aiwa SERVICE

XR-M141 EZ(S)
XR-M161 HA(S),LH(S)

SIMPLE-2

A part of contents is adequate.
Re-issuing is under request.

SERVICE MANUAL

COMPACT DISC STEREO SYSTEM

BASIC TAPE MECHANISM : 2ZM-1 YR12NC
BASIC CD MECHANISM : DA11T3C

SYSTEM	CD–CASSEIVER	SPEAKER
XR-M141	CX-SLM141	SX-SLM141
XR-M161	CX-SLM161	SX-SLM161

aiwa

S/M Code No. 09-014-355-2N1

DATA

SPECIFICATIONS

(141 MODEL)

MAIN UNIT

TUNER

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	16.8 dBf
FM antenna terminal	75 ohms (unbalanced)
MW tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
MW usable sensitivity	350 µV/m
LW tuning range	144 kHz to 290 kHz
LW usable sensitivity	1400 µV/m
MW/LW antenna	Loop antenna

AMPLIFIER

Power output	Rated: 4 W + 4 W (4 ohms, T.H.D. 1%, 1 kHz/ DIN 45500) Reference: 5 W + 5 W (4 ohms, T.H.D. 10%, 1 kHz/DIN 45324) DIN MUSIC POWER 7 W + 7 W
	AUX: 500 mV
Input	SPEAKERS: 4 ohms or more
Outputs	PHONES: 32 ohms or more SUPER WOOFER

CASSETTE DECK

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 15000 Hz
Recording system	AC bias
Heads	Recording/playback × 1, erase × 1

CD PLAYER

Laser	Semiconductor laser (λ = 780 nm)
D/A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	Unmeasurable (1 kHz, 0 dB)

GENERAL

Power requirements	230 V AC, 50 Hz
Power consumption	30 W
Dimensions (W × H × D)	160 × 237 × 207 mm
Weight	2.7 kg

SPEAKER SYSTEM

Speakers	100 mm cone type
Impedance	4 ohms
Dimensions (W × H × D)	140 × 232.5 × 191.5 mm
Weight	1.1 kg

- Design and specifications are subject to change without notice.

(161 MODEL)

MAIN UNIT

TUNER

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	13 2 dBf
FM antenna terminals	75 ohms (unbalanced)
AM tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
AM usable sensitivity	350 µV/m
AM antenna	Loop antenna

AMPLIFIER

Power output	5.5 W + 5 5 W (4 ohms, T H D. 1% 1 kHz) 7 W + 7 W (4 ohms, T.H.D 10% 1 kHz)
Input	AUX: 500 mV
Outputs	SPEAKERS· 4 ohms or more PHONES: 32 ohms or more SUPER WOOFER

CASSETTE DECK

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz to 15000 Hz
Recording system	AC bias
Heads	Recording/playback × 1, erase × 1

CD PLAYER

Laser	Semiconductor laser (λ = 780 nm)
D/A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	Unmeasurable (1 kHz, 0 dB)

GENERAL

Power requirements	120/220-240 V AC switchable, 50/60 Hz
Power consumption	32 W
Dimensions (W × H × D)	160 × 237 × 204 mm
Weight	2.9 kg

SPEAKER SYSTEM

Speakers	100 mm cone type
Impedance	4 ohms
Dimensions (W × H × D)	140 × 232.5 × 191.5 mm
Weight	1 1 kg

- Design and specifications are subject to change without notice.

ACCESSORIES/PACKAGE LIST-1/1

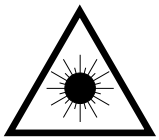
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8B-CLL-906-010		1IB,EZ(9L)B<141EZSC>
1	8B-CLA-902-110		1IB,LH(ESP)B<EXCEPT 141EZSC>
2	8A-CLB-961-210		2RC UNIT,RC-AAT11<EXCEPT 161LHSC>
2	8A-CLB-961-110		2RC UNIT,RC-AAT11<161LHSC>
3	87-A90-030-010		3ANT,LOOP AM-NC C
4	87-043-115-010		4ANT,FEEDER FM<EXCEPT 141EZSC>
4	87-A90-118-010		4ANT,WIRE FM (Z)<141EZSC>
⚠ 5	87-A91-017-010		5PLUG,CONVERSION JT-0476<161LHSC>

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: Usynling laserstråling 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.

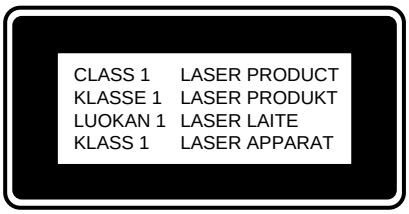
ATTENTION

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

ADVARSEL!

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

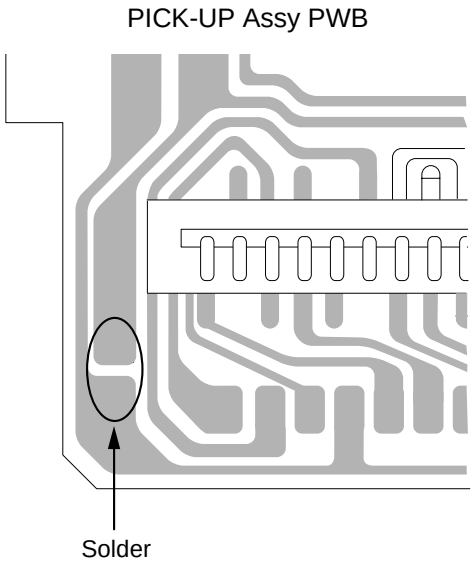
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



Precaution to replace Optical block (SF-P101NR)

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

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



ELECTRICAL MAIN PARTS LIST-1/5

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-020-454-010		IC,DN6851
	87-A20-446-010		C-IC,LA9241ML
	87-A21-319-010		C-IC,LC78622NE
	87-A21-443-040		C-IC,M62495AFP
	87-A21-145-040		IC BA4560F For 2 CH OPE. AMP
	87-A21-928-010		IC LC72131D (Z) [SANYO]
	87-A20-913-010		IC,LA1837NL
	87-A21-756-010		IC,LA4629
	87-A21-093-010		IC,LA6541D
	8B-CLA-610-010		IC,LC867248A-5T90
	87-A21-245-010		IC,RPM6938-V4
TRANSISTOR			
	89-505-434-540		C-FET,2SK543(4/5)<141EZ>
	87-A30-257-080		C-TR 2SD1306E (200mw) [CDIL]<141EZ>
	87-A30-287-040		C-TR DTC114TK (0.2W) [ROHM]
	89-327-143-080		C-TR,2SC2714O
	87-A30-432-040		C-TR,DTC124XK (0.2W)
	86-NFZ-664-080		C-TR,DTC143TK
	87-026-210-040		C-TR,DTC144EK (200MW)
	87-A30-074-080		C-TR,RT1P 141C<141EZ>
	87-A30-072-080		C-TR,RT1P 144C
	87-A30-091-080		FET,2SJ460
	87-A30-492-080		TR 2SC5343G [AUK] [AIWA]
	89-112-965-080		TR,2SA1296GR
	87-A30-515-080		TR,2SA1979O/Y
	87-A30-151-080		TR,2SA1993F
	89-109-332-380		TR,2SA933S-S (300mw)
	89-109-521-080		TR,2SA952K
	S1-911-240-000		TR,2SB1240
	89-320-011-080		TR,2SC2001K
	89-333-317-080		TR,2SC3331TU
	87-A30-185-010		TR,2SD1381F
	89-418-580-080		TR,2SD1858TV<161LH,161HA>
	87-026-291-080		TR,DTC124XS (0.3W)AI
	87-026-218-080		TR,DTC144ES
	87-026-313-080		TR,DTC343TS
	87-A30-476-010		TR,KTA1046Y
	87-026-610-080		TR,KTC3198GR
	87-CD7-603-080		TR,S8050
	87-A30-196-080		Transistor 2SC4115SR (400MW)<141EZ>
DIODE			
	87-020-027-080		C-DIODE,1SS184
	87-A40-270-080		C-DIODE,MC2838<141EZ>
	87-A40-393-090		Diode 1N5402-BD54 [RECTRON]
	87-020-465-080		DIODE,1SS133
	87-070-335-080		Zener Diode MTZJ8.2B,26mm TAPE
	87-A40-442-080		ZENER DIODE MTZJ9.1A 1/2W. AI
	87-070-334-080		ZENER,MTZJ10B
	87-070-136-080		ZENER,MTZJ5.1B
	87-A40-234-080		ZENER,MTZJ5.6A<141EZ>
	87-017-932-080		ZENER,MTZJ6.2B
	87-A40-290-080		Vari-Cap. Diode 3KV1590 [MI TY
MAIN C.B<141EZ>			
C101	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C102	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C103	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C104	87-010-404-080		CAP,E 4.7-50 M 11L SME
C105	87-010-403-080		CAP,E 3.3-50 M 11L SME
C106	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C107	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C108	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C109	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C110	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C111	87-010-453-010		CAP,E 4700-25 M SME
C112	87-012-140-080		C-CAP,S 470P-50 J CH
C113	87-010-408-080		Cap. 47uF M ELEC. 50V P=5mm
C114	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C115	87-010-112-080		CAP,E 100-16 M 11L SME
C116	87-010-101-080		CAP,E 220-16 M SME
C117	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C118	87-010-263-080		CAP,E 100-10 M 11L SME
C120	87-010-545-080		CAP,E 0.22-50 M 11L SME
C121	87-010-401-080		CAP,E 1-50 M 11L SME
C122	87-010-401-080		CAP,E 1-50 M 11L SME
C125	87-010-401-080		CAP,E 1-50 M 11L SME
C126	87-010-401-080		CAP,E 1-50 M 11L SME
C129	87-A10-831-090		Elect Cap. 1000uF +/-20% 25V
C130	87-A10-831-090		Elect Cap. 1000uF +/-20% 25V
C131	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C132	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C133	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C134	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C135	87-010-405-080		CAP,E 10-50 M 11L SME
C136	87-010-404-080		CAP,E 4.7-50 M 11L SME
C139	87-010-401-080		CAP,E 1-50 M 11L SME
C140	87-010-401-080		CAP,E 1-50 M 11L SME
C141	87-010-405-080		CAP,E 10-50 M 11L SME
C142	87-010-405-080		CAP,E 10-50 M 11L SME
C143	87-010-405-080		CAP,E 10-50 M 11L SME
C144	87-010-405-080		CAP,E 10-50 M 11L SME
C145	87-010-404-080		CAP,E 4.7-50 M 11L SME
C146	87-010-404-080		CAP,E 4.7-50 M 11L SME
C147	87-010-408-080		Cap. 47uF M ELEC. 50V P=5mm
C148	87-010-408-080		Cap. 47uF M ELEC. 50V P=5mm
C151	87-010-545-080		CAP,E 0.22-50 M 11L SME
C152	87-010-545-080		CAP,E 0.22-50 M 11L SME
C153	87-010-545-080		CAP,E 0.22-50 M 11L SME
C154	87-010-545-080		CAP,E 0.22-50 M 11L SME
C158	87-010-263-080		CAP,E 100-10 M 11L SME
C159	87-010-182-080		C-CAP,S 2200P-50 K B C2012
C160	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C161	87-010-263-080		CAP,E 100-10 M 11L SME
C162	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C166	87-012-368-080		C-CAP, S 0.1UF-50V K X7R
C169	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C170	87-010-112-080		CAP,E 100-16 M 11L SME
C171	87-010-384-080		Elect. Cap.100UF +/-20% 25V Pi
C173	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C174	87-012-368-080		C-CAP, S 0.1UF-50V K X7R
C175	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C176	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C177	87-010-248-080		CAP,E 220-10 M 11L SME
C303	87-010-180-080		C-CAP,S 1500P-50 K B C2012
C304	87-010-180-080		C-CAP,S 1500P-50 K B C2012
C305	87-010-263-080		CAP,E 100-10 M 11L SME
C306	87-010-263-080		CAP,E 100-10 M 11L SME
C307	87-010-830-080		C-CAP.U 0.068uF-16V K X7R
C308	87-010-830-080		C-CAP.U 0.068uF-16V K X7R
C309	87-010-188-080		C-CAP,S 6800P-50 K B C2012
C310	87-010-188-080		C-CAP,S 6800P-50 K B C2012
C312	87-010-401-080		CAP,E 1-50 M 11L SME
C313	87-010-401-080		CAP,E 1-50 M 11L SME
C314	87-010-401-080		CAP,E 1-50 M 11L SME
C315	87-010-401-080		CAP,E 1-50 M 11L SME
C316	87-010-182-080		C-CAP,S 2200P-50 K B C2012
C317	87-010-182-080		C-CAP,S 2200P-50 K B C2012
C318	87-A12-364-080		Cap. 0.01 uF K Mylar 100V AI
C319	87-A12-364-080		Cap. 0.01 uF K Mylar 100V AI
C320	87-A10-295-080		Cap. 0.01UF J Mylar 50V AI
C321	87-A10-295-080		Cap. 0.01UF J Mylar 50V AI
C322	87-010-321-080		C-CAP,S 82P-50 J CH
C323	87-010-321-080		C-CAP,S 82P-50 J CH

