112	87-012-157-089		C-CAP, S 330P-50 CH
C113	87-012-157-089		C-CAP, S 330P-50 CH
C114	87-012-157-089		C-CAP, S 330P-50 CH
C115	87-010-405-089		CAP, E 10-50 SME
C116	87-010-405-089		CAP, E 10-50 SME
C117	87-010-178-089		C-CAP, S 1000P-50 B
C118	87-010-178-089		C-CAP, S 1000P-50 B
C119	87-010-248-089		CAP, E 220-10 SME
C120	87-010-248-089		CAP, E 220-10 SME
C121	87-012-157-089		C-CAP, S 330P-50 CH
C122	87-012-157-089		C-CAP, S 330P-50 CH
C123	87-012-157-089		C-CAP, S 330P-50 CH
C124	87-012-157-089		C-CAP, S 330P-50 CH
C201	87-010-263-089		CAP, E 100-10
C202	87-010-196-089		C-CAP, S 0.1-25 F
C203	87-010-401-089		CAP, E 1-50 SME
C204	87-010-405-089		CAP, E 10-50 SME
C205	87-010-405-089		CAP, E 10-50 SME
C206	87-010-405-089		CAP, E 10-50 SME
C207	87-010-196-089		C-CAP, S 0.1-25 F
C208	87-010-197-089		C-CAP, S 0.01-25 B
C209	87-010-178-089		C-CAP, S 1000P-50 B
C211	87-010-235-089		CAP, E 470-16 SME
C212	87-010-197-089		C-CAP, S 0.01-25 B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C213	87-010-196-089		C-CAP, S 0.1-25 F
C214	87-010-197-089		C-CAP, S 0.01-25 B
C216	87-010-382-089		CAP, E 22-25 SME
C250	87-010-405-089		CAP, E 10-50 SME
C301	87-010-237-089		CAP, E 1000-16
C302	87-010-178-089		C-CAP, S 1000P-50 B
C303	87-010-221-089		CAP, E 470-10
C304	87-010-178-089		C-CAP, S 1000P-50 B
C305	87-010-263-089		CAP, E 100-10
C306	87-010-075-089		CAP, E 10-16 5L
C307	87-010-405-089		CAP, E 10-50 SME
C308	87-010-075-089		CAP, E 10-16 5L
C309	87-010-196-089		C-CAP, S 0.1-25 F
C310	87-010-196-089		C-CAP, S 0.1-25 F
C501	87-010-405-089		CAP, E 10-50 SME
C502	87-010-405-089		CAP, E 10-50 SME
C503	87-010-404-089		CAP, E 4.7-50 SME
C504	87-010-404-089		CAP, E 4.7-50 SME
C505	87-010-374-089		CAP, E 47-10
C506	87-010-221-089		CAP, E 470-10
C507	87-010-384-089		CAP, E 100-25 SME
C508	87-010-075-089		CAP, E 10-16 5L
C509	87-010-075-089		CAP, E 10-16 5L
C510	87-010-197-089		C-CAP, S 0.01-25 B
C511	87-010-321-089		C-CAP, S 82P-50 CH
C512	87-010-321-089		C-CAP, S 82P-50 CH
C513	87-010-321-089		C-CAP, S 82P-50 CH
C514	87-010-321-089		C-CAP, S 82P-50 CH
C515	87-010-321-089		C-CAP, S 82P-50 CH
C516	87-010-321-089		C-CAP, S 82P-50 CH
C517	87-010-321-089		C-CAP, S 82P-50 CH
C518	87-010-321-089		C-CAP, S 82P-50 CH
C519	87-010-321-089		C-CAP, S 82P-50 CH
FL601	82-NV1-626-019		FL, 8-ST-15G
J501	81-VP1-634-019		JACK, PIN 3P
J502	81-VP1-634-019		JACK, PIN 3P
J503	81-VP1-635-019		JACK, PIN 3P EARTH
L1	87-003-295-089		COIL, 10UH
L101	87-003-295-089		COIL, 10UH
L501	87-008-474-089		F-BEAD, EMI BL02RN1
L502	87-008-474-089		F-BEAD, EMI BL02RN1
L503	87-008-474-089		F-BEAD, EMI BL02RN1
L504	87-008-474-089		F-BEAD, EMI BL02RN1
M401	87-045-305-019		MOTOR, RF-500TB
R25	87-022-396-089		C-RES, S 3.6K-1/10WF
R33	87-022-214-089		C-RES, S 100K-1/10WF
R34	87-022-214-089		C-RES, S 100K-1/10WF
SFR1	87-024-173-089		SFR, 22K DIA6 V
SFR2	87-024-173-089		SFR, 22K DIA6 V
SFR3	87-024-173-089		SFR, 22K DIA6 V
SFR4	87-024-168-089		SFR, 1K DIA6 V
VR501	81-MX4-636-019		VR, 50KBX2 RK14K12A0
X101	87-030-270-089		VIB, XTAL 16.9344MHZ
X201	87-008-394-089		CF CST 4.19 MGW

DECK C.B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C101	87-012-158-089		C-CAP, S 390P-50 CH
C102	87-012-158-089		C-CAP, S 390P-50 CH
C103	87-010-318-089		C-CAP, S 47P-50 CH
C104	87-010-318-089		C-CAP, S 47P-50 CH
C105	87-010-426-089		C-CAP, S 0.012-25 B
C106	87-010-426-089		C-CAP, S 0.012-25 B
C109	87-012-154-089		C-CAP, S 150P-50 CH
C110	87-012-154-089		C-CAP, S 150P-50 CH
C111	87-010-404-089		CAP, E 4.7-50 SME
C112	87-010-404-089		CAP, E 4.7-50 SME
C113	87-010-404-089		CAP, E 4.7-50 SME
C114	87-010-404-089		CAP, E 4.7-50 SME
C115	87-010-101-089		CAP, E 220-16 SME
C116	87-010-197-089		C-CAP, S 0.01-25 B
C117	87-015-819-089		C-CAP, S 0.01-25 B
C201	87-012-158-089		C-CAP, S 390P-50 CH
C202	87-012-158-089		C-CAP, S 390P-50 CH
C203	87-010-318-089		C-CAP, S 47P-50 CH
C204	87-010-318-089		C-CAP, S 47P-50 CH
C205	87-010-426-089		C-CAP, S 0.012-25 B
C206	87-010-426-089		C-CAP, S 0.012-25 B
C207	87-012-156-089		C-CAP, S 220P CH
C208	87-012-156-089		C-CAP, S 220P CH
C211	87-010-404-089		CAP, E 4.7-50 SME
C212	87-010-404-089		CAP, E 4.7-50 SME
C213	87-010-101-089		CAP, E 220-16 SME
C214	87-010-197-089		C-CAP, S 0.01-25 B
C215	87-010-197-089		C-CAP, S 0.01-25 B
C301	87-010-322-089		C-CAP, S 100P-50 CH
C302	87-010-322-089		C-CAP, S 100P-50 CH
C303	87-010-183-089		C-CAP, S 2700P-50 B
C304	87-010-183-089		C-CAP, S 2700P-50 B
C305	87-010-404-089		CAP, E 4.7-50 SME
C306	87-010-404-089		CAP, E 4.7-50 SME
C323	87-012-157-089		C-CAP, S 330P-50 CH
C324	87-012-157-089		C-CAP, S 330P-50 CH
C401	87-012-156-089		C-CAP, S 220P CH
C402	87-012-156-089		C-CAP, S 220P CH
C403	87-014-071-089		CAP, PP 3900P-100 J
C405	87-010-263-089		CAP, E 100-10
C409	87-010-402-089		CAP, E 2.2-50 SME
C410	87-010-405-089		CAP, E 10-50 SME
C451	87-010-178-089		C-CAP, S 1000P-50 B
C453	87-010-322-089		C-CAP, S 100P-50 CH
C454	87-010-322-089		C-CAP, S 100P-50 CH
C455	87-010-197-089		C-CAP, S 0.01-25 B
C456	87-010-197-089		C-CAP, S 0.01-25 B
C501	87-012-158-089		C-CAP, S 390P-50 CH
C502	87-012-158-089		C-CAP, S 390P-50 CH
C503	87-010-182-089		C-CAP, S 2200P-50 B
C504	87-010-182-089		C-CAP, S 2200P-50 B
C505	87-010-404-089		CAP, E 4.7-50 SME
C506	87-010-404-089		CAP, E 4.7-50 SME
C507	87-010-182-089		C-CAP, S 2200P-50 B
C508	87-010-182-089		C-CAP, S 2200P-50 B
C509	87-010-182-089		C-CAP, S 2200P-50 B
C510	87-010-182-089		C-CAP, S 2200P-50 B
C511	87-010-825-089		CAP, E 0.56/50V, SME
C512	87-010-825-089		CAP, E 0.56/50V, SME
C513	87-010-546-089		CAP, E 0.33-50 SME
C514	87-010-546-089		CAP, E 0.33-50 SME
C515	87-010-404-089		CAP, E 4.7-50 SME
C516	87-010-404-089		CAP, E 4.7-50 SME
C517	87-010-371-089		CAP, E 470-6.3
C518	87-010-101-089		CAP, E 220-16 SME
C519	87-010-404-089		CAP, E 4.7-50 SME
C520	87-010-404-089		CAP, E 4.7-50 SME
C521	87-010-179-089		C-CAP, S 1200P-50 B
C522	87-010-179-089		C-CAP, S 1200P-50 B
C523	87-010-382-089		CAP, E 22-25 SME
C601	87-010-178-089		C-CAP, S 1000P-50 B
C602	87-010-186-089		C-CAP, S 4700P-50 B
C603	87-010-149-089		C-CAP, S 5P-50 CH
C604	87-010-182-089		C-CAP, S 2200P-50 B
C605	87-010-149-089		C-CAP, S 5P-50 CH
C606	87-012-154-089		C-CAP, S 150P-50 CH
C607	87-010-400-089		CAP, E 0.47-50 SME
C608	87-010-382-089		CAP, E 22-25 SME
C609	87-010-374-089		CAP, E 47-10
C801	87-010-404-089		CAP, E 4.7-50 SME
C802	87-010-381-089		CAP, E 330-16 SME
C803	87-010-101-089		CAP, E 220-16 SME
C804	87-010-237-089		CAP, E 1000-16

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C805	87-010-198-089		C-CAP, S 0.022-25 B
C902	87-010-405-089		CAP, E 10-50 SME
L301	87-005-525-089		COIL, 22MH-J
L302	87-005-525-089		COIL, 22MH-J
L303	87-003-131-089		COIL, 10MH J
L304	87-003-131-089		COIL, 10MH J
L305	87-003-123-089		COIL, 2.2MH J
L306	87-003-123-089		COIL, 2.2MH J
L401	80-VW1-605-119		COIL, OSC BIAS 108K
L801	87-005-474-089		COIL, 12UH J FLR50
PIN301	87-009-035-019		CONN, 7P PH V
PIN501	87-009-038-019		CONN, 10P PH
R913	87-025-470-089		RES, NF3.3-1/4W J
SFR101	87-024-349-089		SFR, 1K DIA6 H
SFR102	87-024-349-089		SFR, 1K DIA6 H
SFR201	87-024-349-089		SFR, 1K DIA6 H
SFR202	87-024-349-089		SFR, 1K DIA6 H
SFR301	87-024-352-089		SFR, 4.7K DIA6 H
SFR302	87-024-352-089		SFR, 4.7K DIA6 H
SFR401	87-024-356-089		SFR, 47K DIA6 H
SFR402	87-024-356-089		SFR, 47K DIA6 H

KEY-1 C.B

D601	87-001-123-089		LED, SLZ 981C-02TI
D602	87-017-369-080		LED, SEL 2510C TP-6
D603	87-017-369-080		LED, SEL 2510C TP-6
D604	87-017-369-080		LED, SEL 2510C TP-6
D605	87-017-369-080		LED, SEL 2510C TP-6
D606	87-017-369-080		LED, SEL 2510C TP-6
D607	87-017-369-080		LED, SEL 2510C TP-6
SW501	87-036-215-089		SW, TACT EVQ21404M
SW502	87-036-215-089		SW, TACT EVQ21404M
SW503	87-036-215-089		SW, TACT EVQ21404M
SW504	87-036-215-089		SW, TACT EVQ21404M
SW505	87-036-215-089		SW, TACT EVQ21404M
SW506	87-036-215-089		SW, TACT EVQ21404M
SW507	87-036-215-089		SW, TACT EVQ21404M
SW508	87-036-215-089		SW, TACT EVQ21404M
SW509	87-036-215-089		SW, TACT EVQ21404M
SW510	87-036-215-089		SW, TACT EVQ21404M
SW511	87-036-215-089		SW, TACT EVQ21404M

DECK-1 C.B

PIN901	87-009-350-019		CONN, 7P PH H
SOL1	82-ZM1-618-010		SOL ASSY, 27
SW4	87-036-110-010		SW, PUSH SPPB 62
SW5	87-036-110-010		SW, PUSH SPPB 62
SW6	87-036-110-010		SW, PUSH SPPB 62

DECK-2 C.B

M1	87-045-348-010		MOT, SHW 2L 70
PIN902	87-009-353-019		CONN, 10P PH H WHT
SFR1	87-024-170-080		SFR, 3.3K DIA 6V
SOL1	82-ZM1-618-010		SOL ASSY, 27
SW1	87-036-110-010		SW, PUSH SPBB 62
SW2	87-036-110-010		SW, PUSH SPBB 62
SW3	87-036-110-010		SW, PUSH SPBB 62
SW4	87-036-110-010		SW, PUSH SPBB 62
SW5	87-036-110-010		SW, PUSH SPBB 62

RELAY-1 C.B

RELAY-2 C.B

KEY-2 C.B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
D608	87-017-369-080		LED, SEL 2510C TP-6
D609	87-017-369-080		LED, SEL 2510C TP-6
D610	87-017-369-080		LED, SEL 2510C TP-6
D611	87-017-369-080		LED, SEL 2510C TP-6
SW512	87-036-215-089		SW, TACT EVQ21404M
SW513	87-036-215-089		SW, TACT EVQ21404M
SW514	87-036-215-089		SW, TACT EVQ21404M
SW515	87-036-215-089		SW, TACT EVQ21404M
SW516	87-036-215-089		SW, TACT EVQ21404M
SW517	87-036-215-089		SW, TACT EVQ21404M

KEY-3 C.B

SW518	87-036-215-089		SW, TACT EVQ21404M
SW519	87-036-215-089		SW, TACT EVQ21404M
SW520	87-036-215-089		SW, TACT EVQ21404M
SW521	87-036-215-089		SW, TACT EVQ21404M
SW522	87-036-215-089		SW, TACT EVQ21404M

LED-1 C.B

D615	87-017-369-080		LED, SEL 2510C TP-6
D616	87-017-369-080		LED, SEL 2510C TP-6

LED-2 C.B

D617	87-017-369-080		LED, SEL 2510C TP-6
D618	87-017-369-080		LED, SEL 2510C TP-6

LED-3 C.B

D612	87-017-369-080		LED, SEL 2510C TP-6
D613	87-017-369-080		LED, SEL 2510C TP-6
D614	87-017-369-080		LED, SEL 2510C TP-6

MOTOR C.B

PIN703	91-564-722-110		CONNECTOR 6P
M701	9X-262-513-210		SLED MOTOR ASSY
M702	9X-262-513-310		T.T CHASSIS ASSY W/MOTOR
SW701	91-572-085-110		LEAF SW

D-MO C.B

C215	87-010-196-089		C-CAP, S 0.1-25 F
M402	87-045-305-019		MOTOR, RF-500TB

PHOTO C.B

PH401	87-026-573-010		P-SNSR GP1S53V (*)

SW-CL C.B

SW403	87-036-109-019		SW, PUSH SPPB 61

SW U/D C.B

SW401	87-036-271-019		SW, LVR 1-2-2 (*)

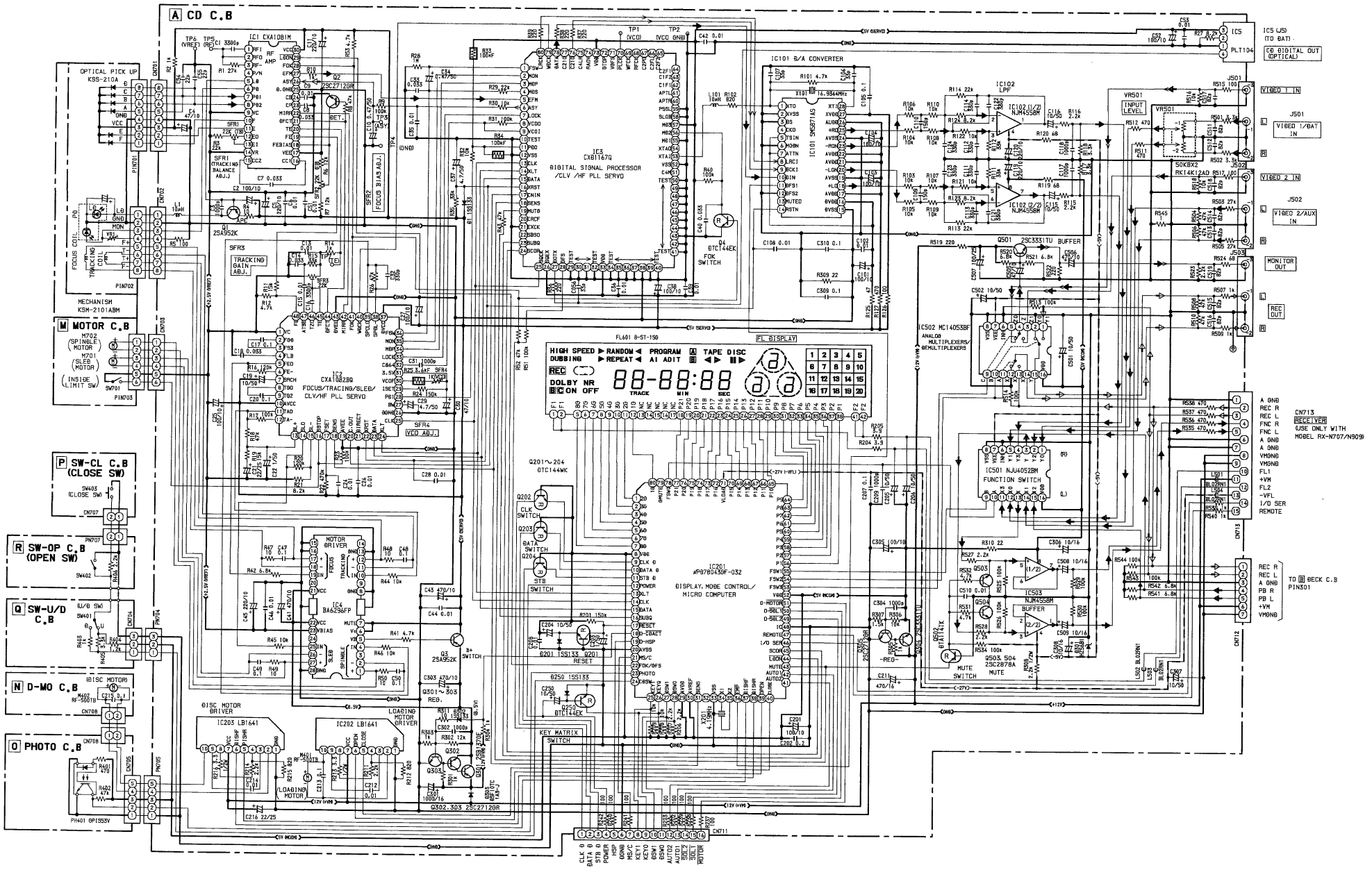
SW OP C.B

SW402	87-036-271-019		SW, LVR 1-2-2 (*)

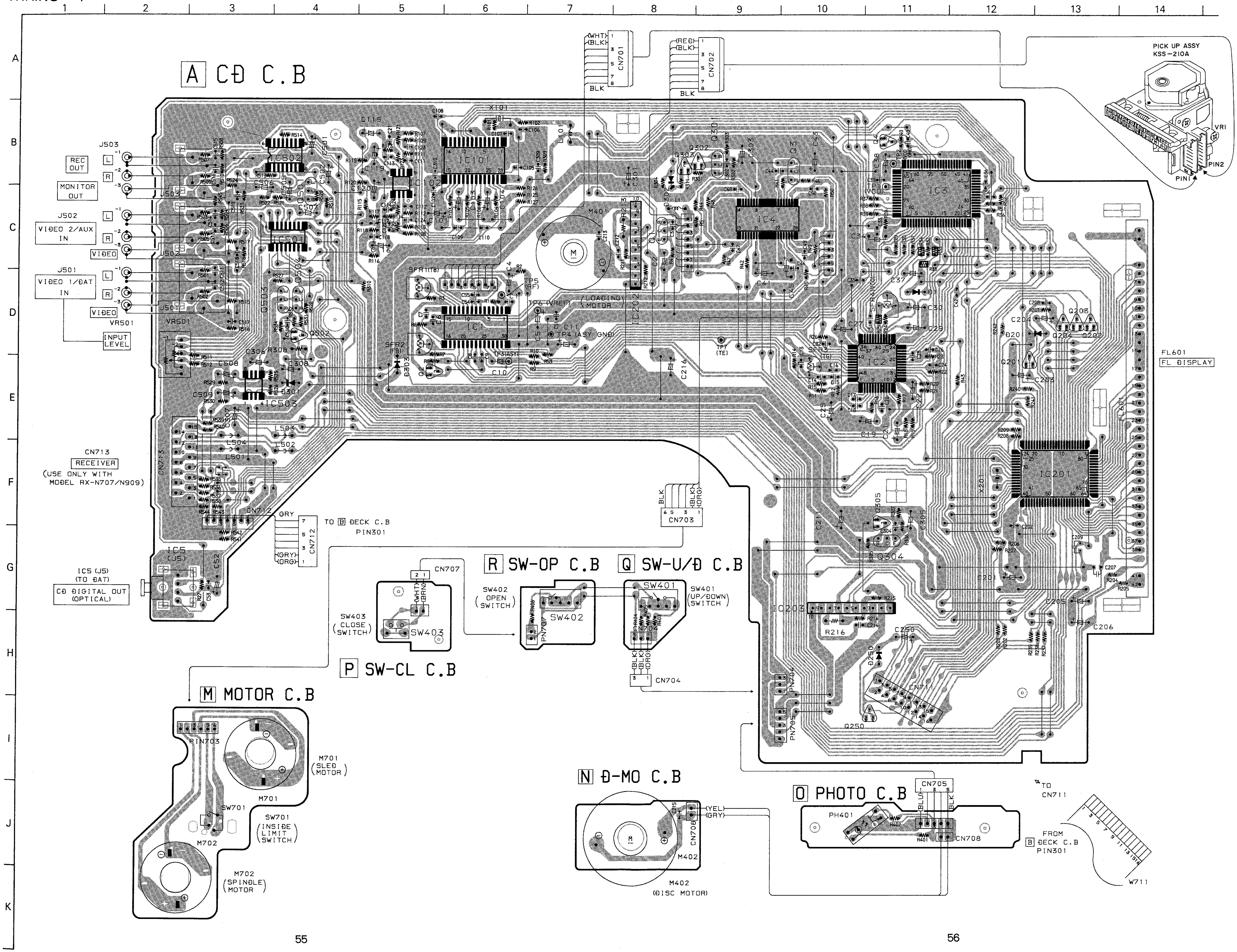
MISCELLANEOUS

	98-848-127-110		PICK UP KSS-210A
PH	87-046-355-010		HEAD, PH HADKH2529B(D1)
RPH	87-046-356-010		HEAD, RPH HADKH5581B(D2)
W711	82-NV1-619-019		CABLE, FFC16P-1.25