ELECTRICAL MAIN PARTS LIST-2/5

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C324	87-010-112-080		CAP,E 100-16 M 11L SME
C325	87-010-112-080		CAP,E 100-16 M 11L SME
C326	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C327	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C328	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C329	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C331	87-010-382-080		CAP,E 22-25 M 11L SME
C332	87-010-187-080		C-CAP,S 5600P-50 K B
C333	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C335	87-012-158-080		C-CAP,S 390P-50 J CH GRM
C336	87-012-158-080		C-CAP,S 390P-50 J CH GRM
C337	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C338	87-012-140-080		C-CAP,S 470P-50 J CH
C339	87-010-405-080		CAP,E 10-50 M 11L SME
C340	87-010-405-080		CAP,E 10-50 M 11L SME
C341	87-010-318-080		C-CAP,S 47P-50 J CH GRM
C342	87-010-318-080		C-CAP,S 47P-50 J CH GRM
C345	87-012-272-080		C-CAP, U 680P-50V K X7R
C346	87-012-272-080		C-CAP, U 680P-50V K X7R
C350	87-010-374-080		CAP,E 47-10 M 11L SME
C351	87-010-234-040		Cap. 47UF M Elec. 16V P=5mm
C354	87-012-268-080		C-CAP, U 330P-50V J C0G
C355	87-012-268-080		C-CAP, U 330P-50V J C0G
C701	87-010-381-080		CAP,E 330-16 M SME
C702	87-010-404-080		CAP,E 4.7-50 M 11L SME
C703	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C704	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C709	87-012-195-080		C-CAP,U 100P-50 J CH
C711	87-010-263-080		CAP,E 100-10 M 11L SME
C712	87-010-831-080		C-CAP,U 0.1-16 Z F
C713	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C714	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C715	87-012-195-080		C-CAP,U 100P-50 J CH
C717	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C719	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C720	87-012-195-080		C-CAP,U 100P-50 J CH
C721	87-012-176-080		C-CAP,U 15P-50 J CH
C722	87-012-176-080		C-CAP,U 15P-50 J CH
C723	87-012-274-080		C-CAP,U 1000P-50 K B
C725	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C727	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C728	87-010-248-080		CAP,E 220-10 M 11L SME
C729	87-012-274-080		C-CAP,U 1000P-50 K B
C731	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C752	87-012-284-080		C-CAP,U 6800P-50 K B GRM
C753	87-012-195-080		C-CAP,U 100P-50 J CH
C755	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C756	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C757	87-012-188-080		C-CAP,U 47P-50 J CH
C758	87-012-167-080		C-CAP,U 5P-50 C CH
C761	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C762	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C763	87-010-829-080		C-CAP,U 0.047-16 Z F
C764	87-012-337-080		C-CAP, U 150P-50V J C0G
C765	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C766	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C768	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C769	87-010-260-080		CAP,E 47-25 M 11L SME
C770	87-010-829-080		C-CAP,U 0.047-16 Z F
C771	87-010-383-080		CAP,E 33-25 M 11L SME
C772	87-010-829-080		C-CAP,U 0.047-16 Z F
C773	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C774	87-010-263-080		CAP,E 100-10 M 11L SME
C775	87-010-405-080		CAP,E 10-50 M 11L SME
C776	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C777	87-010-400-080		CAP,E 0.47-50 M 11L SME
C778	87-010-401-080		CAP,E 1-50 M 11L SME
C779	87-010-401-080		CAP,E 1-50 M 11L SME
C780	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C781	87-010-405-080		CAP,E 10-50 M 11L SME
C782	87-010-405-080		CAP,E 10-50 M 11L SME
C783	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C784	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C785	87-010-401-080		CAP,E 1-50 M 11L SME
C786	87-010-401-080		CAP,E 1-50 M 11L SME
C787	87-012-287-080		C-CAP,U 0.015-25 Z F
C788	87-012-287-080		C-CAP,U 0.015-25 Z F
C789	87-012-275-080		C-CAP,U 1200P-50 K B GRM
C790	87-012-275-080		C-CAP,U 1200P-50 K B GRM
C791	87-010-405-080		CAP,E 10-50 M 11L SME
C793	87-012-273-080		C-CAP, U 820P-50V K X7R
C794	87-010-406-080		CAP,E 22-50 M 11L SME
C795	87-010-596-080		C-CAP,S 0.047-16 K R C2012
C796	87-010-403-080		CAP,E 3.3-50 M 11L SME
C797	87-012-276-080		C-CAP,U 1500P-50 K B
C798	87-012-276-080		C-CAP,U 1500P-50 K B
C799	87-010-829-080		C-CAP,U 0.047-16 Z F
C812	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C814	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C820	87-010-260-080		CAP,E 47-25 M 11L SME
C821	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C822	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C823	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C824	87-012-172-080		C-CAP,U 10P-50 D CH
C828	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C829	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C909	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C910	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C940	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C942	87-012-172-080		C-CAP,U 10P-50 D CH
C947	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C949	87-A10-039-080		C-CAP,U 470P-50 J CH
C952	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C958	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C959	87-010-831-080		C-CAP,U 0.1-16 Z F
C960	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C962	87-010-401-080		CAP,E 1-50 M 11L SME
CF801	87-008-423-010		FLTR,CF SFE10.7MS3G-A
CF802	82-785-747-010		CF MS2 GLY R
CN101	88-NF9-658-010		CONN,30P BLK TYK-B(P)
CN301	87-099-832-010		CONN,8P V S2M-8W
⚠F101	87-035-457-010		FUSE,3.15A 250V T 218
FC101	87-033-213-080		FUSE CLAMP,PFC5000
FC102	87-033-213-080		FUSE CLAMP,PFC5000
FFE801	A8-6ZA-19C-170		6ZA-1 YFEENC
J101	8A-CLA-624-010		JACK,PIN 3P AUX
J102	87-A60-754-010		Speaker Terminal 4 pins Push t
J103	87-A60-420-010		Stereo Headphone Jack (DC:34V/
J104	87-099-608-010		DC JACK HEC3800 (500V)
J801	87-A60-880-010		TERMINAL,ANT-PAL 2P MSP-313V-0
L101	87-005-366-010		COIL,1UH K
L102	87-005-366-010		COIL,1UH K
L104	87-005-676-080		COIL,2.2UH K LF5.0S
L301	87-007-342-010		COIL OSC 85K BIAS
L771	87-A50-266-010		COIL,FM DET-2N(TOK)
L772	87-A90-733-010		FLTR,PCFAZH-450 (TOK)
L773	S6-047-410-000		AN ANT COIL PIN:4-5:99T
L774	S6-047-510-000		AM OSC COIL PIN:5-4:21T
L781	87-005-847-080		COIL,2.2UH K CECS
L832	87-005-847-080		COIL,2.2UH K CECS
L941	87-A50-020-010		COIL,ANT LW (COI) 252KHZ
L942	87-A50-019-010		COIL,OSC LW (COI) 856KHZ
⚠PR100	87-A91-940-080		PROTECTOR,2.5A 20P 60V
R118	SR-F82-000-25N		RES,FUSE 82-1/2W J
TC942	87-011-164-010		TRIMMER,CER 30P 4.5X3.9 VCT31
WH101	87-099-043-010		CONN 2P EH
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309

MAIN C.B<161LH,161HA>

ELECTRICAL MAIN PARTS LIST-3/5

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C101	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C102	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C103	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C104	87-010-404-080		CAP,E 4.7-50 M 11L SME
C105	87-010-403-080		CAP,E 3.3-50 M 11L SME
C106	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C107	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C108	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C109	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C110	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C111	87-016-440-090		CAP,E 4700-35V SME
C112	87-012-140-080		C-CAP,S 470P-50 J CH
C113	87-010-408-080		Cap. 47uF M ELEC. 50V P=5mm
C114	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C115	87-010-112-080		CAP,E 100-16 M 11L SME
C116	87-010-101-080		CAP,E 220-16 M SME
C117	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C118	87-010-263-080		CAP,E 100-10 M 11L SME
C120	87-010-545-080		CAP,E 0.22-50 M 11L SME
C121	87-010-401-080		CAP,E 1-50 M 11L SME
C122	87-010-401-080		CAP,E 1-50 M 11L SME
C125	87-010-401-080		CAP,E 1-50 M 11L SME
C126	87-010-401-080		CAP,E 1-50 M 11L SME
C129	87-A10-831-090		Elect Cap. 1000uF +/-20% 25V
C130	87-A10-831-090		Elect Cap. 1000uF +/-20% 25V
C131	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C132	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C133	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C134	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C135	87-010-405-080		CAP,E 10-50 M 11L SME
C136	87-010-404-080		CAP,E 4.7-50 M 11L SME
C139	87-010-401-080		CAP,E 1-50 M 11L SME
C140	87-010-401-080		CAP,E 1-50 M 11L SME
C141	87-010-405-080		CAP,E 10-50 M 11L SME
C142	87-010-405-080		CAP,E 10-50 M 11L SME
C143	87-010-405-080		CAP,E 10-50 M 11L SME
C144	87-010-405-080		CAP,E 10-50 M 11L SME
C145	87-010-404-080		CAP,E 4.7-50 M 11L SME
C146	87-010-404-080		CAP,E 4.7-50 M 11L SME
C147	87-010-408-080		Cap. 47uF M ELEC. 50V P=5mm
C148	87-010-408-080		Cap. 47uF M ELEC. 50V P=5mm
C151	87-010-545-080		CAP,E 0.22-50 M 11L SME
C152	87-010-545-080		CAP,E 0.22-50 M 11L SME
C153	87-010-545-080		CAP,E 0.22-50 M 11L SME
C154	87-010-545-080		CAP,E 0.22-50 M 11L SME
C158	87-010-263-080		CAP,E 100-10 M 11L SME
C159	87-010-182-080		C-CAP,S 2200P-50 K B C2012
C160	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C161	87-010-263-080		CAP,E 100-10 M 11L SME
C162	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C166	87-012-368-080		C-CAP, S 0.1UF-50V K X7R
C169	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C170	87-010-112-080		CAP,E 100-16 M 11L SME
C171	87-010-384-080		Elect. Cap.100UF +/-20% 25V Pi
C173	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C177	87-010-248-080		CAP,E 220-10 M 11L SME
C303	87-010-180-080		C-CAP,S 1500P-50 K B C2012
C304	87-010-180-080		C-CAP,S 1500P-50 K B C2012
C305	87-010-263-080		CAP,E 100-10 M 11L SME
C306	87-010-263-080		CAP,E 100-10 M 11L SME
C307	87-010-830-080		C-CAP.U 0.068uF-16V K X7R
C308	87-010-830-080		C-CAP.U 0.068uF-16V K X7R
C309	87-010-188-080		C-CAP,S 6800P-50 K B C2012
C310	87-010-188-080		C-CAP,S 6800P-50 K B C2012
C312	87-010-401-080		CAP,E 1-50 M 11L SME
C313	87-010-401-080		CAP,E 1-50 M 11L SME
C314	87-010-401-080		CAP,E 1-50 M 11L SME
C315	87-010-401-080		CAP,E 1-50 M 11L SME
C316	87-010-182-080		C-CAP,S 2200P-50 K B C2012
C317	87-010-182-080		C-CAP,S 2200P-50 K B C2012
C318	87-A12-364-080		Cap. 0.01 uF K Mylar 100V AI
C319	87-A12-364-080		Cap. 0.01 uF K Mylar 100V AI
C320	87-A10-295-080		Cap. 0.01UF J Mylar 50V AI
C321	87-A10-295-080		Cap. 0.01UF J Mylar 50V AI
C322	87-010-321-080		C-CAP,S 82P-50 J CH
C323	87-010-321-080		C-CAP,S 82P-50 J CH
C324	87-010-112-080		CAP,E 100-16 M 11L SME
C325	87-010-112-080		CAP,E 100-16 M 11L SME
C326	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C327	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C328	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C329	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C331	87-010-382-080		CAP,E 22-25 M 11L SME
C332	87-010-187-080		C-CAP,S 5600P-50 K B
C333	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C335	87-012-158-080		C-CAP,S 390P-50 J CH GRM
C336	87-012-158-080		C-CAP,S 390P-50 J CH GRM
C337	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C338	87-012-140-080		C-CAP,S 470P-50 J CH
C339	87-010-405-080		CAP,E 10-50 M 11L SME
C340	87-010-405-080		CAP,E 10-50 M 11L SME
C341	87-010-318-080		C-CAP,S 47P-50 J CH GRM
C342	87-010-318-080		C-CAP,S 47P-50 J CH GRM
C345	87-012-272-080		C-CAP, U 680P-50V K X7R
C346	87-012-272-080		C-CAP, U 680P-50V K X7R
C350	87-010-374-080		CAP,E 47-10 M 11L SME
C351	87-010-234-040		Cap. 47UF M Elec. 16V P=5mm
C354	87-012-268-080		C-CAP, U 330P-50V J C0G
C355	87-012-268-080		C-CAP, U 330P-50V J C0G
C701	87-010-381-080		CAP,E 330-16 M SME
C702	87-010-404-080		CAP,E 4.7-50 M 11L SME
C703	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C704	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C709	87-012-195-080		C-CAP,U 100P-50 J CH
C711	87-010-263-080		CAP,E 100-10 M 11L SME
C712	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C714	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C717	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C719	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C720	87-012-195-080		C-CAP,U 100P-50 J CH
C721	87-012-176-080		C-CAP,U 15P-50 J CH
C722	87-012-176-080		C-CAP,U 15P-50 J CH
C723	87-012-274-080		C-CAP,U 1000P-50 K B
C725	87-012-274-080		C-CAP,U 1000P-50 K B
C727	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C728	87-010-248-080		CAP,E 220-10 M 11L SME
C729	87-012-274-080		C-CAP,U 1000P-50 K B
C731	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C756	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C757	87-012-188-080		C-CAP,U 47P-50 J CH
C758	87-012-167-080		C-CAP,U 5P-50 C CH
C763	87-010-596-080		CAP,S 0.047-16
C764	87-012-337-080		C-CAP,U 56P-50 J CH GRM
C765	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C768	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C769	87-010-260-080		CAP,E 47-25 M 11L SME
C770	87-010-596-080		CAP,S 0.047-16
C771	87-010-383-080		CAP,E 33-25 M 11L SME
C772	87-010-596-080		CAP,S 0.047-16
C773	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C774	87-010-263-080		CAP,E 100-10 M 11L SME
C775	87-010-405-080		CAP,E 10-50 M 11L SME
C776	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C777	87-010-400-080		CAP,E 0.47-50 M 11L SME
C778	87-010-401-080		CAP,E 1-50 M 11L SME
C779	87-010-401-080		CAP,E 1-50 M 11L SME
C780	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C781	87-010-405-080		CAP,E 10-50 M 11L SME
C782	87-010-405-080		CAP,E 10-50 M 11L SME
C783	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R

ELECTRICAL MAIN PARTS LIST-4/5

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C784	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C785	87-010-401-080		CAP,E 1-50 M 11L SME
C786	87-010-401-080		CAP,E 1-50 M 11L SME
C789	87-012-275-080		C-CAP,U 1200P-50 K B GRM
C790	87-012-275-080		C-CAP,U 1200P-50 K B GRM
C791	87-010-405-080		CAP,E 10-50 M 11L SME
C793	87-012-273-080		C-CAP,U 820P-50 K B
C794	87-010-406-080		CAP,E 22-50 M 11L SME
C795	87-010-596-080		CAP,S 0.047-16
C796	87-010-403-080		CAP,E 3.3-50 M 11L SME
C797	87-012-276-080		C-CAP,U 1500P-50 K B
C798	87-012-276-080		C-CAP,U 1500P-50 K B
C799	87-010-596-080		CAP,S 0.047-16
C812	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C820	87-010-260-080		CAP,E 47-25 M 11L SME
C821	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C822	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C823	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C828	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C829	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C959	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C960	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C961	87-012-166-080		C-CAP, U 4 P-50V C COG
C963	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
CF801	87-008-261-010		FLTR,CF SFE10.7MA5
CF802	87-008-261-010		FLTR,CF SFE10.7MA5
CN101	88-NF9-658-010		CONN,30P BLK TYK-B(P)
CN301	87-099-832-010		CONN,8P V S2M-8W
⚠F101	87-035-457-010		FUSE,3.15A 250V T 218
FC101	87-033-213-080		FUSE CLAMP,PFC5000
FC102	87-033-213-080		FUSE CLAMP,PFC5000
FFE801	A8-8ZA-192-070		8ZA-1 FEUNC (FM:12V) [AIWA]
J101	8A-CLA-624-010		JACK,PIN 3P AUX
J102	87-A60-754-010		Speaker Terminal 4 pins Push t
J103	87-A60-420-010		Stereo Headphone Jack (DC:34V/
J801	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
JW718	87-A50-079-080		COIL,22UH (CECS)
L101	87-005-366-010		COIL,1UH K
L102	87-005-366-010		COIL,1UH K
L104	87-005-676-080		COIL,2.2UH K LF5.0S
L301	87-007-342-010		COIL OSC 85K BIAS
L771	87-A50-266-010		COIL FM DET-N (TOK)
L772	87-A90-733-010		FLTR,PCFAZH-450 (TOK)
L773	S6-046-410-000		AM ANT COIL PIN : 3-1:15T
L774	S6-046-410-000		AM OSC COIL PIN: 1-2:62T
L781	87-005-676-080		COIL,2.2UH K LF5.0S
⚠PR100	87-A91-940-080		PROTECTOR,2.5A 20P 60V
R118	SR-F82-000-25N		RES,FUSE 82-1/2W J
WH101	87-099-043-010		CONN 2P EH
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309