SCHEMATIC DIAGRAM – 1

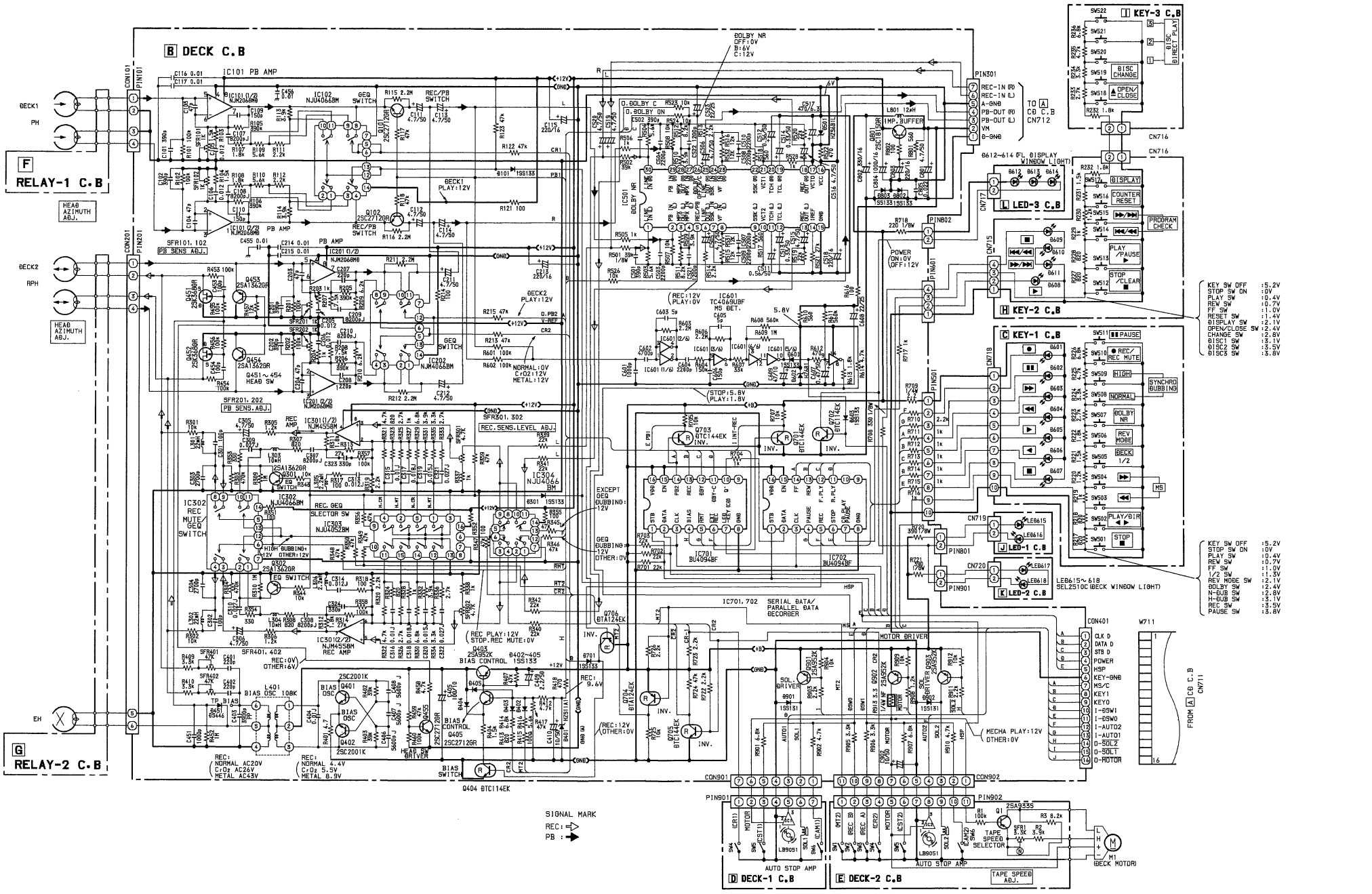


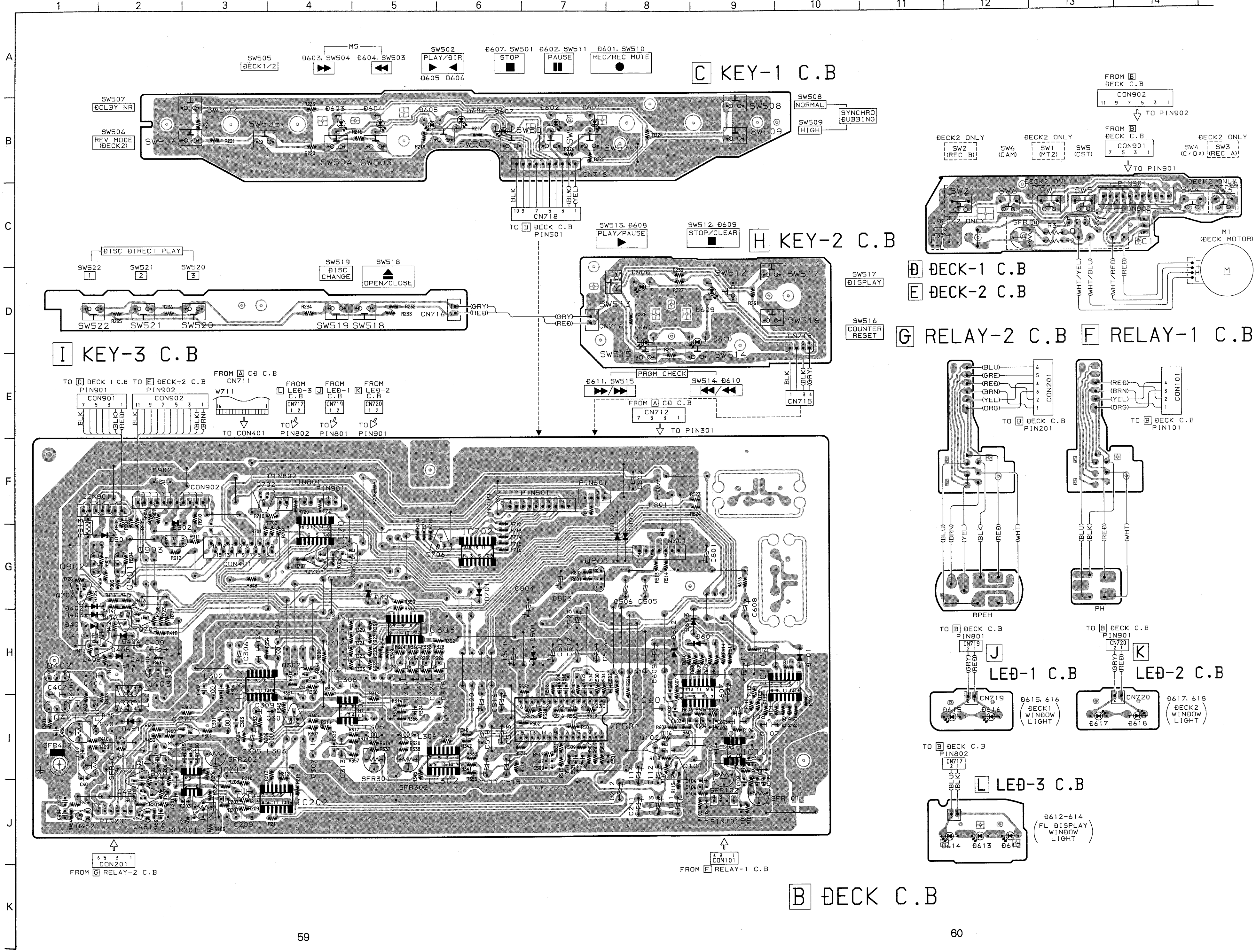
WIRING – 1



A CD C.B
M MOTOR C.B
N D-MO C.B
O PHOTO C.B
P SW-CL C.B
Q SW-U/D C.B
R SW-OP C.B
PICK UP ASSY
KSS-210A
FL601
FL DISPLAY
J503
REC OUT
MONITOR OUT
J502
VIDEO 2/AUX IN
VIDEO
J501
VIDEO 1/DAT IN
VIDEO
VR501
INPUT LEVEL
CN713
RECEIVER
(USE ONLY WITH MODEL RX-N707/N909)
IC5 (J5)
(TO DAT)
CD DIGITAL OUT (OPTICAL)
TO B DECK C.B PIN301
FROM B DECK C.B PIN301
TO CN711
SW403 (CLOSE SWITCH)
SW402 (OPEN SWITCH)
SW401 (UP/DOWN SWITCH)
M701 (SLED MOTOR)
M702 (SPINDLE MOTOR)
SW701 (INSIDE LIMIT SWITCH)
M402 (DISC MOTOR)

SCHEMATIC DIAGRAM – 2

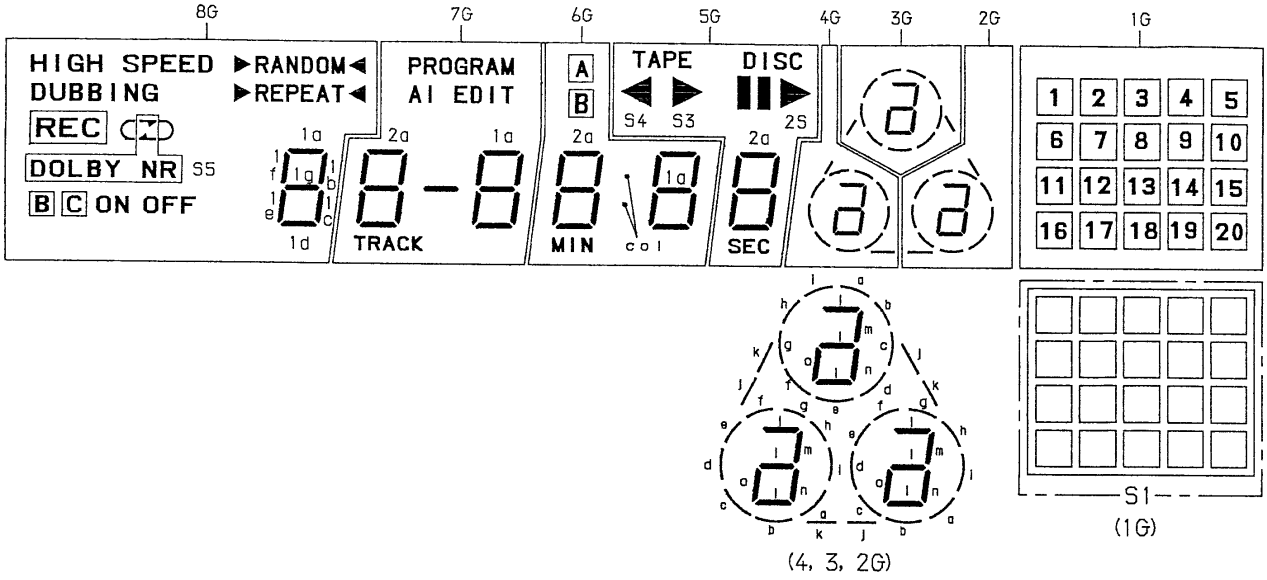



C KEY-1 C.B
H KEY-2 C.B
I KEY-3 C.B
D DECK-1 C.B
E DECK-2 C.B
G RELAY-2 C.B
F RELAY-1 C.B
J LED-1 C.B
K LED-2 C.B
L LED-3 C.B
B DECK C.B
SW505 DECK1/2
SW504 SW503 MS
SW502 PLAY/DIR
SW501 STOP
SW511 PAUSE
SW510 REC/REC MUTE
SW507 DOLBY NR
SW506 REV MODE (DECK2)
SW508 NORMAL
SW509 HIGH
SYNCHRO DUBBING
SW513, D608 PLAY/PAUSE
SW512, D609 STOP/CLEAR
SW517 DISPLAY
SW516 COUNTER RESET
PRGM CHECK
SW522 SW521 SW520 DISC DIRECT PLAY
SW519 DISC CHANGE
SW518 OPEN/CLOSE
M1 (DECK MOTOR)
D615, 616 (DECK1 WINDOW LIGHT)
D617, 618 (DECK2 WINDOW LIGHT)
D612-614 (FL DISPLAY WINDOW LIGHT)
FROM G RELAY-2 C.B
FROM F RELAY-1 C.B

FL (DISPLAY)

FL, 8 – ST – 15G

GRID ASSIGNMENT



ANODE CONNECTION

	8G	7G	6G	5G	4G	3G	2G	1G
P1	1a	1a	1a	**TAPE**	j	k	k	**1**
P2	1b	1b	1b	**DISC**	f	g	g	**2**
P3	1c	1c	1c	▮▮	l	o	m	**5**
P4	1d	1d	1d	–	m	m	l	**7**
P5	1e	1e	1e	S2	o	l	n	**6**
P6	1f	1f	1f	S4	e	h	h	**3**
P7	1g	1g	1g	S3	g	f	f	**4**
P8	▶(RANDOM)◀	—	col	–	n	n	o	**8**
P9	**RANDOM**	2a	2a	2a	d	i	e	**9**
P10	▶(REPEAT)◀	2b	2b	2b	c	a	i	**10**
P11	**DUBBING**	2c	2c	2c	i	c	b	**13**
P12	☽	2d	2d	2d	k	d	j	**15**
P13	**REC**	2e	2e	2e	a	e	a	**14**
P14	**REPEAT**	2f	2f	2f	h	b	d	**11**
P15	**HIGH SPEED**	2g	2g	2g	b	j	c	**12**
P16	☾	**TRACK**	**MIN**	**SEC**	–	–	–	**16**
P17	S5	**AI**	**B**	–	–	–	–	**17**
P18	**OFF**	**EDIT**	**A**	–	–	–	–	**18**
P19	**ON**	**PROGRAM**	–	–	–	–	–	**19**
P20	**C**	–	–	–	–	–	–	**20**
P21	**B**	–	–	–	–	–	–	S1

IC DESCRIPTION (FD – N909)