FRONT C.B

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C201	87-010-375-080		CAP,E 330-10 M 11L SME
C202	87-010-805-080		C-CAP.S 1uF-16V Z CER.Y5V
C203	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C204	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C205	87-012-156-080		C-CAP,S 220P-50 J CH GRM
C206	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C207	87-A12-310-080		C-CAP, U 0.01UF-50V K X7R
C208	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C210	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C211	87-010-314-080		C-CAP,S 22P-50V
C212	87-010-321-080		C-CAP,S 82P-50 J CH
C213	87-012-168-080		C-CAP U 6 P-50V C CER. COG
C214	87-010-314-080		C-CAP,S 22P-50V
C215	87-012-176-080		C-CAP,U 15P-50 J CH
C216	87-010-400-080		CAP,E 0.47-50 M 11L SME
C217	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C218	87-010-405-080		CAP,E 10-50 M 11L SME
CN201	87-099-720-010		CONN,30P BLK TYK-B(P)
CN202	87-A60-404-010		CONN,3P TKX-P03P-F1
FB201	87-A90-562-010		F-BCAD 843556 TB36 TAPING 52mm
L201	87-005-676-080		COIL,2.2UH K LF5.0S
L202	87-A50-083-080		COIL,47UH (CECS)
LCD201	8Z-CL8-665-110		LCD,ZCL-8
S200	87-A90-095-080		SW,TACT EVQ11G04M
S201	87-A90-095-080		SW,TACT EVQ11G04M
S202	87-A90-095-080		SW,TACT EVQ11G04M
S203	87-A90-095-080		SW,TACT EVQ11G04M
S204	87-A90-095-080		SW,TACT EVQ11G04M
S205	87-A90-095-080		SW,TACT EVQ11G04M
S206	87-A90-095-080		SW,TACT EVQ11G04M
S207	87-A90-095-080		SW,TACT EVQ11G04M
S208	87-A90-095-080		SW,TACT EVQ11G04M
S209	87-A90-095-080		SW,TACT EVQ11G04M
S213	87-A90-095-080		SW,TACT EVQ11G04M
S214	87-A90-095-080		SW,TACT EVQ11G04M
S215	87-A90-095-080		SW,TACT EVQ11G04M
S216	87-A90-095-080		SW,TACT EVQ11G04M
S217	87-A90-095-080		SW,TACT EVQ11G04M
S218	87-A90-095-080		SW,TACT EVQ11G04M
S219	87-A90-095-080		SW,TACT EVQ11G04M
X201	87-030-364-010		VIB,XTAL 32.768K CT
X202	87-030-376-080		VIB,CER 5.760MHZ CSA MG200

CD C.B

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C401	87-010-403-080		CAP,E 3.3-50 M 11L SME
C402	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C403	87-010-263-080		CAP,E 100-10 M 11L SME
C404	87-010-248-080		CAP,E 220-10 M 11L SME
C405	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C406	87-010-374-080		CAP,E 47-10 M 11L SME
C407	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C408	87-010-198-080		C-CAP,S 0.022-25 K B C2012
C409	87-010-248-080		CAP,E 220-10 M 11L SME
C410	87-010-263-080		CAP,E 100-10 M 11L SME
C411	87-A11-177-080		C-CAP,S 0.15-16 K B
C412	87-010-401-080		CAP,E 1-50 M 11L SME
C413	87-016-369-080		C-CAP,S 0.033-25 K B GRM
C414	87-010-405-080		CAP,E 10-50 M 11L SME
C415	87-012-368-080		C-CAP, S 0.1UF-50V K X7R
C416	87-010-545-080		CAP,E 0.22-50 M 11L SME
C417	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C418	87-010-213-080		C-CAP,S 0.015-25 K B GRM
C419	87-A10-201-080		C-CAP,S 0.33-16 K B
C420	87-016-369-080		C-CAP,S 0.033-25 K B GRM
C421	87-A11-177-080		C-CAP,S 0.15-16 K B
C422	87-010-184-080		C-CAP,S 3300P-50 K B C2012
C423	87-010-992-080		C-CAP,S 0.047-25 K B MK212
C424	87-016-460-080		C-CAP,S 0.22-16 K B
C425	87-010-176-080		C-CAP,S 680P-50 J SL
C426	87-A10-201-080		C-CAP,S 0.33-16 K B
C428	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C429	87-010-186-080		C-CAP,S 4700P-50 K B C2012
C430	87-012-156-080		C-CAP,S 220P-50 J CH GRM
C431	87-010-545-080		CAP,E 0.22-50 M 11L SME
C432	87-010-374-080		CAP,E 47-10 M 11L SME
C433	87-010-401-080		CAP,E 1-50 M 11L SME
C434	87-010-184-080		C-CAP,S 3300P-50 K B C2012
C435	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C436	87-010-374-080		CAP,E 47-10 M 11L SME
C437	87-010-404-080		CAP,E 4.7-50 M 11L SME
C438	87-012-368-080		C-CAP, S 0.1UF-50V K X7R
C439	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C441	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C442	87-010-313-080		C-CAP,S 18P-50 J CH GRM
C445	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C446	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C447	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C448	87-010-322-080		C-CAP,S 100P-50 J CH GRM

ELECTRICAL MAIN PARTS LIST-5/5

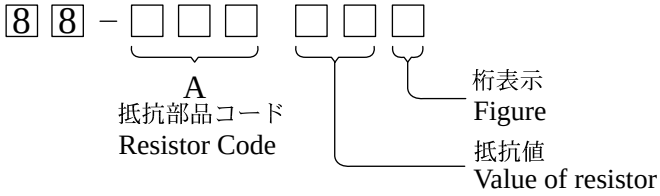
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C450	87-012-140-080		C-CAP,S 470P-50 J CH
C451	87-012-156-080		C-CAP,S 220P-50 J CH GRM
C455	87-010-247-080		CAP,E 100-50 M SME
C457	87-010-312-080		C-CAP,S 15P-50 J CH GRM
C458	87-010-312-080		C-CAP,S 15P-50 J CH GRM
C459	87-010-263-080		CAP,E 100-10 M 11L SME
C460	87-015-819-080		C-CAP, 0.01-50 K B C3216
C461	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C462	87-010-248-080		CAP,E 220-10 M 11L SME
C463	87-012-348-080		Cap. 0.1uF Z CER. 50V F TYPE
C464	87-010-263-080		CAP,E 100-10 M 11L SME
C465	87-010-404-080		CAP,E 4.7-50 M 11L SME
C466	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C467	87-010-263-080		CAP,E 100-10 M 11L SME
C469	87-012-154-080		C-CAP,S 150P-50 J CH GRM
C470	87-010-544-080		CAP,E 0.1-50 M 11L SME
C471	87-015-785-080		C-CAP, 0.1-25 Z F C3216
C472	87-015-785-080		C-CAP, 0.1-25 Z F C3216
C473	87-015-785-080		C-CAP, 0.1-25 Z F C3216
C474	87-015-785-080		C-CAP, 0.1-25 Z F C3216
C475	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C476	87-010-221-080		CAP,E 470-10 M SME
C477	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C478	87-010-263-080		CAP,E 100-10 M 11L SME
C479	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C480	87-010-221-080		CAP,E 470-10 M SME
C481	87-010-405-080		CAP,E 10-50 M 11L SME
C482	87-010-405-080		CAP,E 10-50 M 11L SME
C489	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C490	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C491	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C492	87-010-221-080		CAP,E 470-10 M SME
C494	87-012-348-080		Cap. 0.1uF Z CER. 50V F TYPE
C496	87-010-403-080		CAP,E 3.3-50 M 11L SME
C501	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C502	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C503	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C504	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C505	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C506	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C510	87-012-368-080		C-CAP, S 0.1UF-50V K X7R
CN401	87-A60-424-010		CONN,16P V TOC-B
CN402	87-A60-670-010		CONN,6P H 2MM JMT
CN403	87-A60-619-010		CONN,2P V 2MM JMT
CNA203	8A-CLA-621-010		CONN ASSY,9P MOTOR

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
FFC401	8B-CLB-601-010		FF-CABLE,16P 1.0 130MM
L401	87-003-102-080		COIL,10UH J LAL02
L403	87-A50-087-080		COIL,100UH (CECS)
L404	87-A50-079-080		COIL,22UH (CECS)
SFR430	87-024-437-080		SFR, 100K H NVZ6TLTA AI TAPING
X401	87-A70-046-010		VIB,XTAL 16.934MHZ
LED C.B			
D941	87-A40-365-080		LED LAMP Green SLR-342 MGT32
D942	87-A40-365-080		LED LAMP Green SLR-342 MGT32
D943	87-A40-365-080		LED LAMP Green SLR-342 MGT32
D944	87-A40-365-080		LED LAMP Green SLR-342 MGT32
D945	87-A40-365-080		LED LAMP Green SLR-342 MGT32
D946	87-A40-365-080		LED LAMP Green SLR-342 MGT32
D947	87-A40-365-080		LED LAMP Green SLR-342 MGT32
D948	87-A40-365-080		LED LAMP Green SLR-342 MGT32
D949	87-A40-365-080		LED LAMP Green SLR-342 MGT32
AC C.B			
⚠C219	87-010-197-080		C-CAP,S 0.01-25 K B C2012<141EZ>
⚠C220	87-010-197-080		C-CAP,S 0.01-25 K B C2012<141EZ>
CNA101	8A-CLA-630-010		CONN ASSY,2P PT
⚠PT101	8B-CLA-602-010		POWER TRANSFORMER EN60065<141EZ>
⚠PT101	8B-CLA-604-010		POWER TRANSFORMER IEC-65<161LH,161HA>
⚠SW001	87-A90-178-010		SW,SL 1-1-2 KUN<161LH,161HA>
MOTOR C.B			
M1	S0-M10-A09-700		MOTOR SLED ASSY
PIN3	S2-369-750-000		PLUG,6P
SW1	S4-S13-A01-600		SW,LEAF
DECK C.B			
CN1	87-009-352-010		CONN,9P PH H
CRD1	82-ZM1-625-010		RBN-CORD,4P-55
M1	87-045-347-010		MOT,SHU2L 70
SFR1	87-024-581-010		SFR,3.3K DIA6V K0A
SOL1	82-ZM3-627-010		SOL ASSY,27 SO
SW2	87-036-110-010		PUSH SWITCH
SW3	87-036-110-010		PUSH SWITCH
SW4	87-036-110-010		PUSH SWITCH
SW5	87-036-110-010		PUSH SWITCH
SW6	87-A90-248-010		SW,MICRO ESE11SH2CXQ

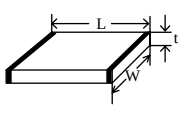
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

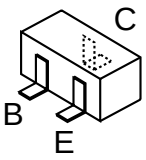
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



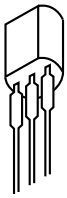
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード ：A Resistor Code ：A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

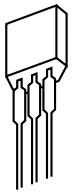
TRANSISTOR ILLUSTRATION-1/1



2SC2714
2SD1306
DTC114TK
DTC143TK
DTC144EK
RT1P141C
PT1P144C
DTC124XK



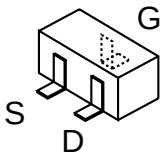
2SA1296
KTC3198



DTC124XS
DTC343TS
2SA1993F
DTC144ES
2SC3331

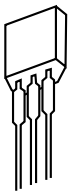
2SA933
2SC2001
SS8050
2SC4115SR
2SA1979
2SD1858TV
2SA952

2SD1381

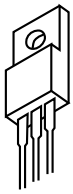


2SK543

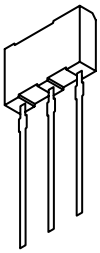
2SC5343G



2SJ460



KTA1046



2SB1240

MAIN C.B

141EZ MODEL

J801
ANTENNA
FM 75Ω (COAXIAL)
MW/LW LOOP

J101
SUPER WOOFER
R
AUX
L

J102
SPEAKERS
IMP:4Ω
L
R

J104
DC JACK

J103
PHONES

TO FRONT C.B CN201

TO TAPE MECHANISM (2ZM-1 YR12NC)

AC C.B

AC~
230V
50Hz

PT101
CNA101

MAIN C.B
161 LH,HA MODEL

J801
ANTENNA
FM 75Ω
AM LOOP

J101
SUPER WOOFER
R
AUX
L

J102
SPEAKERS
IMP : 4 Ω
L
R

TO FRONT C.B CN201

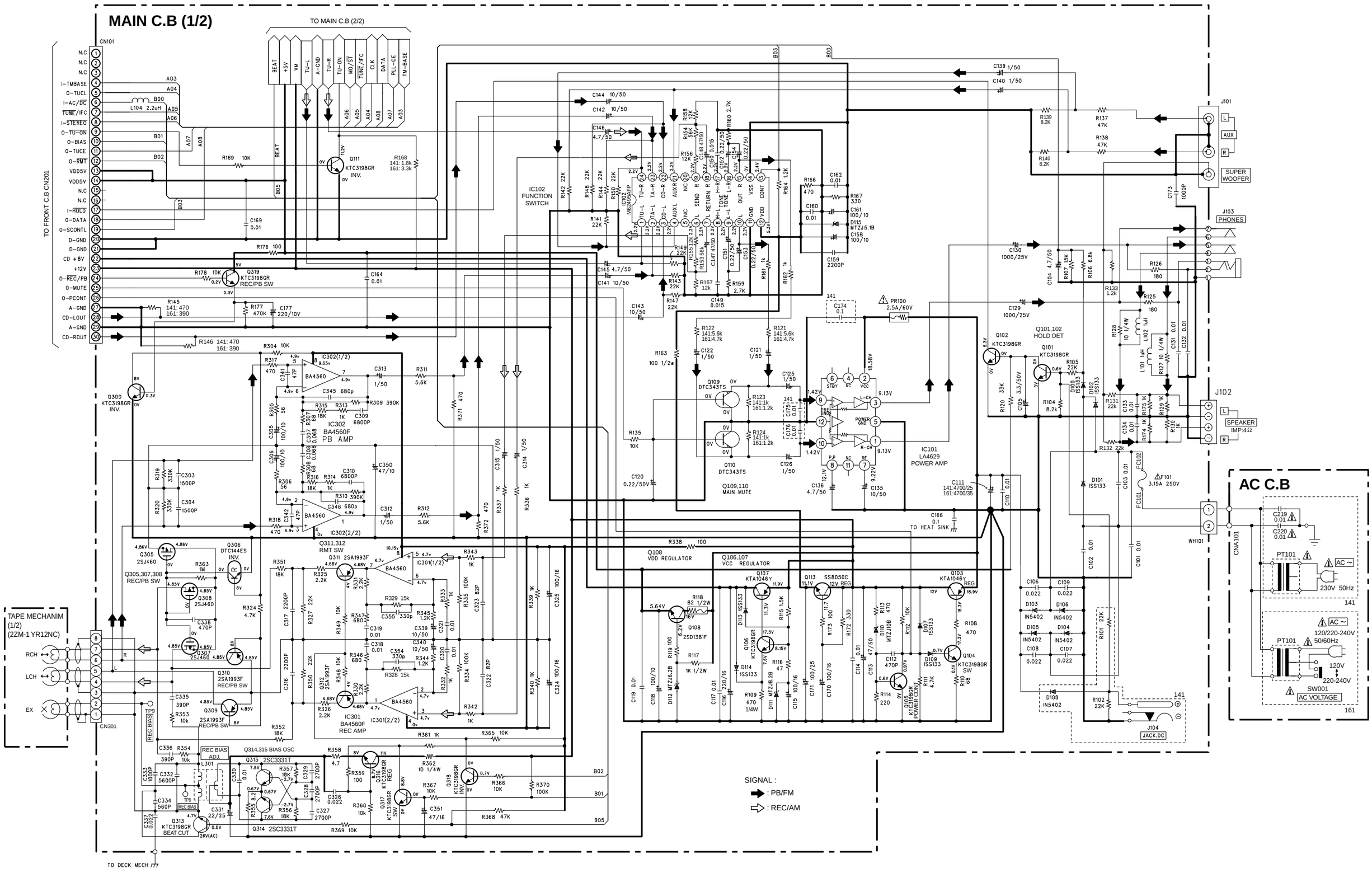
TO TAPE MECHANISM (2ZM-1 YR12NC)

J103
PHONES

AC C.B

CNA101
PT101
AC~
120/220-240V
50/60Hz
SW1
AC VOLTAGE SELECTOR
120V
220V-240V

SCHEMATIC DIAGRAM-1/5 (MAIN 1/2)



MAIN C. B (2/2)

141EZ MODEL

TO MAIN C.B (1/2)

BEAT C0 · TM-BASE C1 · PLL-CE C2 · DATA C3 · CLK C4 · TUNE/IFC C5 · MO/ST C6 · TU-ON C7 · TUN-R C8 · A-GND · TUN-L C9 · VM

711 TUNER ON/OFF SWITCH

Q711 2SC4115SR

IC721 LC72131D PLL

X721 4.500MHZ

IC771 LA1837NL

L771 FM DET-2N

L772 PCFAZH-450

DC BAL. ADJ.

MW IF ADJ.

TRACKING

BUFFERS

FM/MW IF SYSTEM

Q805 IF AMP

Q806 RT1P144C BAND SW

FFE801 6ZA-1YFEENC

CF801 10.7MHZ

CF802

Q805 2SC2714O

J801 ANTENNA · FM 75Ω (COAXTAL) · MW/LW LOOP

Q951 RT1P141C BAND SW

Q947 2SK543 MW RF AMP.

L774 AM OSC COIL

L773 AM ANT COIL

D981 3KV1590

MW VT ADJ.

MW TRACKING ADJ.

L942 OSC LW 0644

L941 ANT LW

Q952 CSD1306E

Q948 2CSD1306

TC942 30P

LW VT ADJ.

LW TRACKING ADJ

Q948, 952 BAND SW

D944 ISS133 · D942 MC2838

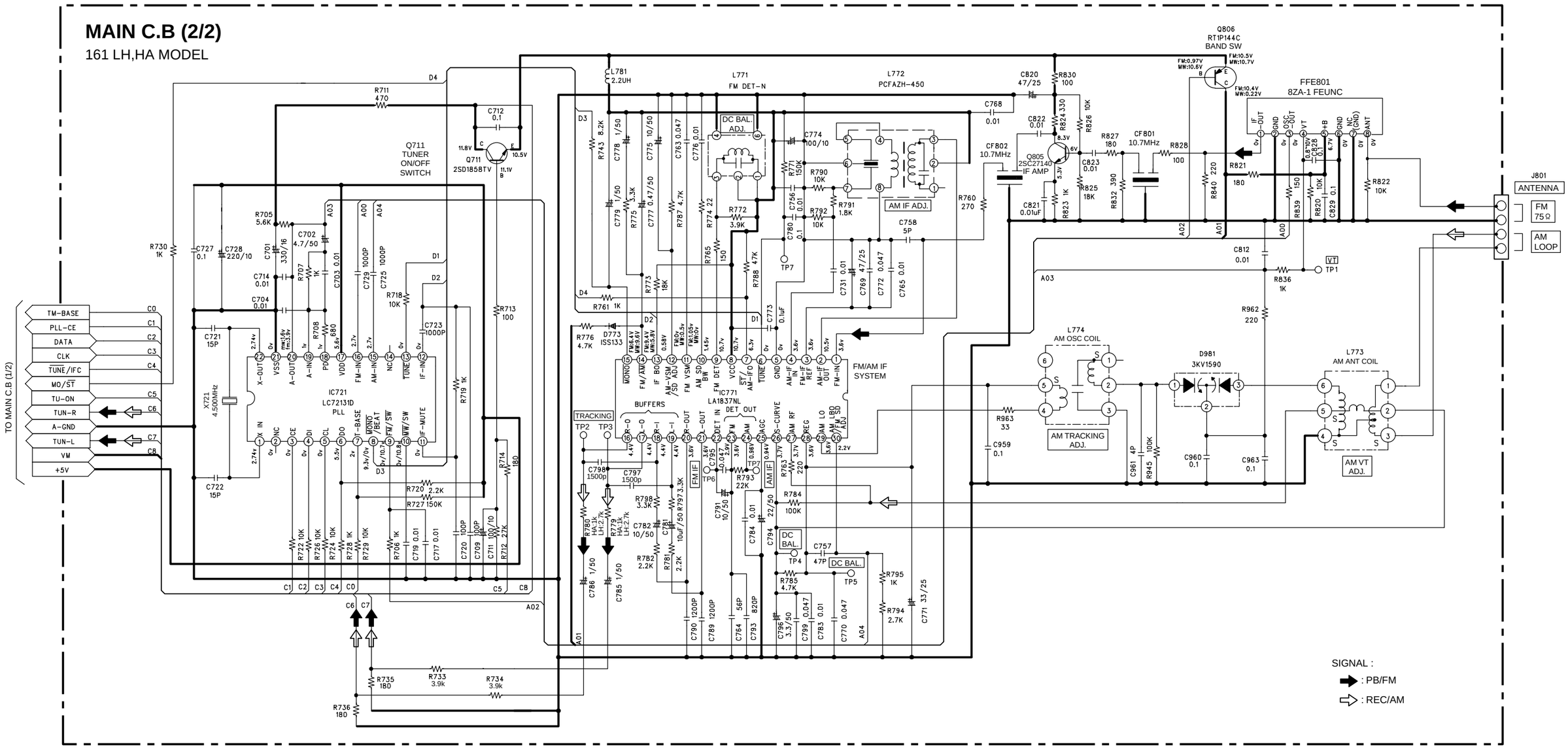
TP1 (VT) · TP2 · TP3 · TP4 · TP5 · TP6 (FM IF) · TP7 (MW IF)

TP4, 5 DC BALANCE

SIGNAL :

: PB/FM

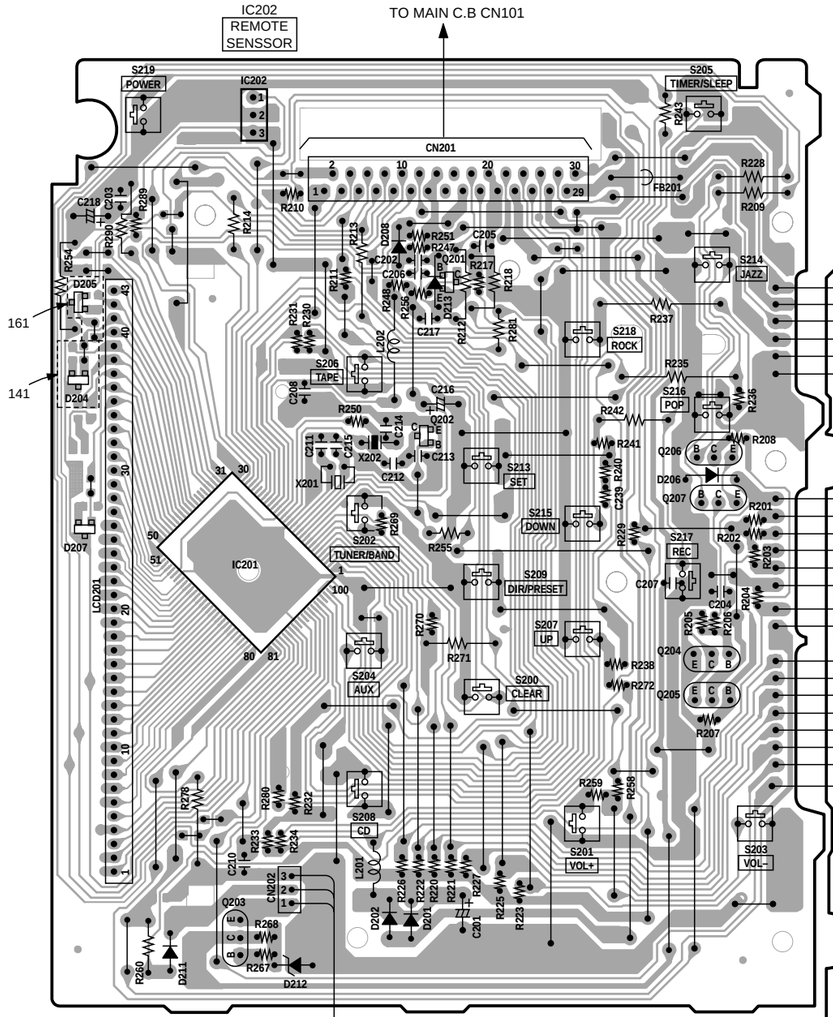
: REC/AM


MAIN C.B (2/2)
161 LH,HA MODEL
TO MAIN C.B (1/2)
TM-BASE
PLL-CE
DATA
CLK
TUNE/IFC
MO/ST
TU-ON
TUN-R
A-GND
TUN-L
VM
+5V
Q711
TUNER
ON/OFF
SWITCH
2SD1858TV
IC721
LC72131D
PLL
X721
4.500MHz
L781
2.2UH
L771
FM DET-N
L772
PCFAZH-450
DC BAL.
ADJ.
AM IF ADJ.
TP7
FM/AM IF
SYSTEM
IC771
LA1837NL
DET OUT
BUFFERS
TRACKING
TP2
TP3
FM IF
AM IF
TP6
DC
BAL.
TP4
TP5
Q806
RT1P144C
BAND SW
FFE801
8ZA-1 FEUNC
Q805
2SC2714O
IF AMP
CF801
10.7MHz
CF802
10.7MHz
J801
ANTENNA
FM
75Ω
AM
LOOP
VT
TP1
L774
AM OSC COIL
L773
AM ANT COIL
D981
3KV1590
AM TRACKING
ADJ.
AM VT
ADJ.
SIGNAL :
: PB/FM
: REC/AM

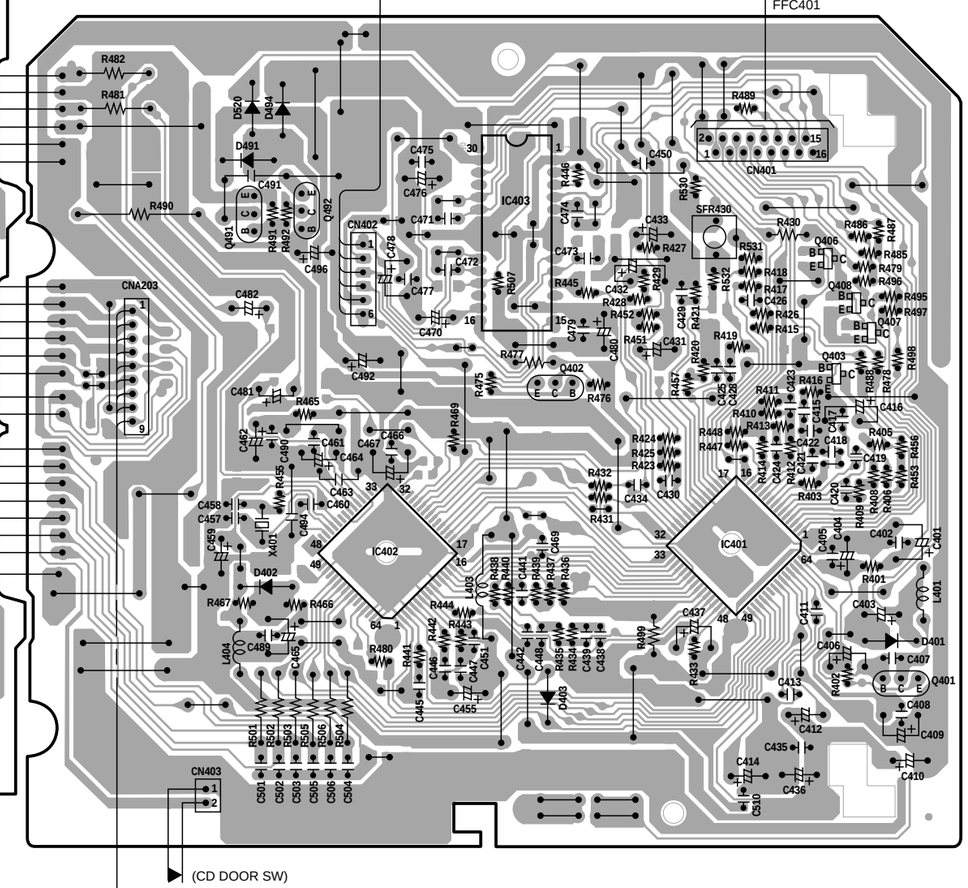
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