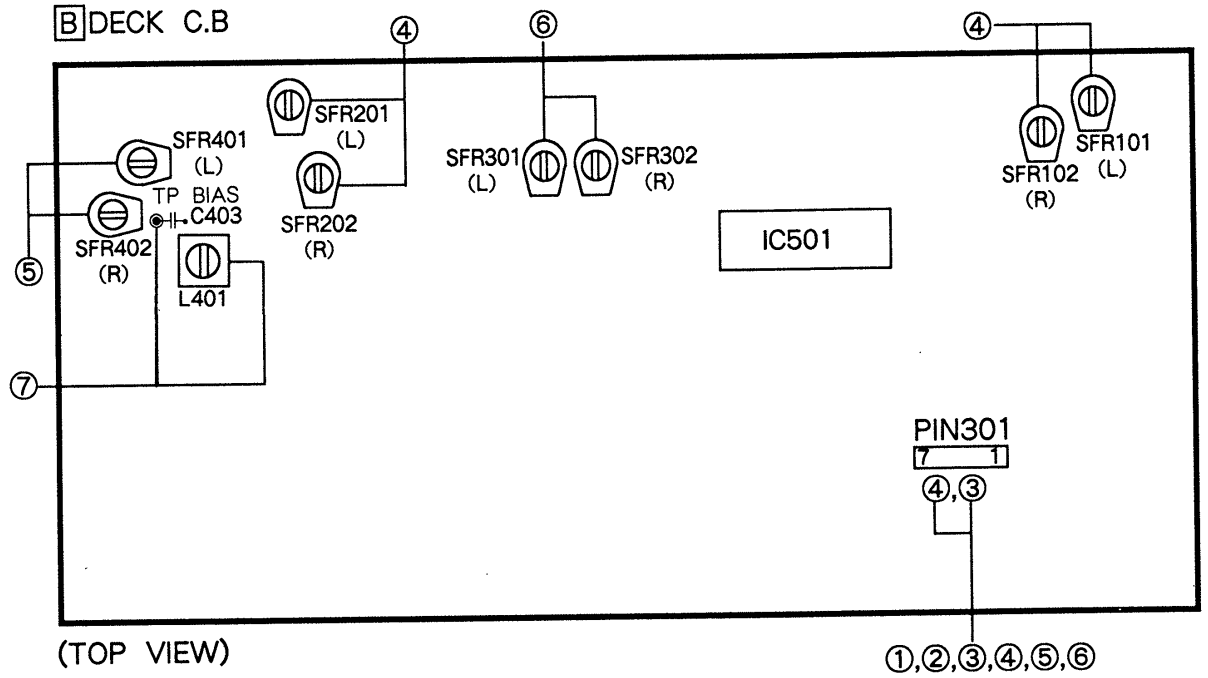
IC, μPD78043GF – 032

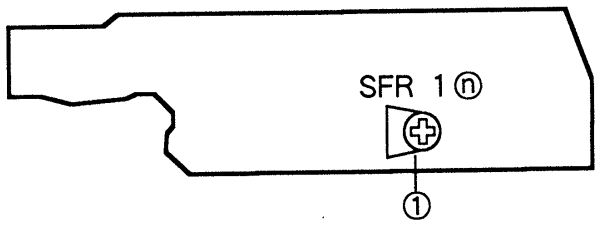
Pin No.	Pin Name	I/O	Description
1～7	2G～8G	O	Digit output for FL display.
8	VDD	—	+5V power supply.
9	CLK D	O	Serial data output to control the output port expansion IC (4094).
10	DATA D		
11	STB D		
12	POWER	O	"H" during POWER ON of the unit.
13	XLT	O	Serial data output to control the signal processing IC for CD.
14	CLK		
15	DATA		
16	SUBQ	I	Sub-code Q input.
17	$\overline{\text{RESET}}$	I	System reset input.
18	O-$\overline{\text{CDACT}}$	O	Output to control the power of CD circuit. "L" during CD function. Open-drain.
19	O-HSP	O	High speed control output to DECK. "H" during high speed dubbing. Open-drain.
20	AVSS	—	GND for A/D converter input.
21	MS/C	ADI	A/D input of MS signal.
22	FOK/GFS	ADI	A/D input of the focus OK signal and frame sync lock state display signal from CD.
23	PHOTO	ADI	Mechanism-3 disc table position detect photo sensor signal input from CD.
24	CDSW	ADI	A/D input of mechanism tray and base unit position detect switches from CD.
25	KEY1	ADI	A/D input of the key data from CD.
26	KEY0	ADI	A/D input of key data from DECK.
27	DSW1	ADI	A/D input of mechanism status detect switch from DECK.
28	DSW0	ADI	A/D input of mechanism status detect switch from DECK.
29	AVDD	—	Analog power supply to A/D converter (+5V).
30	AVREF	I	Reference voltage input to A/D converter (connected to +5V).
31	SENS	I	Internal state of CD signal processing IC.
32	—	—	-
33	VSS	—	GND.
34	X1	I	4.19MHz clock oscillator input.
35	X2	—	4.19MHz clock oscillator input.
36	$\overline{\text{EMP}}$	O	De-emphasis control output for CD output signal. "L" when ON.
37	DISH F	O	Mechanism-3 disc table drive control output to IC203. "H" during forward rotation.
38	DISH R	O	Mechanism-3 disc table drive control output to IC203. "H" during reverse rotation.
39	OPEN	O	Mechanism tray drive control output to IC202. "H" during open.
40	CLOSE	O	Mechanism tray drive control output to IC202. "H" during close.
41	AUTO2	I	Mechanism reel table rotation detect signal input from DECK 2.
42	AUTO1	I	Mechanism reel table rotation detect signal input from DECK 1.
43	MUTE	O	Output signal to mute the signal output. "H" during muting.
44	$\overline{\text{LDON}}$	O	Output signal which controls ON/OFF of CD pickup laser diode. "L" when ON.
45	SCOR	I	CD sub-code sync SO + SI input.
46	I/O SER	I/O	Serial data input/output to and from RX.
47	REMOTE	I	Remote control unit received signal input from RX.
48	IC	—	Internal connection (connected to GND).
49	O-$\overline{\text{SOL2}}$	O	Mechanism solenoid drive control output to DECK 2. "L" when ON. Open drain.
50	O-$\overline{\text{SOL1}}$	O	Mechanism solenoid drive control output to DECK 1. "L" when ON. Open drain.
51	O-$\overline{\text{MOTOR}}$	O	Mechanism main motor drive control output to DECKs. "L" when ON. Open drain.
52	VDD	—	+5V power supply.
53	FSW3	O	Function selector control output (video select).
54	FSW2	O	Function selector control output (REC MUTE).
55	FSW1	O	Function selector control output (Function B).
56～70	P1～15	O	Segment output for FL display.
71	VLOAD	—	-27V power supply for FL pull-down.
72～77	P16～21	O	Segment output for FL display.
78	FSW0	O	Function selector control output (Function A).
79	GMUTE	O	Output signal to mute graphic of CDG. "H" during muting (Not used).
80	1G	O	Digit output for FL display.

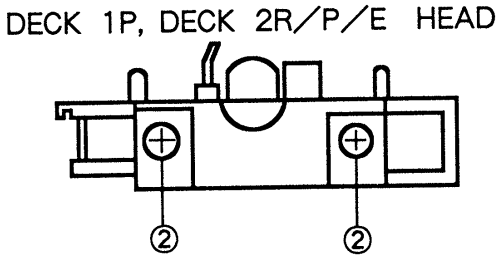
See the NSX – D55 (FD – N55) for the IC description below.		
	FD – N707/N909	NSX – D55 (FD – N55)
①	IC,CXD1167Q	IC,CXD1167Q
②	IC,CXA1081M	IC,CXA1081S
③	IC,CXA1082BQ	IC,CXA1082S
④	IC,SM5871AS	IC,SM5870BS

See the NSX – D55 (FD – N55) for the IC Block Diagram below.		
	FD – N707/N909	NSX – D55 (FD – N55)
①	IC,BA6296FA	IC,BA6296FP
②	IC,CXA1332S	IC,CXA1332S
③	IC,BU4094BF	IC,BU4094B
④	IC,LB1641	IC,LB1641

ADJUSTMENT (DECK)







1. Tape Speed Adjustment
   Settings : • Test tape : TTA-100
   • Test point : TP CONN 7P (PIN301) ③,④
   • Adjustment location : SFR 1ⓝ
   Method : Play back the test tape (II DECK) and adjust SFR 1ⓝ so that the frequency counter reads 3000Hz ± 5Hz.

2. Head Azimuth Adjustment
   Settings : • Test tape : TTA-310
   • Test point : TP CONN 7P (PIN301) ③,④
   • Adjustment location : Head azimuth adjustment screw
   Method : Play back the 10kHz signal of the test tape and adjust so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

3. PB Frequency Response Check
   Settings : • Test tape : TTA-310
   • Test point : TP CONN 7P (PIN301) ③,④
   Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal is with respect to that of the 315Hz signal is ± 2dB.

4. PB Sensitivity Adjustment
   Settings : • Test tape : TTA-200
   • Test point : TP CONN 7P (PIN301) ③,④ (load 47KΩ)
   • Adjustment location :
   (I DECK) SFR101 (Lch)
   SFR102 (Rch)
   (II DECK) SFR201 (Lch)
   SFR202 (Rch)
   Method : Play back the test tape and adjust SFRs so that the output level of the test point is 280mV ± 0.3dB.

5. REC/PB Frequency Response Adjustment
   Settings : • Test tape : TTA-601
   • Test point : TP CONN 7P (PIN301) ③,④
   • Input signal : 1kHz/10kHz (LINE IN)
   • Adjustment location : SFR401 (Lch)
   SFR402 (Rch)
   Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP CONN 7P (PIN301) ③,④ is 28mV.
   Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output

of the 10kHz signal is +0.5dB±0.5dB with respect to that of the 1kHz signal.

6. REC/PB Sensitivity Adjustment
   Settings : • Test tape : TTA-601 (TTA – 600)
   • Test point : TP CONN 7P (PIN301) ③,④
   • Input signal : 400Hz (LINE IN)
   • Adjustment location : SFR301 (Lch) SFR302 (Rch)
   Method : Apply a 400Hz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP CONN 7P (PIN301) ③,④ is 28mV.
   Record and play back the 400Hz signal and adjust SFRs so that the output is 28mV ± 0.5dB.

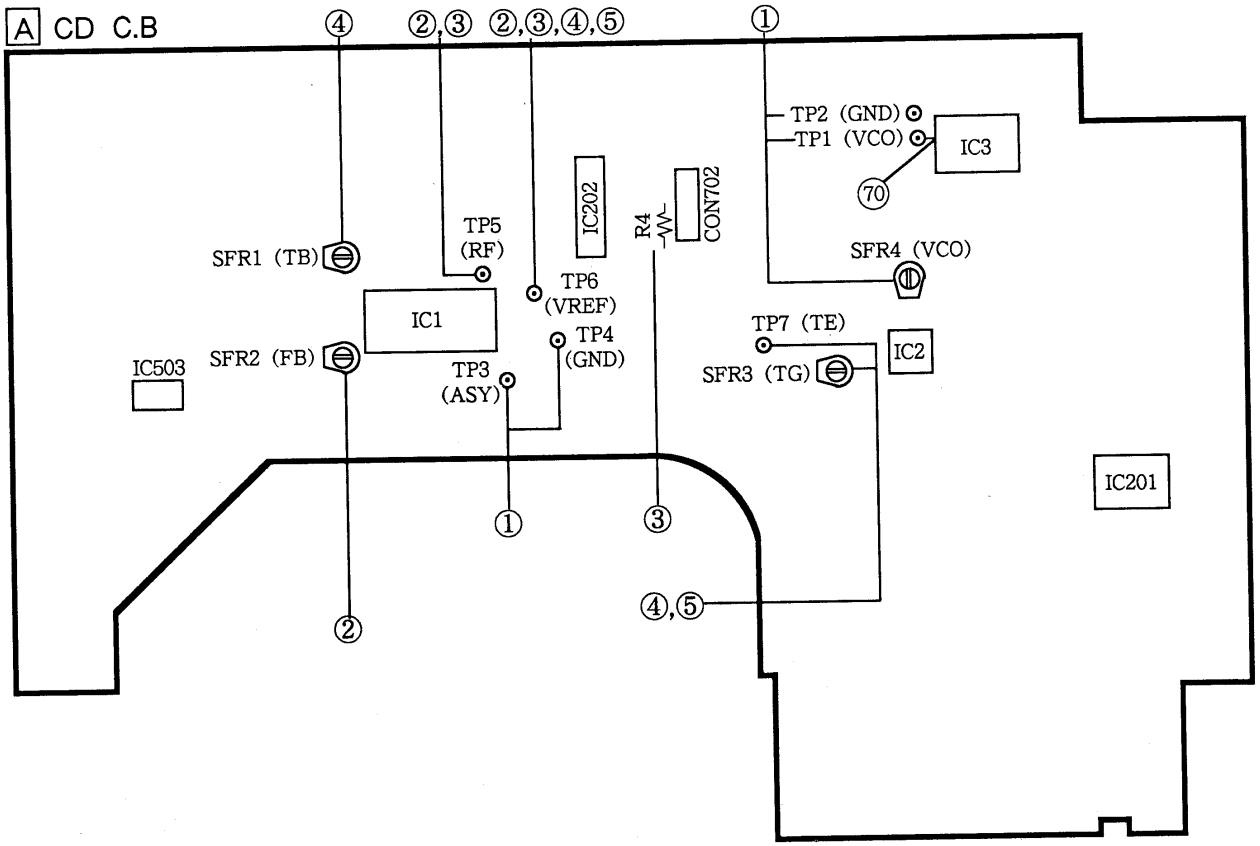
7. Bias OSC Frequency Adjustment
   Settings : • Test tape : TTA-601
   • Test point : TP BIAS (C403)
   • Adjustment Location : L401
   Method : Set to the REC mode. Adjust L401 so that the frequency counter of the test point reads 106kHz ± 2kHz.