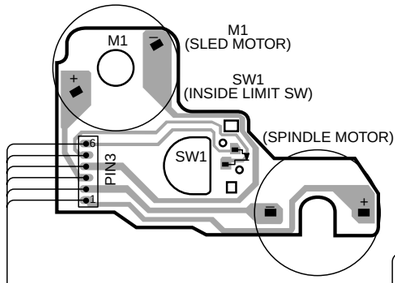
FRONT C.B



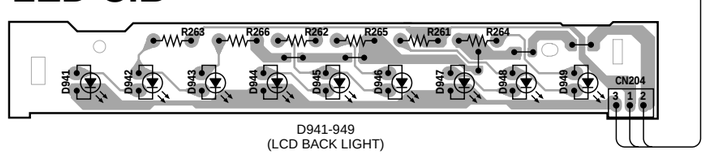
CD C.B



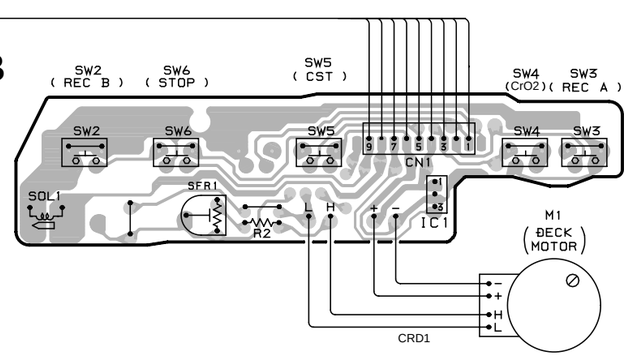
MOTOR C.B



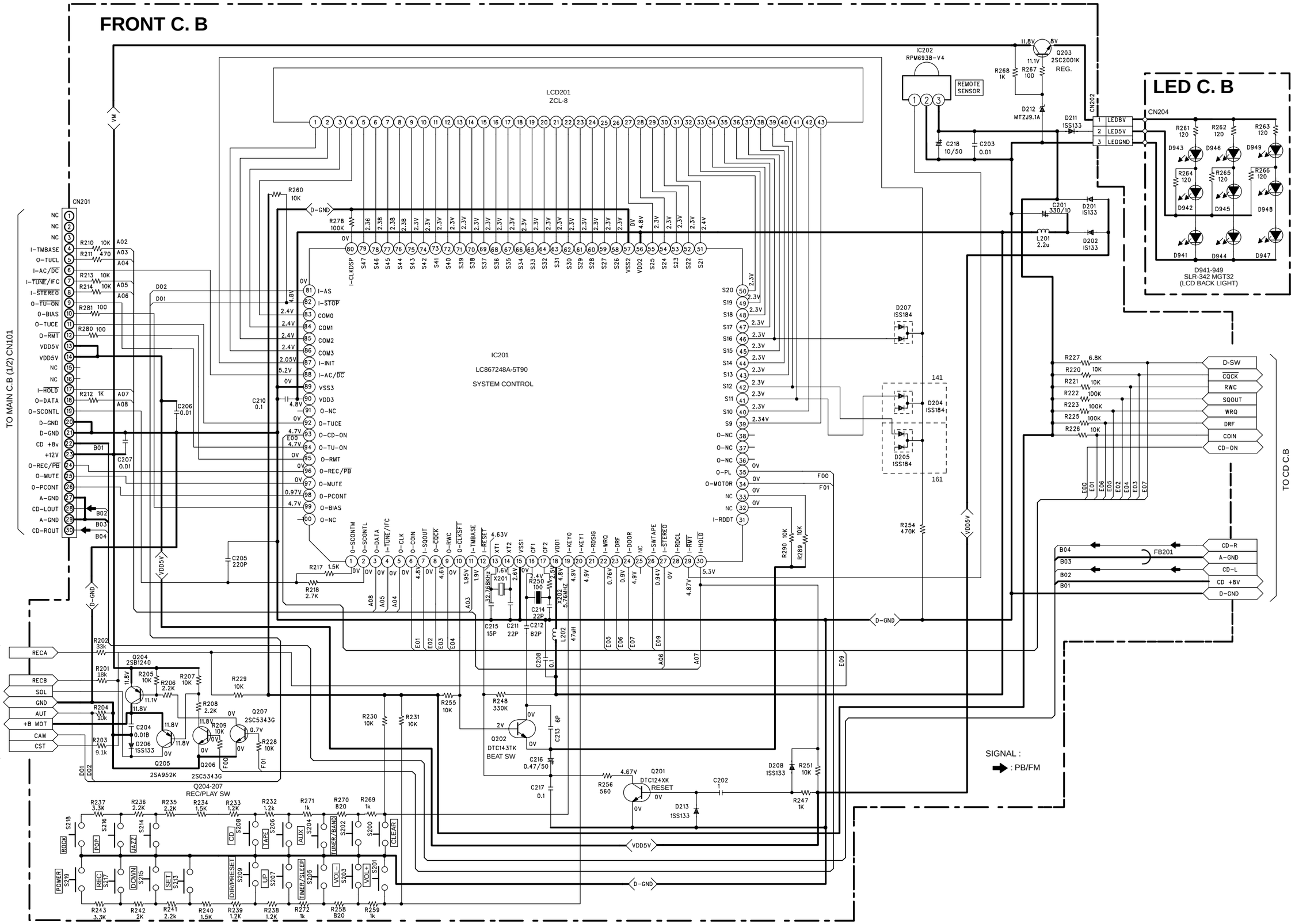
LED C.B



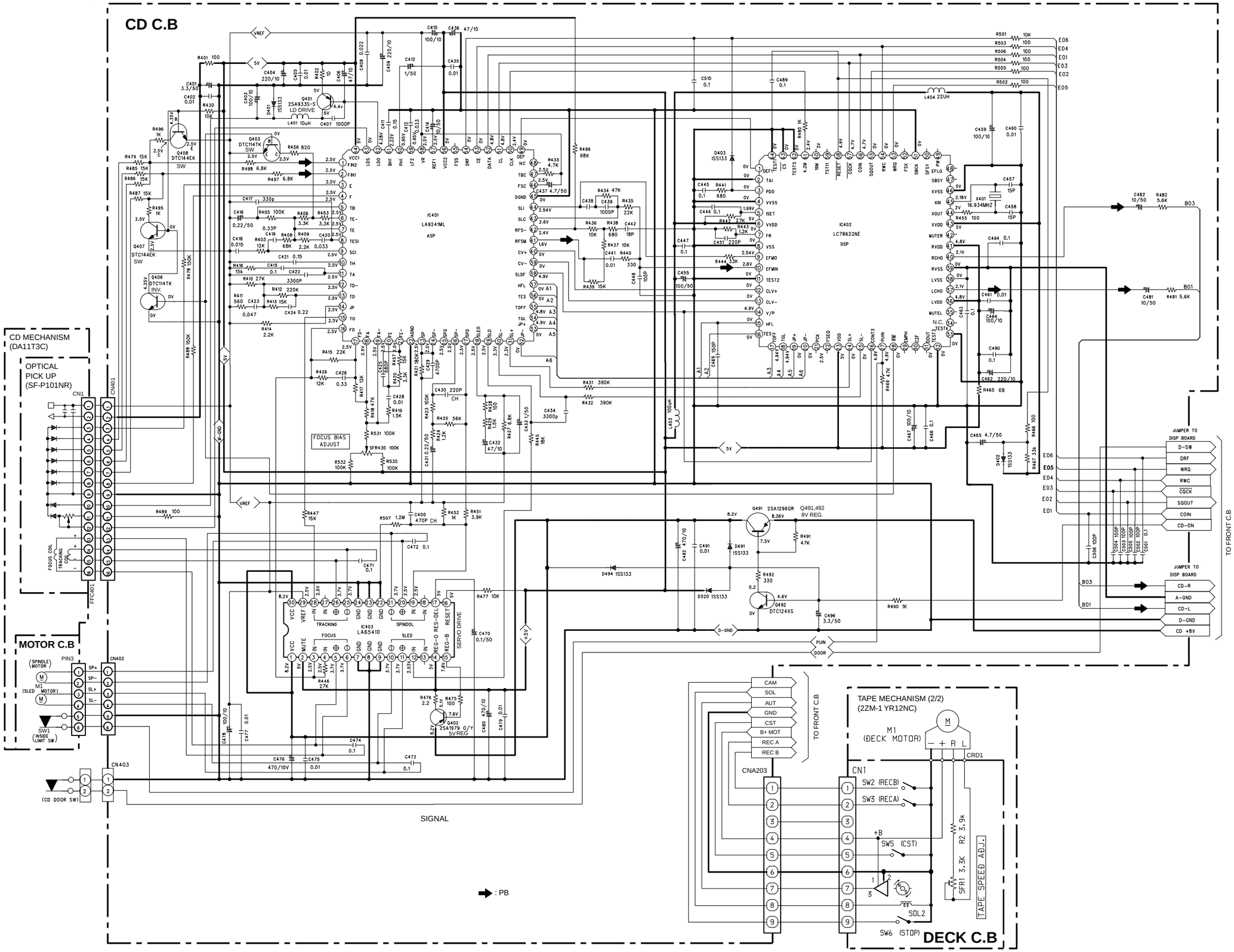
DECK C.B



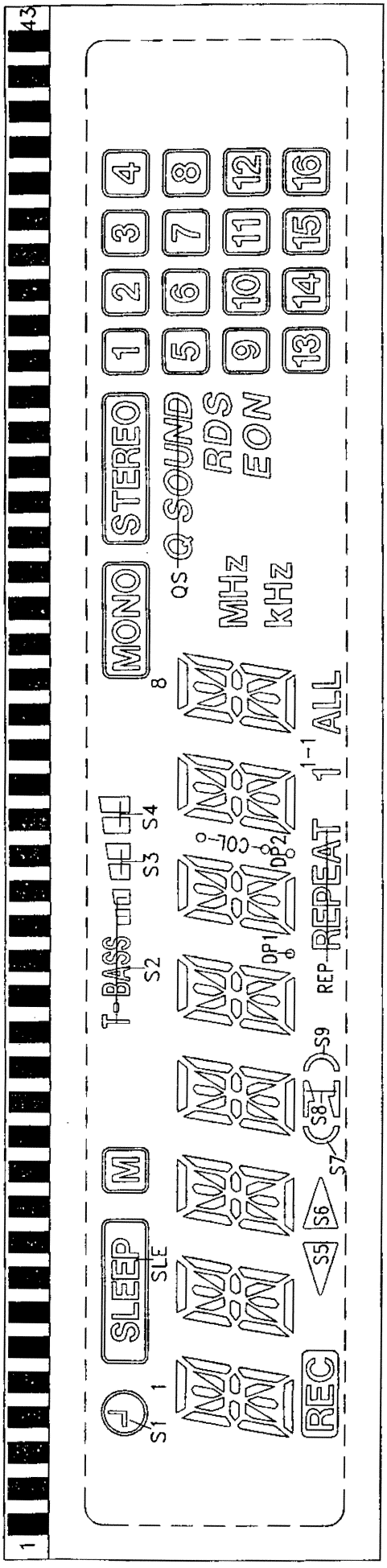
SCHEMATIC DIAGRAM-4/5 (FRONT)



SCHEMATIC DIAGRAM-5/5 (CD)

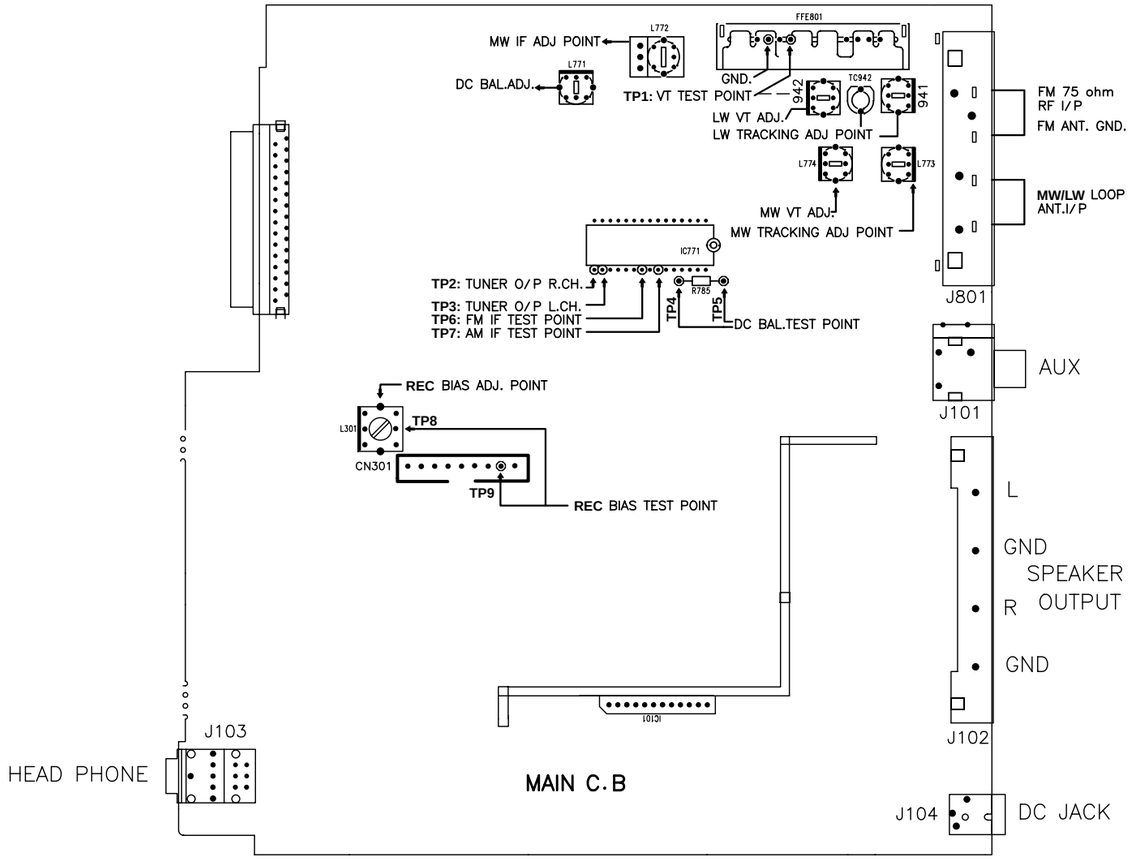


GRID ASSIGNMENT



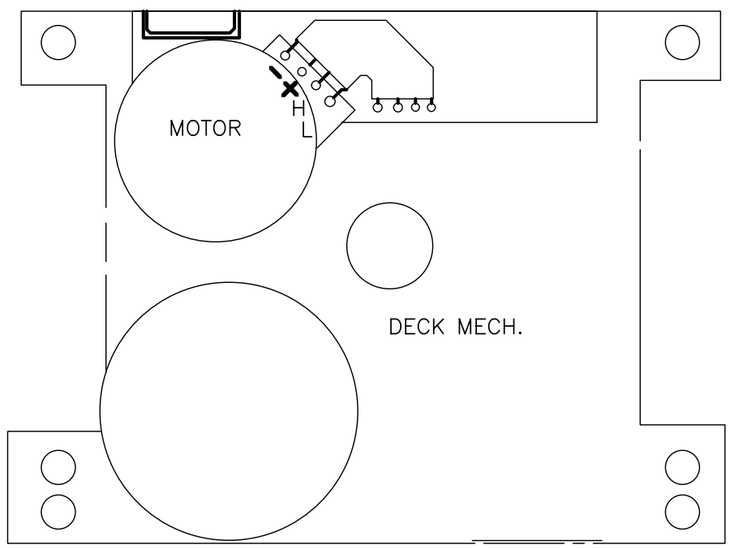
ANODE CONNECTION

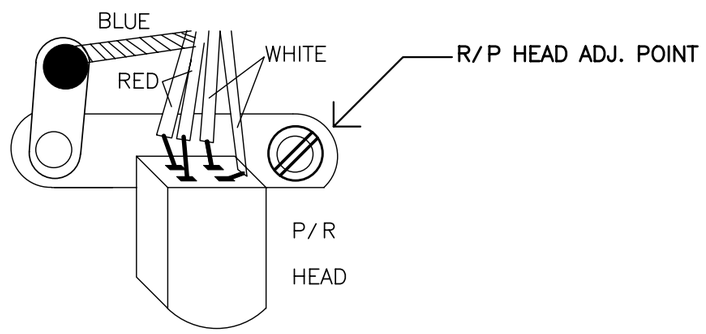
PIN	COM1	COM2	COM3	COM4	PIN	COM1	COM2	COM3	COM4
1	1D	1E	1F	REC	23	6N	6G	6H	6I
2	1N	1G	1H	1I	24	6M	6K	6J	6A
3	1M	1K	1J	1A	25	6L	6C	6B	COL
4	1L	1C	1B	S1	26	7D	7E	7F	DP2
5	2D	2E	2F	S5	27	7N	7G	7H	7I
6	2N	2G	2H	2I	28	7M	7K	7J	7A
7	2M	2K	2J	2A	29	7L	7C	7B	/
8	2L	2C	2B	SLE	30	8D	8E	8F	REP
9	3D	3E	3F	S6	31	8N	8G	8H	8I
10	3N	3G	3H	3I	32	8M	8K	8J	8A
11	3M	3K	3J	3A	33	8L	8C	8B	MONO
12	3L	3C	3B	M	34	ALL	KHz	MHz	1-1
13	4D	4E	4F	S7	35	EON	RDS	QS	STE
14	4N	4G	4H	4I	36	13	9	5	1
15	4M	4K	4J	4A	37	14	10	6	2
16	4L	4C	4B	/	38	15	11	7	3
17	5D	5E	5F	S8	39	16	12	8	4
18	5N	5G	5H	5I	40	/	/	/	COM4
19	5M	5K	5J	5A	41	/	/	COM3	/
20	5L	5C	5B	S9	42	/	COM2	/	/
21	DP1	S4	S3	S2	43	COM1	/	/	/
22	6D	6E	6F	/					

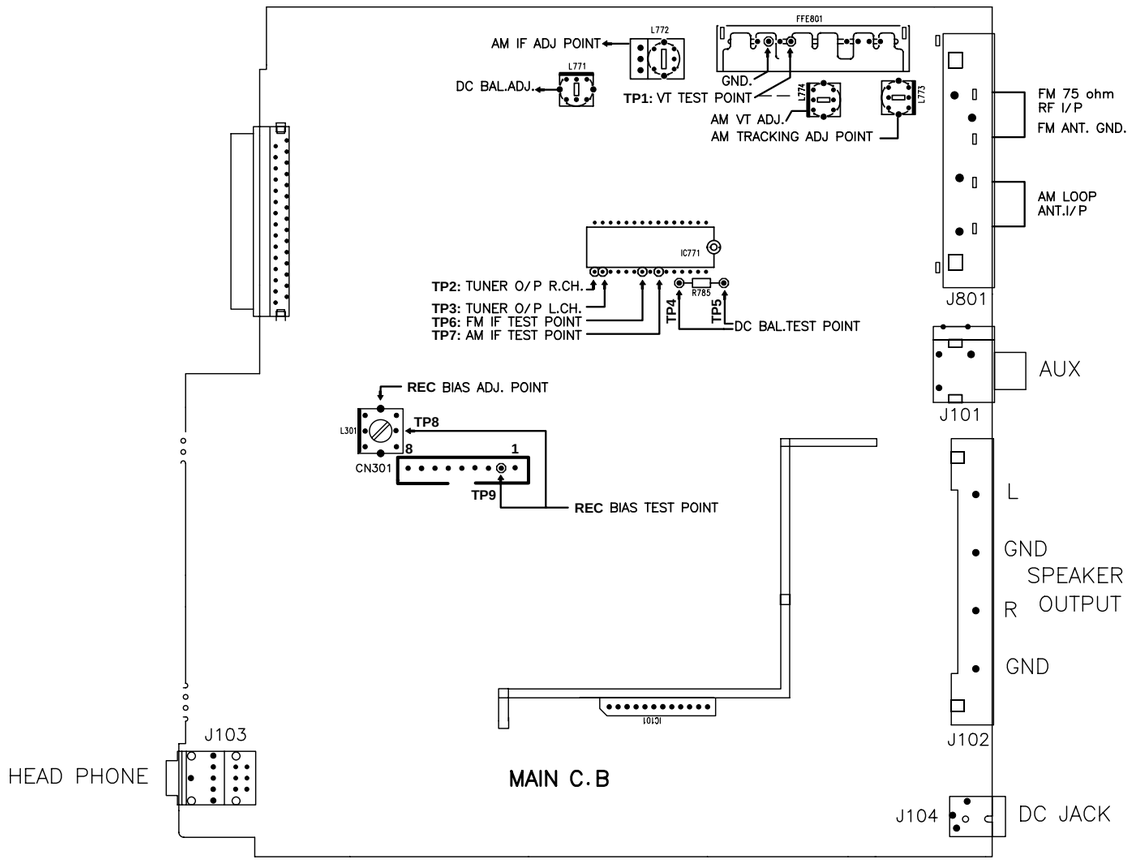


ADJASTMENT ITEM	ADJ. POINT	TEST POINT	SET FREQ.	SETTING
MW VT ADJ.	L774	FFE801 4PIN TO GND.(TP1)	1602KHz	5.5V+/-0.1V
MW VT CHECK	-	FFE801 4PIN TO GND.(TP1)	531KHz OR 530KHz	<2 V
MW TRACKING ADJ.	L773	TUNER O/P L/R (TP2,3)	1000 KHz	MAX.Output Sine Wave(Min.Dist.)
LW VT ADJ.	L942	FFE801 4PIN TO GND.(TP1)	290KHz	5.5 V+/-0.1V
LW VT CHECK	TEST ONLY	FFE801 4PIN TO GND.(TP1)	144KHz	<= 2.5V
LW TRACKING ADJ.	TC942	TUNER O/P L/R (TP2,3)	290KHz	MAX.Output Sine Wave(Min.Dist.)
	L941	TUNER O/P L/R (TP2,3)	144KHz	
FM VT ADJ.	-	FFE801 4PIN TO GND.(TP1)	108 MHz	<= 8V
FM VT CHECK	-	FFE801 4PIN TO GND.(TP1)	87.5MHz	<= 2.5V
DC BAL. ADJ.	L771	Both Terminal OF R785(TP4,5)	98 MHz	0 mv (+/- 20 mv)
FM IF CHECK	-	IC771 PIN 22 (TP6)	10.7 MHz	-
MW IF ADJ.	L772	IC771 PIN 24 (TP7)	450 KHz	-
REC. BAIAS FREQ ADJ:	-	(TP8,9)	-	85KHz +/- 5KHz (With R/P HEAD)
REC.BIAS LEVEL ONLY CHECK	L301	(TP8,9)	-	(With R/P HEAD)
BEAT CUT ST / ON MONO/OFF	TEST ONLY	(TP8,9)	FM 98MHz Deck REC.	4 KHz +/- 1 KHz
TAPE SPEED	MOTOR	SPEAKER OUTPUT	-	3000Hz +3/-2%
DECK R/P HEAD ADJ.	R/P HEAD	SPEAKER OUTPUT	8 KHz TEST TAPE	-

TEST TAPE: TTA-601

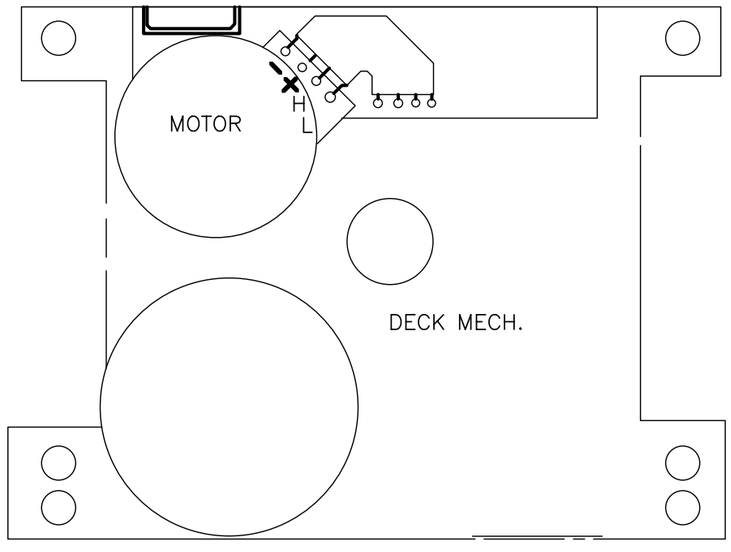


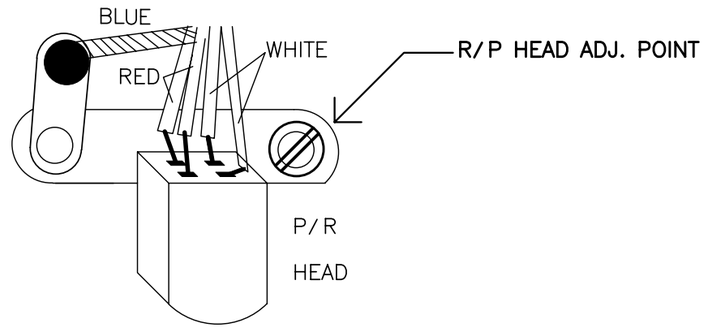




ADJASTMENT ITEM	ADJ. POINT	TEST POINT	SET FREQ.	SETTING
AM VT ADJ.	L773	FFE801 4PIN TO GND.(TP1)	1602KHz OR 1710KHz	< 8.5V
AM VT CHECK	-	FFE801 4PIN TO GND.(TP1)	531KHz OR 530KHz	1.3V
AM TRACKING ADJ.	L774	TUNER O/P L/R(TP2,3)	999KHz OR 1000KHz	MAX.Output Sine Wave(Min.Dist.)
FM VT ADJ.	-	FFE801 4PIN TO GND.(TP1)	108 MHz	<= 8V
FM VT CHECK	-	FFE801 4PIN TO GND.(TP1)	87.5MHz	<= 2.5V
DC BAL. ADJ.	L771	Both Terminal OF R785(TP4,5)	98 MHz	0 mv (+/- 20 mv)
FM IF CHECK	-	IC771 PIN 22 (TP6)	10.7 MHz	-
AM IF ADJ.	L772	IC771 PIN 24 (TP7)	450 KHz	-
REC. BIAS FREQ ADJ:	-	(TP8,9)	-	85KHz +/- 5KHz (With R/P HEAD)
REC.BIAS LEVEL ONLY CHECK	L301	(TP8,9)	-	(With R/P HEAD)
BEAT CUT ST / ON MONO/OFF	TEST ONLY	(TP8,9)	FM 98MHz Deck REC.	4 KHz +/- 1 KHz
TAPE SPEED	MOTOR	SPEAKER OUTPUT	-	3000Hz +3/-2%
DECK R/P HEAD ADJ.	R/P HEAD	SPEAKER OUTPUT	8 KHz TEST TAPE	-