PRACTICAL SERVICE FIGRE (DECK)

DECK SECTION

Tape speed :	3000Hz ± 1.5%
Wow & flutter :	Less than 0.4% (R.M.S)
Take-up torque :	30~60g-cm (FWD, REV)
F.F torque :	75~140g-cm
Rew torque :	75~140g-cm
Back tension :	2~6g-cm
PB Output level :	250mV ± 50mV (REC OUT)
REC/PB Output level :	190mV ± 1dB (REC OUT)
Distortion (REC/PB) :	Less than 2.5% (CrO_2)
	Less than 2.0% (NORMAL)
Noise level (PB) :	Less than 2.0mV/1.4mV (DOLBY B NR ON/OFF CrO_2)
	Less than 1.3mV/1.8mV (DOLBY B NR ON/OFF NORM)
Noise level (REC/PB) :	
	Less than 1.3mV/2.0mV (DOLBY B,C NR ON/OFF NORM)
	Less than 1.2mV/1.5mV (DOLBY B,C NR ON/OFF) CrO_2,METAL)
Erasing ratio :	More than 60dB (125Hz)
REC bias frequency :	106kHz
Test tape :	NORMAL TTA – 601/600
	CrO_2 TTA – 610
	METAL TTA – 630

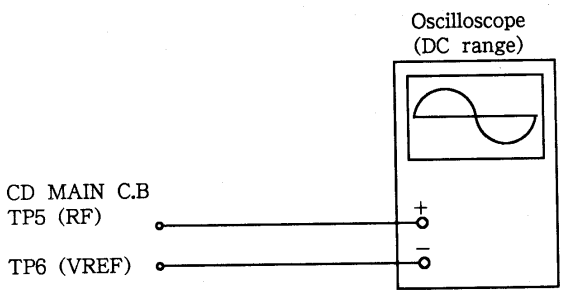
ADJUSTMENT (CD)



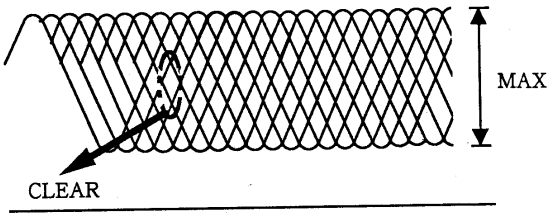
Note : Connect a probe (10 : 1) of the oscilloscope and the counter to a test point.

1. VCO Frequency Adjustment
   1) Connect the frequency counter to test points TP1 (VCO) and TP2 (VCO GND).
   2) Set test disc and PLAY mode.
   3) Connect and short between TP3 (ASY) and TP4 (GND).
   4) Adjust SFR4 so that the frequency counter reading is 4.27MHz ± 0.02MHz.
   5) After the adjustment is completed, disconnect the short lead wire.

2. Focus Bias Adjustment
   Make the focus bias adjustment when replacing and repairing the optical block.

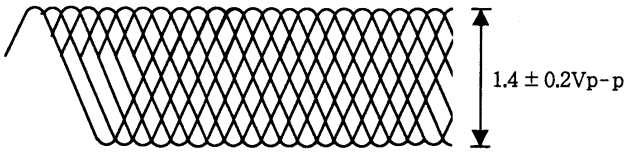


   1) Connect an oscilloscope to test points TP5 (RF) and TP6 (VREF).
   2) Turn on the power switch.
   3) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
   4) Adjust SFR2 (FB) so that the RF waveform must be maximum and clear.



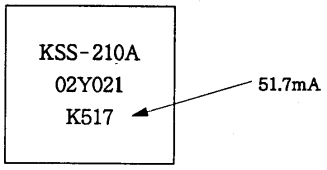
VOLT/DIV : 0.5V
TIME/DIV : 0.5 μ S

3. RF Waveform Check
   This check should be performed whenever the optical block is replaced in repair.
   1) Connect an oscilloscope to test points TP5 (RF) and TP6 (VREF).
   2) Turn on the power switch.
   3) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
   4) Check that the waveform appears as shown in the figure.



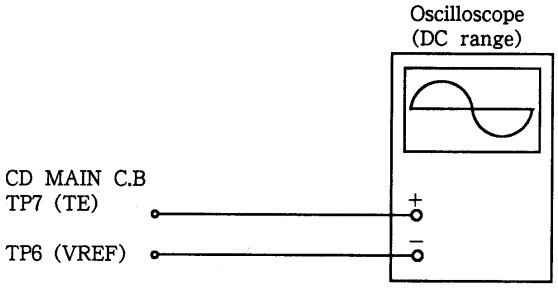
VOLT/DIV : 0.5V
TIME/DIV : 0.5 μ S

Note : The current of the laser signal can be checked with the voltages on both sides of R4 (10 Ω). The difference for the specified value shown on the label must be within ± 6.0mA.

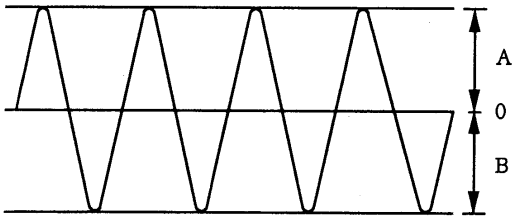


$$\text{Laser current Iop} = \frac{\text{Voltage across R4}}{10\ \Omega}$$

4. Tracking Balance Adjustment



1) Connect an oscilloscope to test points TP7 (TE) and TP6 (VREF).
2) Turn on the power switch.
3) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4) Connect center pin of SFR3 (TG) to TP6 (VREF).
5) Adjust SFR1 (TB) so that the waveform on the oscilloscope is vertically symmetrical as figure shown in the figure below.
6) After the adjustment is completed, remove the ground lead wire.



A = B

VOLT/DIV : 200mV
TIME/DIV : 1mS

5. 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. Therfore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechinical shock when 2-axis device operates. However, as these reciprocate, the adjustment is at the point where both are satisfied.

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

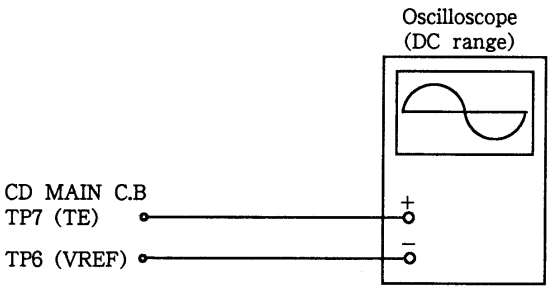
When gain adjustment is off, the symptoms below appear.

Gain / Symptoms	(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

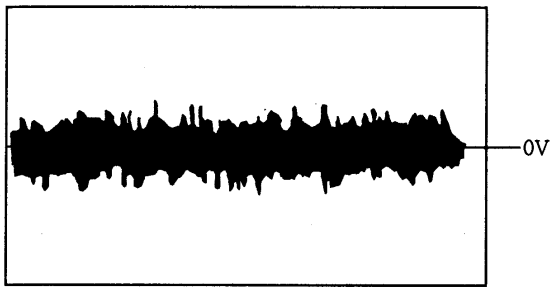
The following is simple adjustment method.

– Simple adjustment –

Note : Since exact adjustment cannot be performed, remember the positions of the controls before the performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.



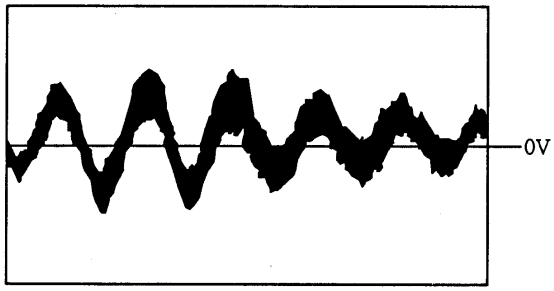
1) Keep the set horizontal.(If the set is not kept horizontally, this adjustment cannot be performed due to the gravity against the 2 – axis device.)
2) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
3) Connect an oscilloscope to TP7 (TE) and TP6 (VREF).
5) Adjust SFR3 (TG) so that the waveform appears as shown in the figure below.
(tracking gain adjustment)



VOLT/DIV : 100mV
TIME/DIV : 1mS

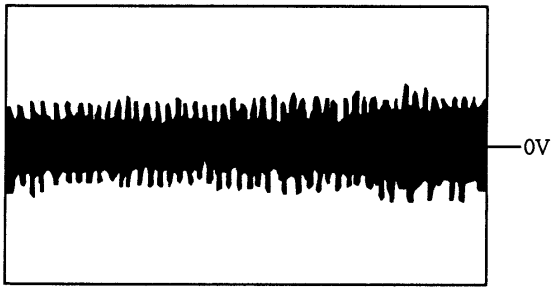
● Incorrect example (The fundamental wave appears as compared with the waveform adjusted)

Low tracking gain



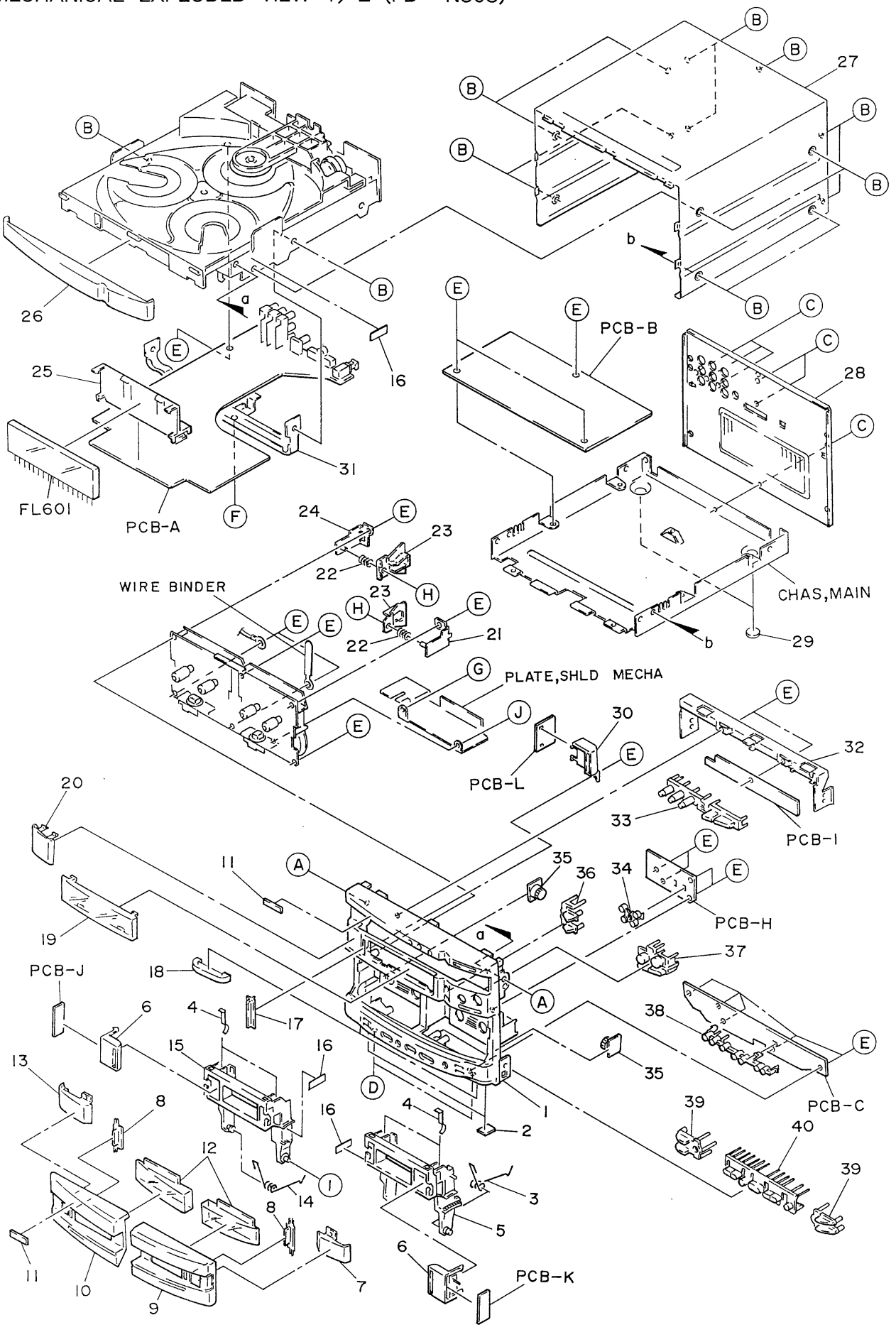
VOLT/DIV : 100mV
TIME/DIV : 1mS

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



VOLT/DIV : 100mV
TIME/DIV : 1mS

MECHANICAL EXPLODED VIEW 1/2 (FD – N909)