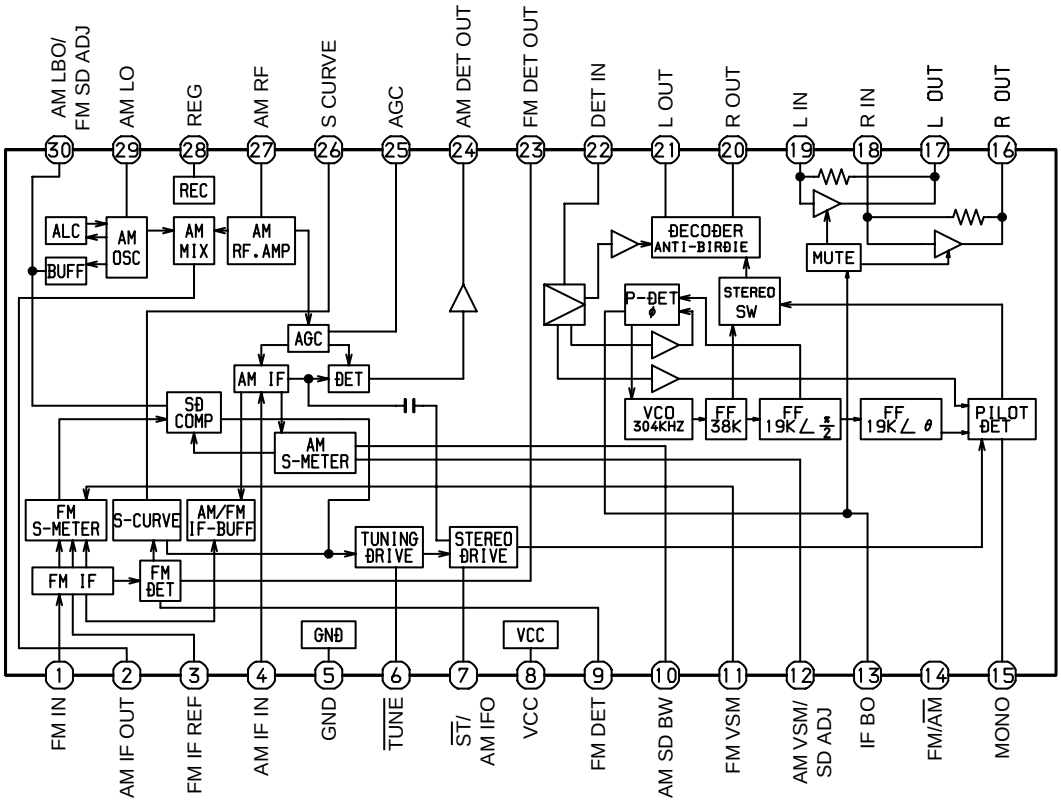
TEST TAPE: TTA-601



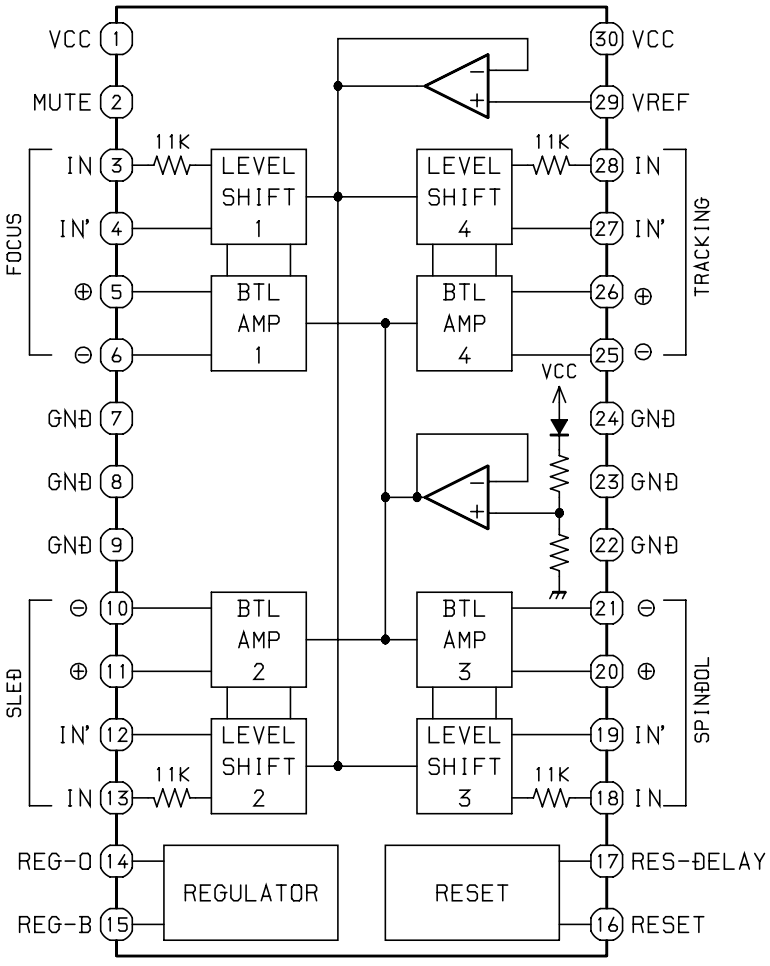


IC BLOCK DIAGRAM-1/2

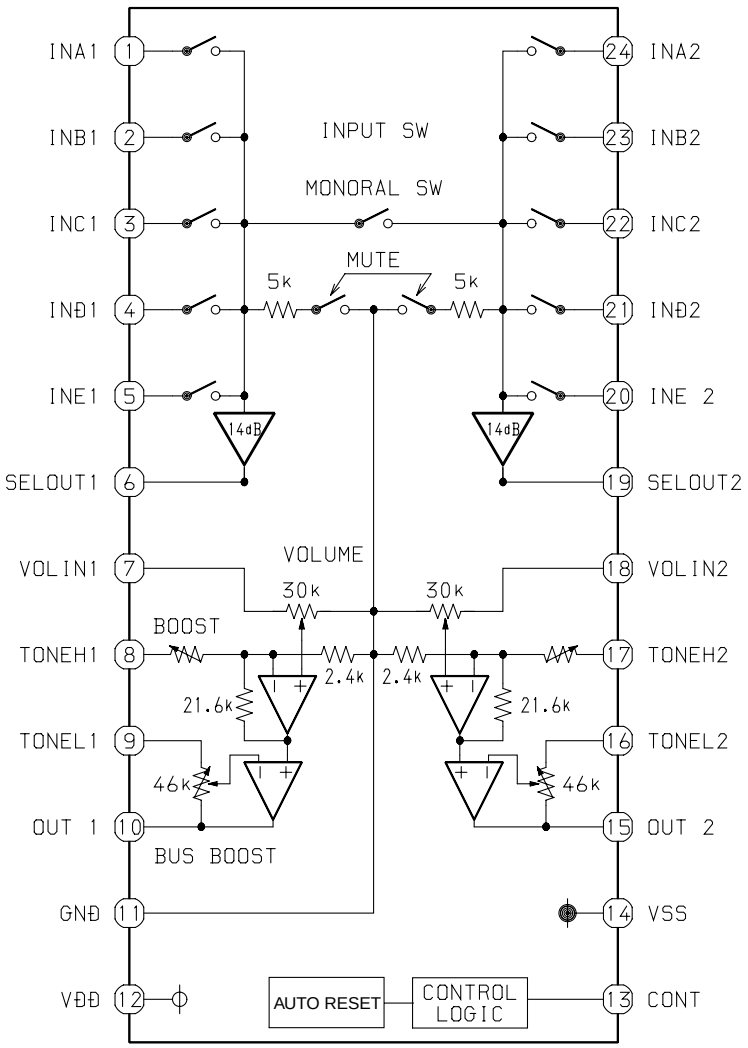
IC, LA1837NL



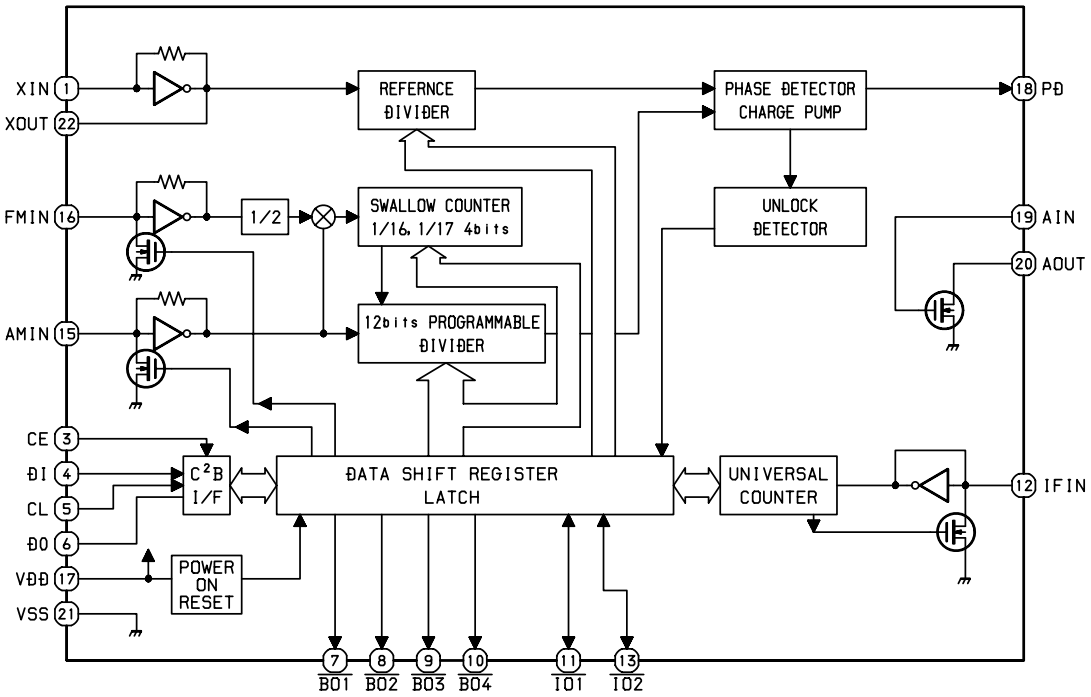
IC, LA6541D



IC BLOCK DIAGRAM-2/2
IC, M62495AFP



IC, LC72131D



Pin No.	Pin Name	I/O	Description
1	FIN2	I	Pin to which external pickup photo diode is connected. RF signal is created by adding with the FIN1 pin signal. FE signal is created by subtracting from the FIN1 pin signal.
2	FIN1	I	Pin to which external pickup photo diode is connected.
3	E	I	Pin to which external pickup photo diode is connected. TE signal is created by subtracting from the F pin signal.
4	F	I	Pin to which external pickup photo diode is connected.
5	TB	I	DC component of the TE signal is input.
6	TE–	I	Pin to which external resistor setting the TE signal gain is connected between the TE pin.
7	TE	O	TE signal output pin.
8	TESI	I	TES “Track Error Sense” comparator input pin. TE signal is passed through a band-pass filter then input.
9	SCI	I	Shock detection signal input pin.
10	TH	I	Tracking gain time constant setting pin.
11	TA	O	TA amplifier output pin.
12	TD–	I	Pin to which external tracking phase compensation constants are connected between the TD and VR pins.
13	TD	I	Tracking phase compensation setting pin.
14	JP	I	Tracking jump signal (kick pulse) amplitude setting pin.
15	TO	O	Tracking control signal output pin.
16	FD	O	Focusing control signal output pin.
17	FD–	I	Pin to which external focusing phase compensation constants are connected between the FD and FA pins.
18	FA	I	Pin to which external focusing phase compensation constants are connected between the FD– and FA– pins.
19	FA–	I	Pin to which external focusing phase compensation constants are connected between the FA and FE pins.
20	FE	O	FE signal output pin.
21	FE–	I	Pin to which external FE signal gain setting resistor is connected between the FE pin.
22	AGND	—	Analog signal GND.
23	SP	—	Single ended output of the CV+ and CV– pin input signal.
24	SP–	O	Spindle amp input.
25	SPG	I	Pin to which external spindle gain setting resistor in 12 cm mode is connected.
26	SP–	I	Pin to which external spindle phase compensation constants are connected together with SPD pin.
27	SPD	O	Spindle control signal output pin.
28	SLEQ	I	Pin to which external sled phase compensation constants are connected.
29	SLD	O	Sled control signal output pin.
30, 31	SL–, SL+	I	Sled advance signal input pin from microprocessor.
32, 33	JP–, JP+	I	Tracking jump signal input pin from DSP.
34	TGL	I	Tracking gain control signal input from DSP. Low gain when TGL = H.
35	TOFF	I	Tracking off control signal input pin from DSP. Off when TOFF = H.

Pin No.	Pin Name	I/O	Description
36	TES	O	Pin from which TES signal is output to DSP.
37	HFL	O	“High Frequency Level” is used to judge whether the main beam position is on top of bit or on top of mirror.
38	SLOF	I	Sled servo off control input pin.
39, 40	CV–, CV+	I	CLV error signal input pin from DSP.
41	RFSM	O	RF output pin.
42	RFS–	I	RF gain setting and EFM signal 3T compensation constant setting pin together with RFSM pin.
43	SLC	O	“Slice Level Control” is the output pin which controls the RF signal data slice level by DSP.
44	SLI	I	Input pin which control the data slice level by the DSP.
45	DGND	—	Digital system GND.
46	FSC	O	Output pin to which external focus search smoothing capacitor is connected.
47	TBC	I	“Tracking Balance Control” EF balance variable range setting pin.
48	NC	—	No connection.
49	DEF	O	Disc defect detector output pin.
50	CLK	I	Reference clock input pin. 4.23 MHz of the DSP is input.
51	CL	I	Microprocessor command clock input pin.
52	DATA	I	Microprocessor command data input pin.
53	CE	I	Microprocessor command chip enable input pin.
54	DRF	O	“Detect RF” RF level detector output.
55	FSS	I	“Focus Search Select” focus search mode (± search/+ search) select pin.
56	VCC2	—	Servo system and digital system Vcc pin.
57	REFI	—	Pin to which external bypass capacitor for reference voltage is connected.
58	VR	O	Reference voltage output pin.
59	LF2	I	Disc defect detector time constant setting pin.
60	PH1	I	Pin to which external capacitor for RF signal peak holding is connected.
61	BH1	I	Pin to which external capacitor for RF signal bottom holding is connected.
62	LDD	O	APC circuit output pin.
63	LDS	I	APC circuit input pin.
64	VCC1	—	RF system Vcc pin.

Pin No.	Pin Name	I/O	Description	
1	DEFI	I	Defect sense signal (DEF) input pin. (Connect to 0V when not used)	
2	TAI	I	For PLL.	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
3	PDO	O		Phase comparator output pin to control external VCO.
4	VVSS	—		GND pin for built-in VCO. Be sure to connect to 0V.
5	ISET	I		Pin to which external resistor adjusting the PD0 output current.
6	VVDD	—		Power supply pin for built-in VCO.
7	FR	I		Pin for VCO frequency range adjustment.
8	VSS	—	Digital system GND. Be sure to connect to 0V.	
9	EFMO	O	For slice level control.	EFM signal output pin.
10	EFMIN	I		EFM signal input pin.
11	TEST2	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
12, 13	CLV+, CLV–	O	Disc motor control output. Three level output is possible using command.	
14	V/$\overline{P}$	O	Rough servo or phase control automatic selection monitoring output pin. Rough servo at H. Phase servo at L.	
15	HFL	I	Track detect signal input pin. Schmidt input.	
16	TES	I	Tracking error signal input pin. Schmidt input.	
17	TOFF	O	Tracking OFF output pin.	
18	TGL	O	Tracking gain selection output pin. Gain boost at L.	
19, 20	JP+, JP–	O	Track jump control signal output pin. Three level output is possible using command.	
21	PCK	O	EFM data playback clock monitoring pin 4.3218 MHz when phase is locked in.	
22	FSEQ	O	Sync signal detection output pin. H when the sync signal which is detected from EFM signal and thesync signal which is internally generated agree. (Not connected)	
23	VDD	—	Digital system power supply pin.	
24	SL+	I/O	General purpose input/output pin 1 to 5.	The pin is controlled by the serial data command from microprocessor. When the pin is not used, set the pin to the input terminal and connect to 0V, or alternately set the pin to output terminal and leave the pin open.
25	SL-	I/O		
26	CONT3	I/O		
27	PUIN	I/O		
28	$\overline{RW}$	I/O		
29	EMPH	O	De-emphasis monitor output pin. De-emphasis disc is being played back at H. (Not connected)	
30	C2F	O	C2 flag output pin. (Not connected)	
31	DOUT	O	DIGITAL OUT output pin. (EIAJ format)	
32, 33	TEST3, TEST4	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
34	NC	—	Not used. Set the pin to open.	
35	MUTEL	O	L-channel 1-bit DAC.	L-channel mute output pin. (Not connected)
36	LVDD	—		L-channel power supply pin.
37	LCHO	O		L-channel output pin.
38	LVSS	—		L-channel GND. Be sure to connect to 0V.
39	RVSS	—	R-channel 1-bit DAC.	R-channel GND. Be sure to connect to 0V.
40	RCHO	O		R-channel output pin.
41	RVDD	—		R-channel power supply pin.
42	MUTER	O		R-channel mute output pin. (Not connected)

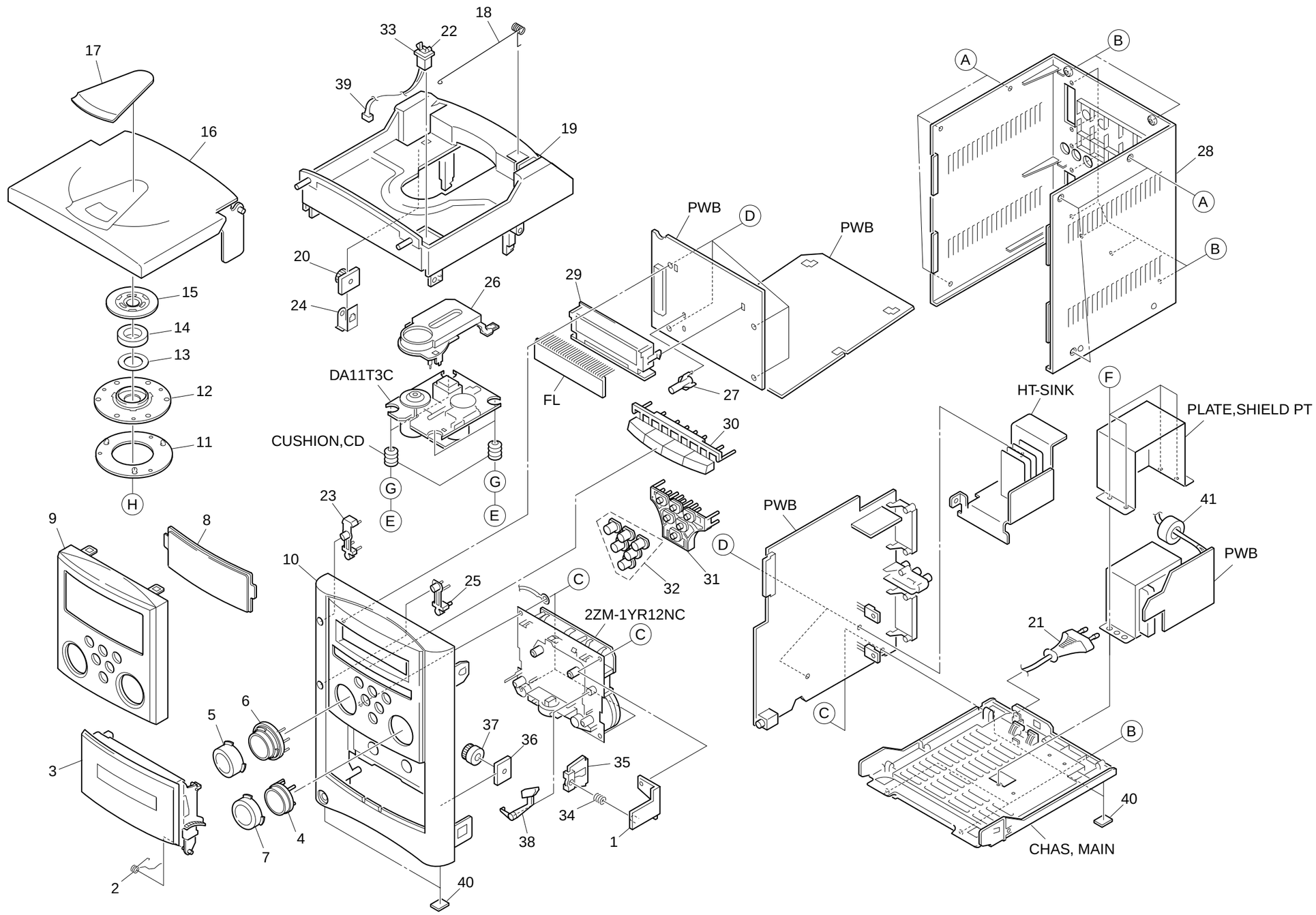
Pin No.	Pin Name	I/O	Description
43	XVDD	—	Crystal oscillator power supply pin.
44	XOUT	O	Pin to which external 16.9344 MHz crystal oscillator is connected.
45	XIN	I	
46	XVSS	—	Crystal oscillator GND pin. Be sure to connect to 0V.
47	SBSY	O	Subcode block sync signal output pin. (Not connected)
48	EFLG	O	C1, C2, single and dual correction monitoring pin. (Not connected)
49	PW	O	Subcode P, Q, R, S, T, U and W output pin. (Not connected)
50	SFSY	O	Subcode frame sync signal output pin. Falls down when subcode enters standby. (Not connected)
51	SBCK	I	Subcode read clock input pin. Schmidt input. (Be sure to connected to 0V when not in use)
52	FSX	O	Pin outputting the 7.35 kHz sync signal which is generated by dividing frequency of crystal oscillator. (Not connected)
53	WRQ	O	Subcode Q output standby output pin.
54	RWC	I	Read/write control input pin. Schmidt input.
55	SQOUT	O	Subcode Q output pin.
56	COIN	I	Command input pin from microprocessor.
57	$\overline{\text{CQCK}}$	I	Command input read clock or subcode read input clock from SQOUT pin
58	$\overline{\text{RES}}$	I	LC78622 reset input pin. Set this pin to L once when the main power is turned on.
59	TST11	O	Test signal output pin. Use this pin as open (normally L output). (Not connected)
60	16M	O	16.9344 MHz output pin. (Not connected)
61	4.2M	O	4.2336 MHz output pin.
62	TEST5	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
63	$\overline{\text{CS}}$	I	Chip select signal input pin with built-in pull-down resistor. Be sure to connect to 0V while it is not controlling.
64	TEST1	I	Test signal input pin without built-in pull-down resistor. Be sure to connect to 0V.