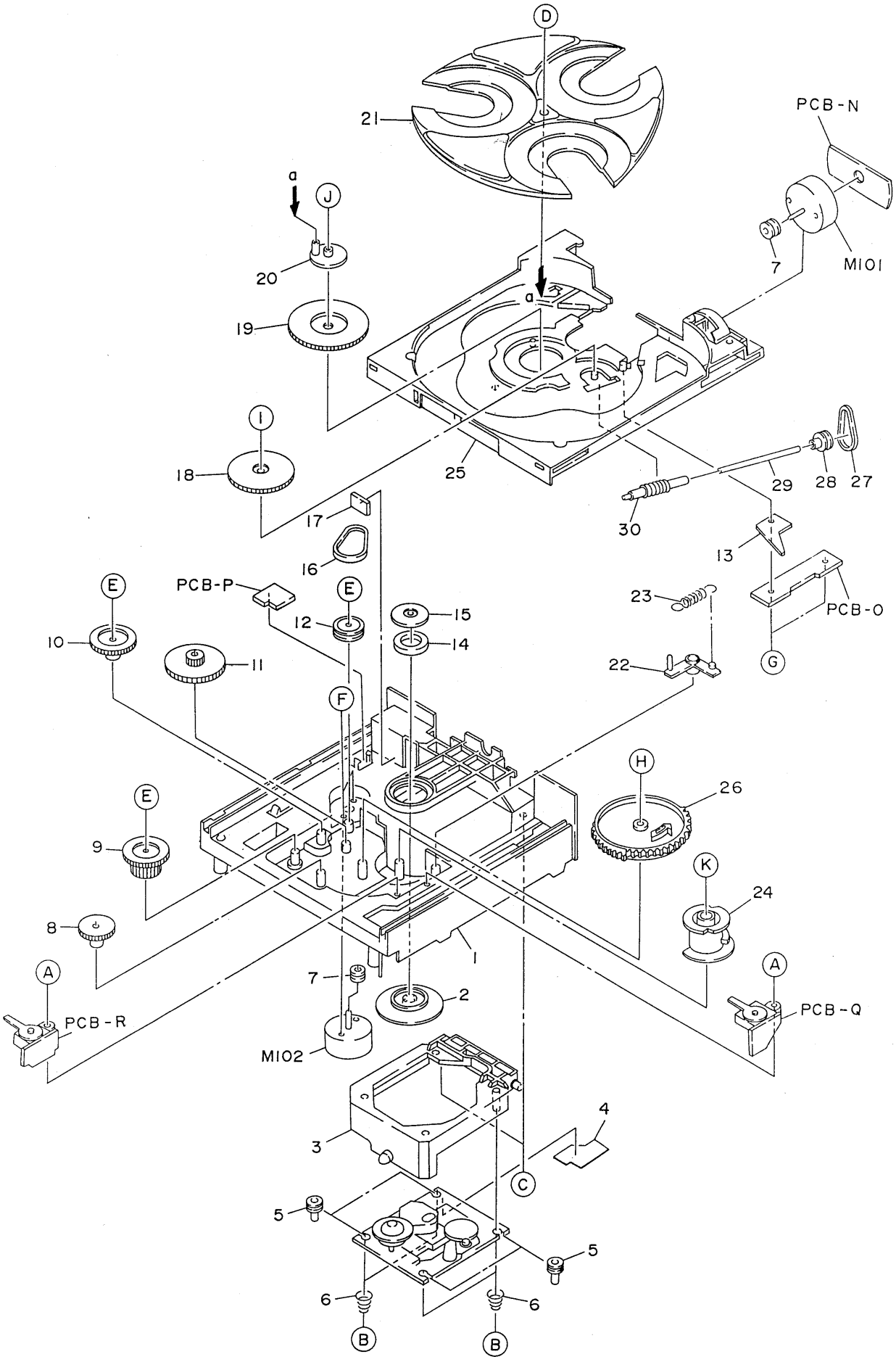


MECHANICAL PARTS LIST 1／2 (FD－N909)

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
1	82-NV1-001-010		CAB, FR EX
2	80-VT1-202-010		FELT, 12. 5-15. 5-2
3	82-NV1-215-010		SPR-T, EJECT R〈Y〉
3	82-NV1-217-010		SPR-T, EJECT R〈YJ〉
4	80-CD3-218-110		SPR-P CASS
5	82-NV1-004-010		BOX, CASS R
6	82-NV1-204-010		GUIDE, LED CASS
7	82-NV1-024-010		DUMMY, CASS R
8	82-NV1-019-010		IND, CASS
9	82-NV1-030-010		PANEL, CASS R EX
10	82-NV1-029-010		PANEL, CASS L EX
11	81-MX4-032-010		BADGE, AIWA N
12	82-NV1-017-010		WINDOW, CASS
13	82-NV1-023-010		DUMMY, CASS L
14	82-NV1-214-010		SPR-T, EJECT L〈Y〉
14	82-NV1-216-010		SPR-T, EJECT L〈YJ〉
15	82-NV1-003-010		BOX, CASS L
16	80-MQ1-209-010		CLOTH, 20-7
17	82-NV1-018-010		IND, CD
18	82-NT1-036-010		RING, FOOT
19	82-NV1-016-010		WINDOW, CD
20	82-NV1-022-010		DUMMY, CD
21	82-NF5-205-010		HLDR ASSY, LOCK 2
22	80-MV3-210-110		SPR-C, LOCK〈Y〉
22	80-MV3-218-010		SPR-C, LOCK〈YJ〉
23	80-CD3-233-010		PLATE, LOCK
24	82-NF5-204-010		HLDR ASSY, LOCK 1
25	81-VM1-203-019		GUIDE, FL
26	82-NV1-015-010		PANEL, TRAY EX
27	82-NV1-002-010		CAB, STEEL
28	82-NV1-038-010		PANEL, REAR〈Y〉
28	82-NV1-031-010		PANEL, REAR〈YJ〉
29	82-NV1-213-010		FELT, DIA12-2
30	82-NV1-205-010		GUIDE, LED WIND
31	82-NF5-217-110		HLDR, BOTTOM
32	82-NV1-201-010		HLDR, FR
33	82-NV1-008-010		KEY, OPEN
34	82-NV1-202-010		GUIDE, LED CD
35	87-063-165-010		OIL-DMPR 150
36	82-NV1-013-010		KEY, DISPLAY
37	82-NV1-009-010		KEY, CD
38	82-NV1-203-010		GUIDE, LED DECK
39	82-NV1-011-010		KEY, DUBB
40	82-NV1-010-010		KEY, DECK
A	87-721-096-410		QT2+3-10 GLD
B	87-067-641-010		UTT2+3-8〈W/O SLOT〉BL
C	87-067-660-010		BVT2+3-8W/O SLOT BLK
D	87-067-689-010		BVTT+3-8
E	87-067-579-010		BVT2+3-8W/O SLOT
F	87-067-716-010		BVTT+3-6 BLK
G	87-571-032-410		VIT+2-3
H	87-081-808-010		PW, 1. 7-3. 5-0. 25
I	82-NE8-215-010		W, 4. 2-6. 8-0. 18
J	87-067-178-019		VTT+2. 6-3

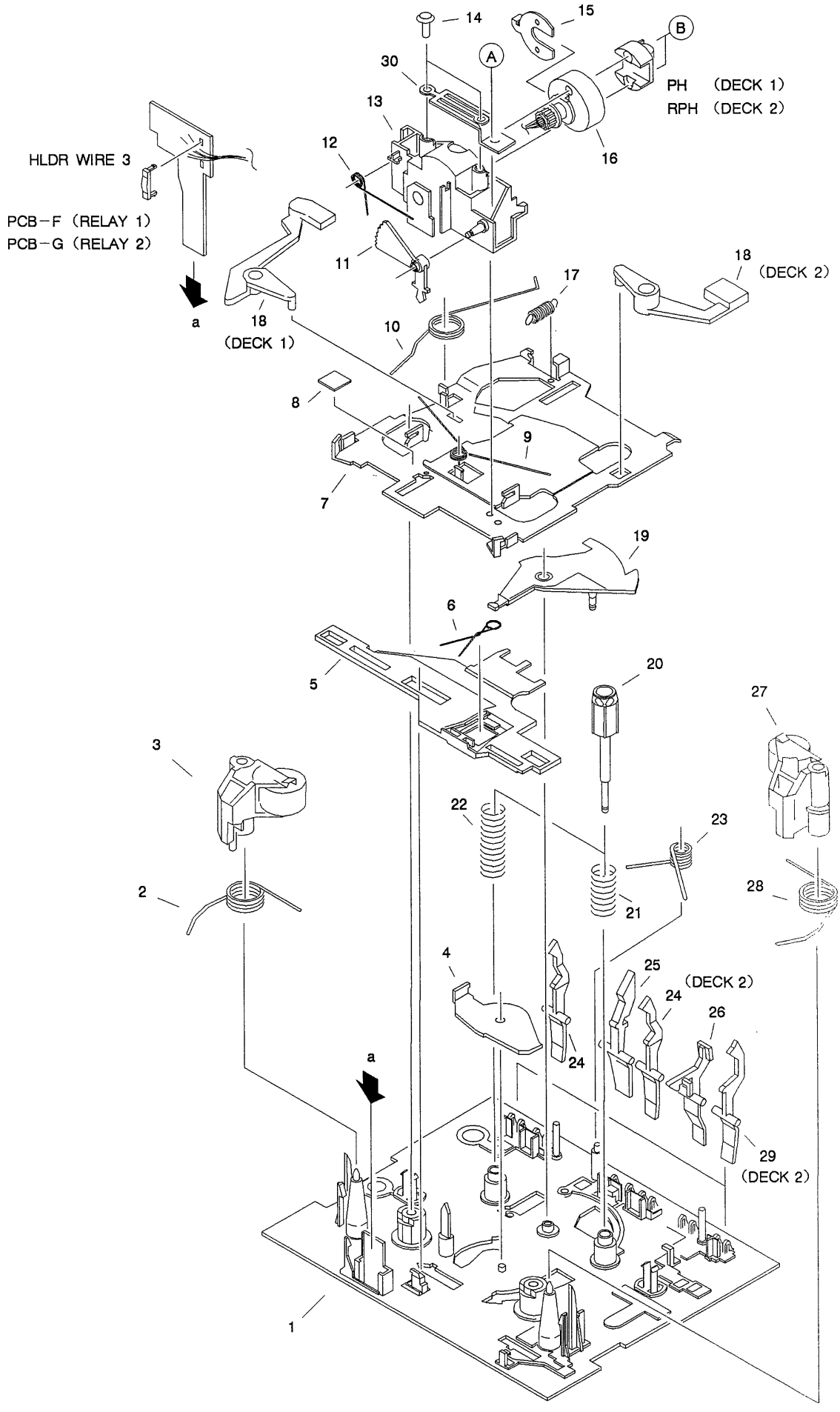
MECHANICAL EXPLODED VIEW 2/2 (FD – N909)

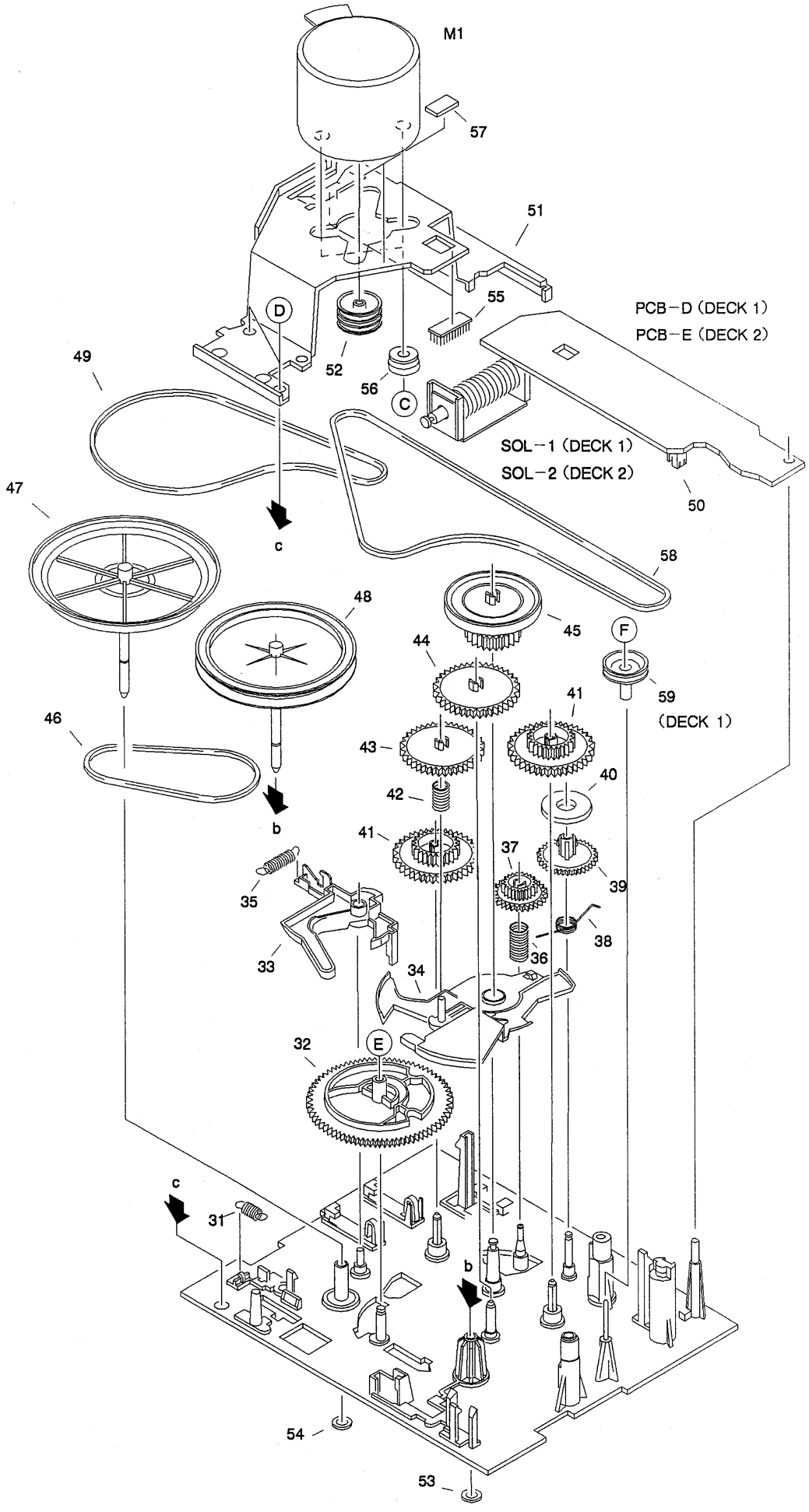


MECHANICAL PARTS LIST 2/2 (FD－N909)

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	81-ZG1-261-010		CHAS, MECH M〈Y〉
1	81-ZG1-246-110		CHAS, MECH M〈YJ〉
2	81-ZG1-228-110		HLDR, MAGNET
3	81-ZG1-253-110		HLDR, MECH MK2
4	81-ZG1-241-210		SH, CD MECH
5	81-ZG1-230-010		G-CUSH, MECH
6	81-ZG1-231-010		SPR-C, MECH
7	81-ZG1-212-010		PULLY, LOAD MO
8	81-ZG1-250-010		GEAR, TRAY RELAY MK2
9	81-ZG1-257-010		GEAR, TRAY B MK2
10	81-ZG1-256-010		GEAR, TRAY A MK2
11	81-ZG1-251-010		GEAR, RELAY MK2
12	81-ZG1-211-010		PULLY, RELAY
13	81-ZG1-240-010		SPR-P, WORM
14	86-531-219-010		MAGNET, CLAMPER
15	81-ZG1-255-010		PLATE, MAGNET MK2
16	81-ZG1-232-010		BELT, TRAY
17	81-ZG1-238-110		CUSH, TRAY IN
18	81-ZG1-222-010		WORM WHEEL, TT
19	81-ZG1-202-010		GEAR MAIN
20	81-ZG1-252-010		LEVER, TT MK2
21	81-ZG1-002-110		TURNTABLE〈Y〉
21	81-ZG1-008-110		TURNTABLE NO2〈YJ〉
22	81-ZG1-213-110		PLATE, CAM
23	81-ZG1-262-010		SPR-E, CAM S
24	81-ZG1-206-110		GEAR, MECH CAM
25	81-ZG1-001-310		TRAY〈Y〉
25	81-ZG1-011-110		TRAY, MK2〈YJ〉
26	81-ZG1-205-210		GEAR, TRAY CAM
27	81-ZG1-233-110		BELT, TT
28	81-ZG1-236-010		PULLY, TT MO
29	81-ZG1-260-010		SHAFT, WORM S
30	81-ZG1-221-010		WORM GEAR, TT
A	81-653-215-010		SPECIAL SCREW VT2
B	81-ZG1-254-010		S-SCREW, MECH HLDR
C	87-561-096-210		VFT1+3-10
D	81-ZG1-239-010		S-SCREW, TT
E	87-067-945-110		VFT2+3-12(F10)
F	87-251-071-410		U+2.6-4
G	87-067-579-010		BVT2+3-8W/O SLOT
H	81-ZG1-264-010		S-SCREW, CAM
I	87-761-095-410		VFT2+3-8
J	87-078-029-010		VFT2+3-13(F8)
K	87-067-828-010		VFT2+3-15DIA10, GLD

TAPE MECHANISM EXPLODED VIEW 1/1 (FD－N909)

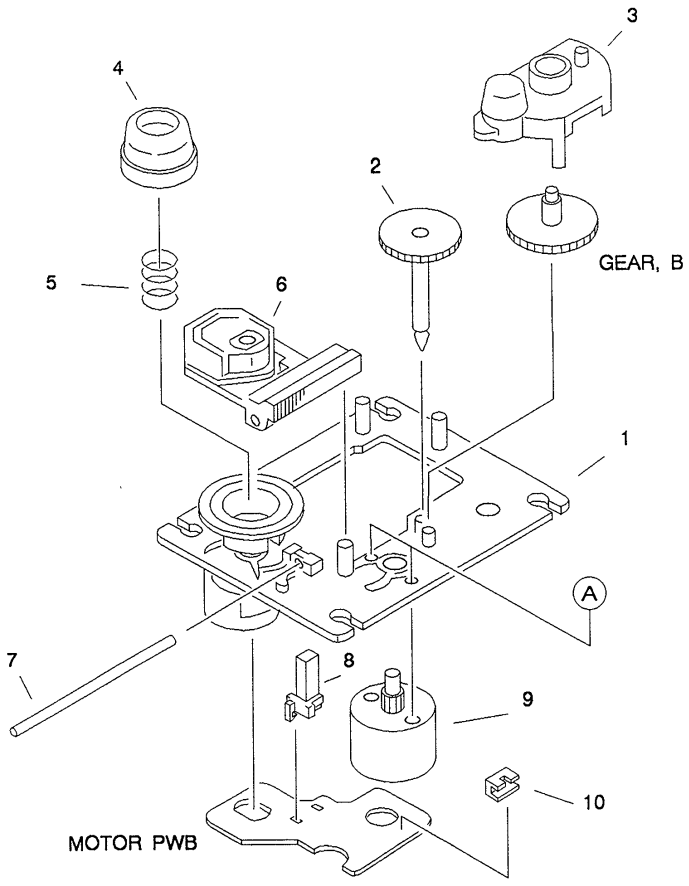



M1
57
51
55
PCB－D (DECK 1)
PCB－E (DECK 2)
D
52
56
C
49
SOL－1 (DECK 1)
SOL－2 (DECK 2)
50
47
c
58
48
45
F
44
59
(DECK 1)
41
46
43
40
42
b
41
37
39
35
38
33
36
34
E
32
c
31
b
54
53

TAPE MECHANISM PARTS LIST 1/1 (FD－N909)

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	82-ZM3-214-110		CHAS ASSY, P (DECK 1)
1	82-ZM1-299-010		CHAS ASSY, R (DECK 2)
2	82-ZM1-258-010		SPR-T, PINCH L
3	82-ZM1-248-110		LVR ASSY, PINCH L
4	82-ZM1-295-210		PLATE ASSY, LINK
5	82-ZM1-266-010		LVR, DIR
6	82-ZM1-214-010		SPR-T, DIR
7	82-ZM1-206-210		CHAS, HEAD
8	87-078-014-010		SH, 5-5-0.05
9	82-ZM1-269-010		SPR-T, BRG
10	82-ZM1-219-010		SPR-T, LINK
11	82-ZM1-210-010		GEAR, H T
12	82-ZM1-213-010		SPR-T, HEAD
13	82-ZM1-207-010		GUIDE, TAPE
14	82-ZM1-283-210		S-SCREW, AZIMUTH
15	82-ZM1-209-010		PLATE, HEAD
16	82-ZM1-208-010		HLDR, HEAD
17	82-ZM1-218-010		SPR-E, HB
18	82-ZM1-263-110		LVR, EJECT L (DECK 1)
18	82-ZM1-264-010		LVR, EJECT R (DECK 2)
19	82-ZM1-222-010		LVR, PLAY
20	82-ZM1-217-110		REEL TABLE
21	82-ZM1-244-110		SPR-C, BT
22	82-ZM1-285-110		SPR-C, BT L
23	82-ZM1-257-010		SPR-T, CAS
24	82-ZM1-241-110		LVR, MC
25	82-ZM1-242-010		LVR, CAS
26	82-ZM1-243-010		LVR, STOP
27	82-ZM1-253-110		LVR ASSY, PINCH R
28	82-ZM1-259-010		SPR-T, PINCH R
29	82-ZM1-240-110		LVR, REC (DECK 2)
30	82-ZM1-298-010		SPR-P, EARTH
31	82-ZM1-255-110		SPR-E, LVR DIR
32	82-ZM1-221-110		GEAR, CAM
33	82-ZM1-227-110		LVR, TRIG
34	82-ZM1-224-110		LVR, FR
35	82-ZM1-305-010		SPR-E, TRIG 2
36	82-ZM1-277-010		SPR-C, PLAY
37	82-ZM1-223-010		GEAR, PLAY
38	82-ZM1-256-110		SPR-T, FR
39	82-ZM1-220-210		GEAR, IDLER
40	80-ZM6-217-010		RING MAGNET 2
41	82-ZM1-216-210		GEAR, REEL
42	82-ZM1-276-010		SPR-C, FR
43	82-ZM1-225-010		GEAR, FR
44	82-ZM1-226-010		GEAR, REW
45	82-ZM1-228-210		SLIP DISK ASSY
46	82-ZM1-261-110		BELT, FR
47	82-ZM1-237-210		FLY-WHL ASSY, R (DECK 2)
47	82-ZM3-209-110		FLY-WHL ASSY, R2 (DECK 1)
48	82-ZM1-234-110		FLY-WHL ASSY, L (DECK 2)
48	82-ZM3-207-210		FLY-WHL ASSY, L2 (DECK 1)
49	82-ZM3-206-010		BELT, R
50	82-ZM1-245-210		HLDR, IC
51	82-ZM3-201-010		HLDR, MC
52	82-ZM3-202-010		PULLEY, MOT 2M
53	82-ZM1-288-010		SH, 1.63-3.2-0.5 SLT
54	80-ZM6-243-010		SH, 1.75-3.6-0.5 SLT
55	80-ZM6-230-010		SH, BELT
56	86-575-242-010		CUSH-G, DIA3.7-9-3.2
57	86-575-361-010		CUSH-G, 6-8-0.8
58	82-ZM3-205-010		BELT, L
59	82-ZM3-204-010		PULLEY, COUPLER (DECK 1)
A	87-585-036-410		UIT+2-8
B	80-ZM6-207-010		V+1.6-7
C	82-ZM1-309-010		S-SCRW, MOTOR
D	87-067-178-010		VTT+2.6-3
E	87-067-932-010		PW, 2.15-6.8-0.5 SLT
F	87-067-972-010		PW, 1.05-3-0.25 SLT

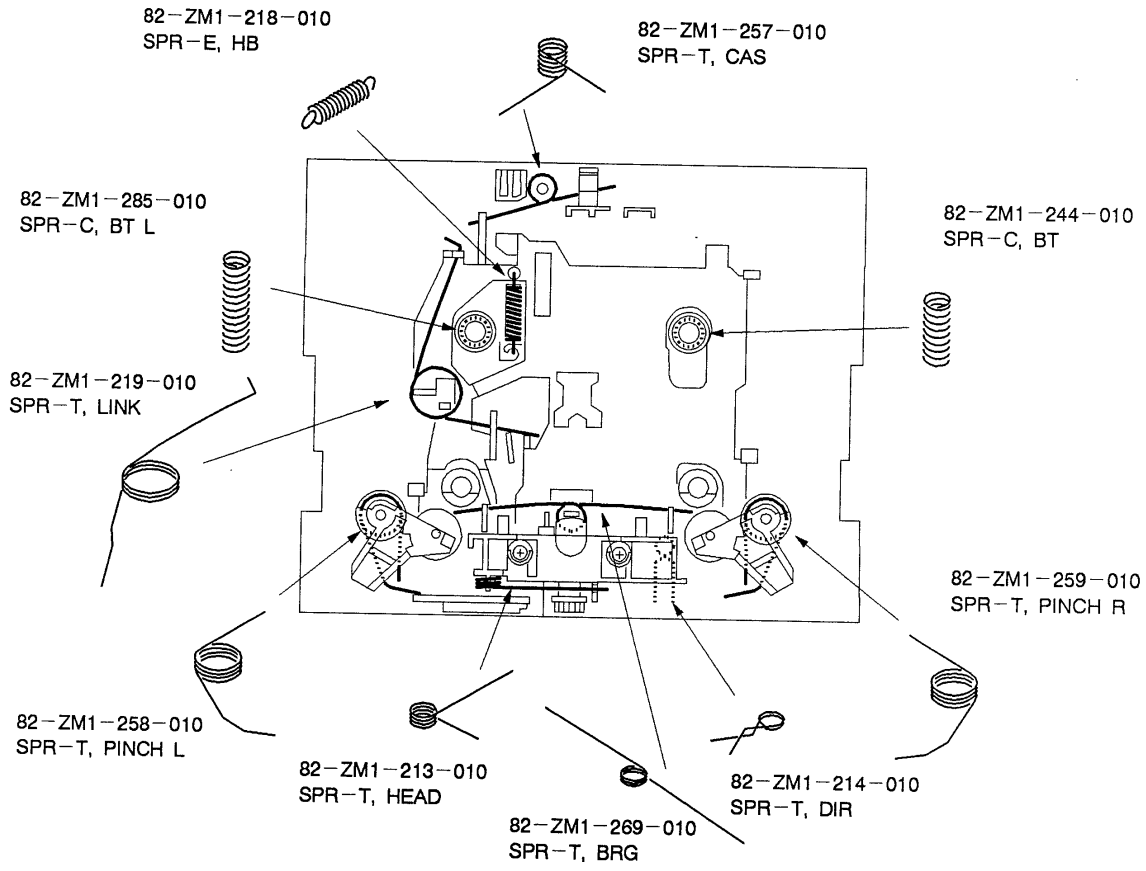
CD MECHANISM EXPLODED VIEW 1/1 (FD – N909)

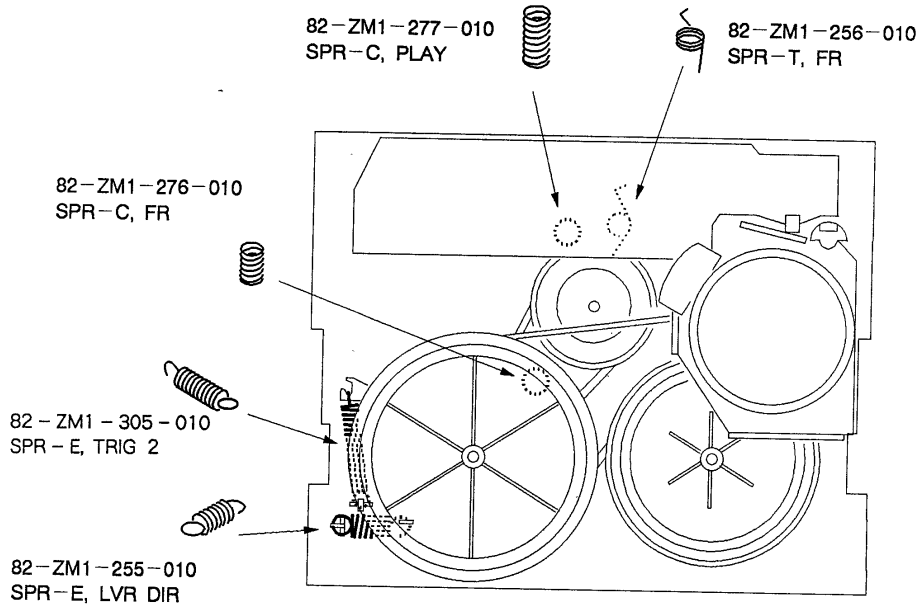


CD MECHANISM PARTS LIST 1/1 (FD – N909)

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	9X-262-513-310		T. T CHASS ASSY W/MOTOR
2	92-625-188-020		GEAR A
3	92-625-544-010		COVER
4	92-625-187-010		RING, CENTER
5	92-625-191-010		SPRING COMPRESSION
6	98-848-127-110		PICK UP KSS-210A
7	94-917-565-010		SHAFT SLED
8	91-572-085-110		LEAF SW (LIMIT)
9	9X-262-513-210		SLED MOTOR ASSY
10	91-564-722-110		CONNECTOR 6P
A	87-261-032-210		V+2-3

SPRING APPLICATION POSITION (FD – N909)





MODEL NO.

SX-N909

■ SPEAKER LIST

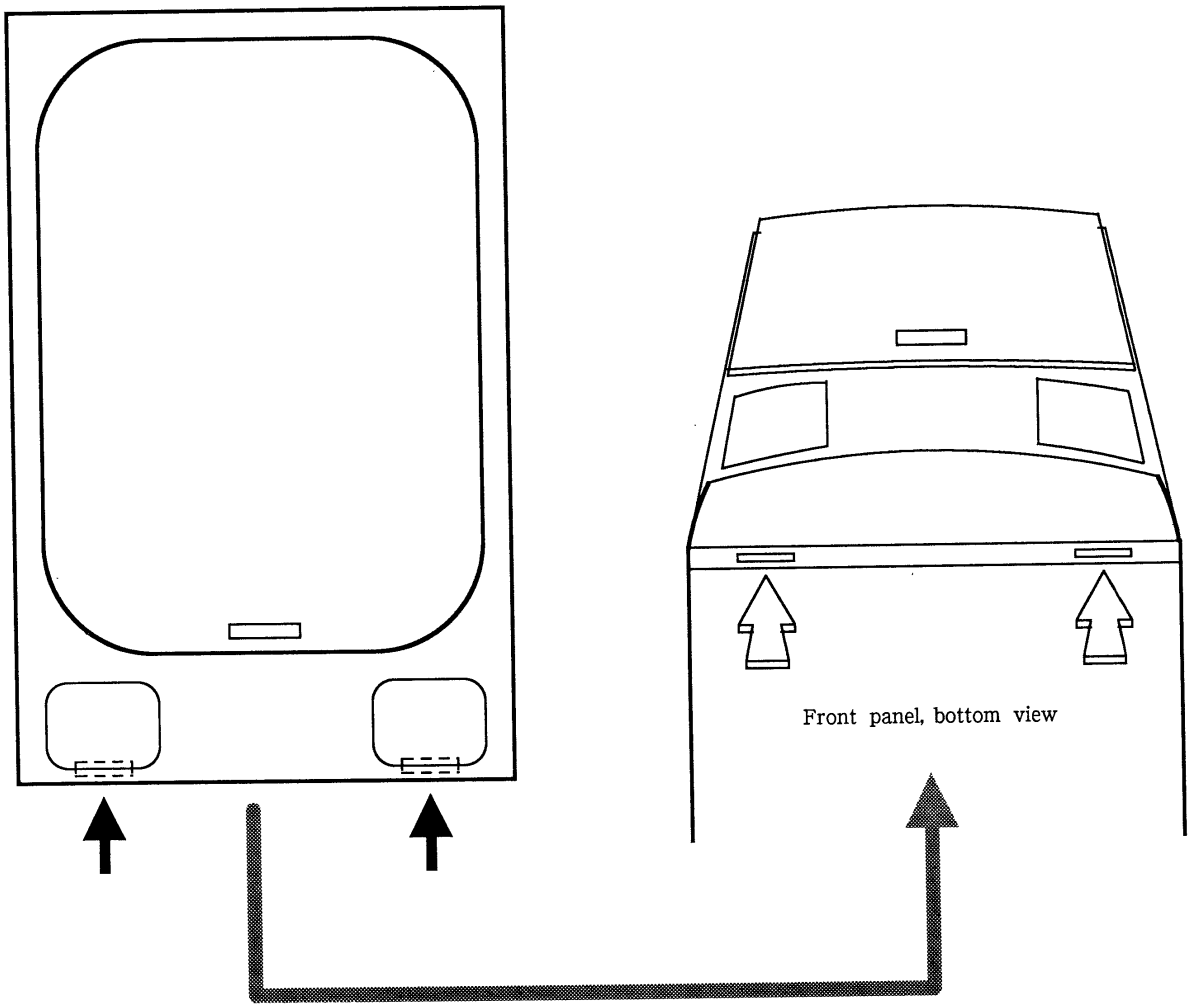
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
	82-NS2-001-010		PANEL FR〈YJB〉
	82-NS2-002-010		PANEL FR〈YB, YUB〉
	82-NS2-007-010		PANEL FR〈YJN〉
	82-NS2-008-010		PANEL FR ST〈YST〉
	82-NS1-004-010		RING W〈EXCEPT YJN〉
	82-NS2-009-010		RING W〈YJN〉
	82-NS2-006-010		RING TW ASSY〈EXCEPT YJN〉
	82-NS2-010-010		RING TW ASSY〈YJN〉
	82-NS2-602-010		SPEAKER WOOFER
	82-VS1-603-010		SPEAKER TWEETER
	83-096-614-010		SPEAKER CORD
	82-NS2-610-010		TERMINAL ASSY
	82-NS1-008-010		GRILL FRAME ASSY

■ DISASSEMBLY INSTRUCTIONS

- Insert a flat－bladed screwdriver into the position indicated by the arrows (shown in the below figure) and remove the front panel and tweeter. Remove the screws of each speaker unit and then remove the speaker units.

- SX－N909 (3 WAY SPEAKER SYSTEM)



Front panel, bottom view

■ ACCESSORIES／PACKAGE LIST

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
1	82-NT1-904-010		IB, E〈G〉〈EE, Z, E〉
2	82-NT1-905-010		IB, H〈G〉〈K, EE, Z, E〉
3	82-NT1-903-010		IB, H〈S〉〈HE, LH, HR〉
4	87-006-226-010		AM LOOP ANT CON2〈K, EE, E〉
5	87-006-225-010		AM LOOP ANT NC2〈HE, LH, HR, Z〉
6	81-748-632-010		FEEDER ANT, FM N〈EXCEPT Z〉
7	87-043-106-010		FM, WIRE ANT〈Z〉〈Z〉
8	87-042-062-010		PLG, ADPTR S-16115〈HE, HR〉
9	87-009-724-010		PLUG, ADPTR, IR39〈LH〉
10	82-NT1-043-010		RC-TN909

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
ｻｰｼﾞｻﾌﾟﾚｯｻ	SERGESUPPRESSOR
ｾﾗｺﾝ	CAP, CERA

サービス技術ニュース	
番号	連絡内容
G－　－	
G－　－	
G－　－	

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTORL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOADING MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ｼｸｱｰﾑ	ARM, SHAFT
ｼｸｶﾞｲﾄﾞ	GUIDE, SHAFT
ｽﾄﾗｯﾌﾟ	STRAP
ﾄｸﾅﾍﾞ	S-SCRW
ﾋﾝｼﾞ	HINGE
ﾋﾝｼﾞﾋﾞｽ	S-SCRW
ﾋﾞｽｾﾚｰﾄ	SCRW, SERRART

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