Note: The same potential must be applied to the respective power supply terminals. (VDD, VVDD, LVDD, RVDD, XVDD)

Pin No.	Pin Name	I/O	Description
1	O-SCONTM	O	M62495AFP control. Open drain output.
2	O-SCONTL	O	
3	O-TUDI	O	Tuner data output. CMOS output.
4	I-TUDO	I	Tuner data input. Open drain input.
5	O-TUCL	O	Tuner clock output. CMOS output.
6	O-COIN	O	CD control. CMOS output.
7	I-SQOUT	I	CD control. Open drain input.
8	O-$\overline{\text{CQCK}}$	O	CD control. CMOS output.
9	O-RWC	O	
10	O-$\overline{\text{CLKSFT}}$	O	Clock shift output. “L” during shift. open drain output.
11	I-TMBASE	I	8 Hz time base input.
12	I-$\overline{\text{RESET}}$	I	Reset input. “L” during reset.
13, 14	XT1,XT2	I/O	32.768kHz crystal.
15	VSS1	—	GND.
16, 17	CF1, CF2	I/O	Main clock 5.76 MHz.
18	VDD1	—	+5V.
19	I-KEY0	I	KEY0 A/D input.
20	I-KEY1	I	KEY1 A/D input.
21	I-RDSIG	I	RDS signal level input. (A/D input)
22	I-WRQ	I	CD control input.
23	I-DRF	I	
24	I-DOOR	I	CD door SW detection SW input. “L” during CLOSE.
25	NC	I	Not used.
26	I-SWTAPE	I	Tape detection SW input. (A/D input)
27	I-$\overline{\text{STEREO}}$	I	Monaural/stereo indication selector input. “L” during stereo.
28	I-RDCL	I	RDS clock input.
29	I-$\overline{\text{RMT}}$	I	Remote control input. (fall-down edge interrupt input)
30	I-$\overline{\text{HOLD}}$	I	Hold mode detection. “L” during hold mode.
31	I-RDDT	I	RDS data input.
32	NC	I	Not used.
33	NC	I	Not used.
34	O-MOTOR	O	Mechanism deck motor ON/OFF output. “H” during ON. CMOS output.
35	O-PL	O	Mechanism deck plunger solenoid ON/OFF output. “H” during ON. CMOS output .
36-38	NC	O	Not used.
39-55	S9-S25	O	LCD SEG terminal Initial setting output. (S10 to S17)
56	VDD2	—	+5V.
57	VSS2	—	GND.
58-79	S26-S47	—	LCD SEG terminal .
80	I-CLKDSP	I	Watch indication select input “L”: 12H. “H”: 24H.
81	I-AS	I	Auto stop. counter input .
82	I-$\overline{\text{STOP}}$	I	Tape stop input. “L” during STOP.

Pin No.	Pin Name	I/O	Description
83-86	COM0-COM3	O	LCD common output.
87	I-INIT	I	Initial setting input.
88	I-AC/$\overline{DC}$	I	AC/DC detection.“H” during AC. COMS input.
89	VSS3	—	GND.
90	VDD3	—	5V.
91	NC	—	Not used.
92	O-TUCE	O	Tuner chip enable output. CMOS output .
93	O-CD-ON	O	“H” output during CD function. CMOS output.
94	O-TU-ON	O	“H” output during TU function. CMOS output.
95	O-RMT	O	REC mute output. “H” during mute. CMOS output.
96	O-REC/$\overline{PB}$	O	REC/PB select output. “L” during PB. COMS output.
97	O-MUTE	O	Mute output. “H” during mute. COMS output.
98	O-PCONT	O	Power control output. “H” during ON. CMOS output.
99	O-BIAS	O	REC bias ON/OFF output. “H” at ON. Open drain output.
100	NC	O	Not used.

MECHANICAL EXPLODED VIEW-1/1



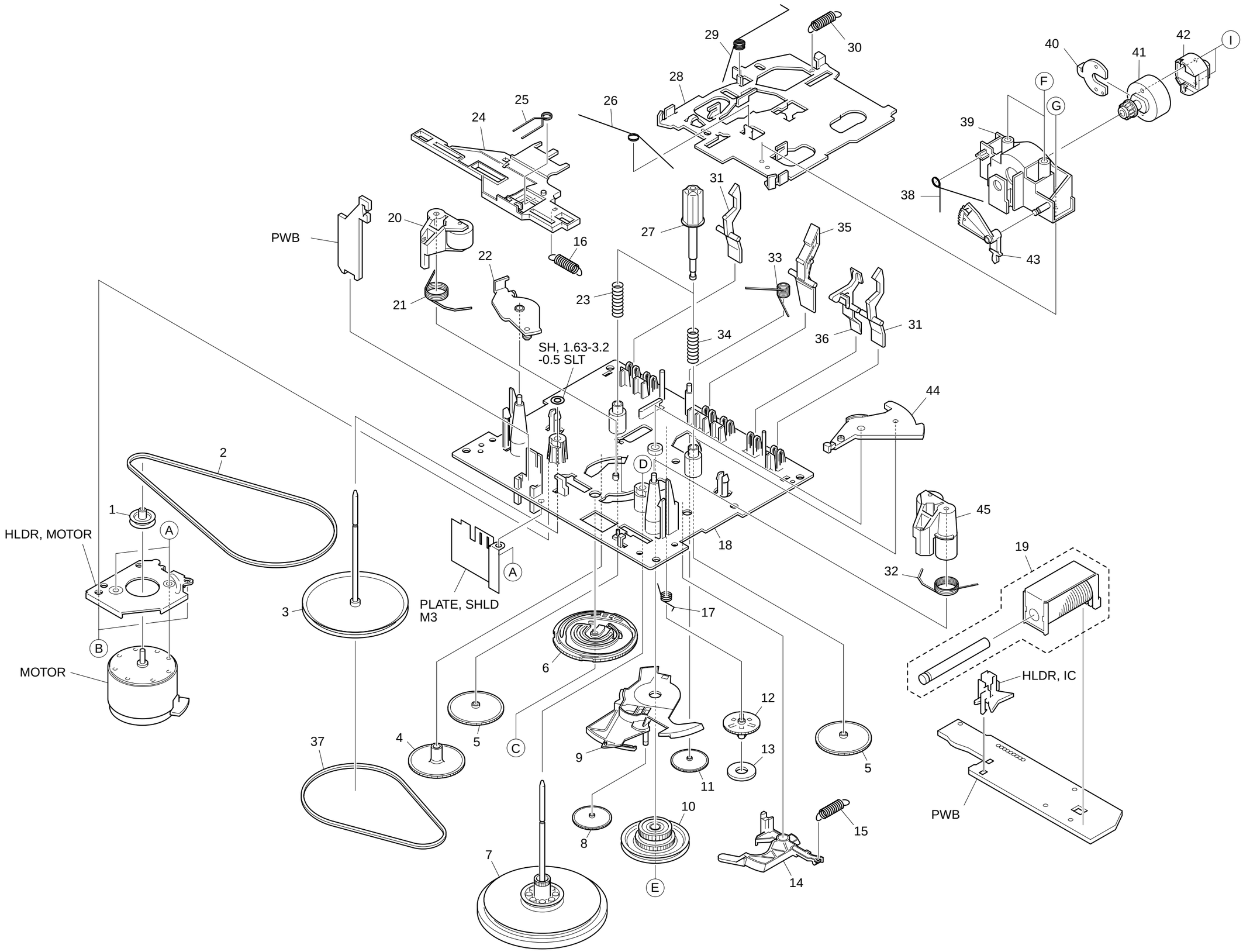
MECHANICAL PARTS LIST-1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	88-CL5-202-010		HLDR,CASS LOCKE R
2	8Z-CL8-209-010		SPR-T,CASS
3	8B-CLA-004-010		BOX,CASS<EXCEPT 141EZSC>
3	8B-CLL-001-010		BOX,CASS<141EZSC>
4	8B-CLB-010-010		KEY,VOLUME<141EZSC>
4	8B-CLA-025-010		KEY,VOLUME A<EXCEPT 141EZSC>
5	8B-CLB-011-010		CAP, EQ
6	8B-CLB-009-010		KEY,EQ<141EZSC>
6	8B-CLA-024-010		KEY,EQ A<EXCEPT 141EZSC>
7	8B-CLB-012-010		CAP, VOLUME
8	8B-CLA-003-010		WINDOW,DISPLAY
9	8B-CLA-002-010		PANEL,FR
10	8B-CLA-001-010		CABI,FR
11	8Z-CH4-212-110		RING,CHUCK<EXCEPT 141EZSC>
11	8Z-CH4-212-010		RING,CHUCK<141EZSC>
12	8Z-CH4-211-010		BASE,CHUCK<141EZSC>
12	8Z-CH4-211-110		BASE,CHUCK<EXCEPT 141EZSC>
13	84-CD5-217-010		PLATE,MAGNET
14	87-036-368-010		MAGNET
15	8Z-CH4-225-010		HLDR,CHUCK A(S)<141EZSC>
15	8Z-CH4-225-210		HLDR,CHUCK A(S)<EXCEPT 141EZSC>
16	8B-CLA-017-010		LID,CD
17	8B-CLA-019-010		WINDOW,CD
18	8Z-CL8-205-010		SPR-T,CD
19	8B-CLA-018-010		CHAS,CD
20	8Z-NF6-210-010		DMPR,150 N<EXCEPT 141EZSC>
20	86-NFZ-231-010		DMPR,70<141EZSC>
⚠ 21	87-A80-105-010		AC CORD ASSY,AZ<161HASC>
⚠ 21	87-A80-157-010		AC CORD ASSY,E BLK CC<EXCEPT 161HASC>
22	87-036-389-010		SW,PUSH LOCK
23	8B-CLB-015-010		KEY,POWER
24	8Z-CL8-214-010		DMPR,HLDR BE
25	8B-CLB-016-010		KEY,TIMER
26	8Z-CDB-169-010		PANEL,CD SANYO
27	8B-CLB-018-010		HLDR,KEY EQ
28	8B-CLA-020-010		CABI,REAR EZ<141EZSC>
28	8B-CLA-022-010		CABI,REAR H<EXCEPT 141EZSC>
29	8Z-CL8-201-010		GUIDE,LCD
30	8B-CLA-005-010		KEY,FUNC
31	8B-CLB-013-010		KEY,CONTROL CD
32	8B-CLA-006-010		CAP, CONTROL CD SET
33	87-064-108-110		HLDR,NC LUTCH
34	82-NF5-228-010		SPR-C,LOCK
35	82-NF5-229-010		PLATE,LOCK
36	84-CD5-216-010		BRACKET
37	84-CD5-215-010		GEAR
38	88-CL5-203-010		LEVER,CASS LOCKE R
39	8B-CLA-606-010		CONN ASSY,2P CD DOOR
40	8Z-CL8-204-010		CUSH,FOOT
41	87-A90-457-010		F-BEAD,15-25-15 E251
A	87-B10-239-010		QT2+3-8 W/O CR
B	87-B10-230-010		BVT2+3-10 W/O SLOT SILVER CR
C	87-067-703-010		TAPPING SCREW, BVT2+3-10
D	87-067-579-010		TAPPING SCREW, BVT2+3-8
E	87-342-074-010		UT2+2.6-8
F	87-761-097-410		VFT2+3-10 GLD
G	8Z-CL8-220-010		W,30-0856-01-01-01
H	87-571-033-410		TAPPING SCREW, VIT+2-4

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue	GL	Light Green		

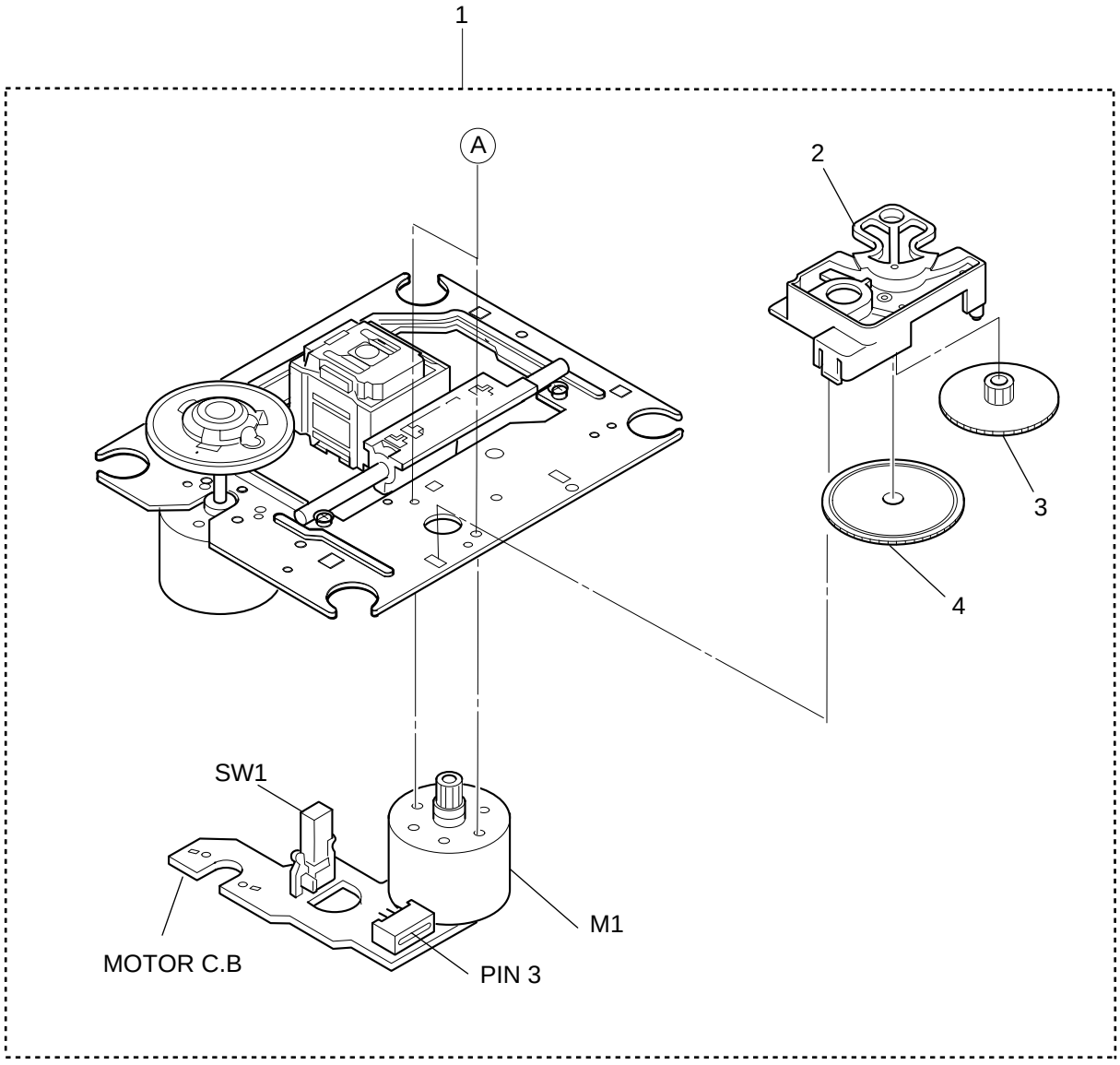
TAPE MECHANISM EXPLODED VIEW-1/1 (2ZM-1 YR12NC)



TAPE MECHANISM PARTS LIST-1/1 (2ZM-1 YR12NC)

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM1-247-210		PULLEY,MOTOR
2	82-ZM1-354-010		BELT,SBU MAIN2 EPDM
3	82-ZM1-234-310		FLY-WHL ASSY,L
4	82-ZM1-226-010		GEAR,REW
5	82-ZM1-216-510		GEAR,REEL
6	82-ZM1-221-310		GEAR,CAM(*)
7	82-ZM1-237-610		FLY-WHL ASSY,R
8	82-ZM1-225-210		GEAR,FR
9	82-ZM1-224-410		LVR,FR
10	82-ZM3-333-310		SLIP DISK ASSY 2
11	82-ZM1-223-010		GEAR,PLAY
12	82-ZM1-220-210		GEAR,IDLER
13	82-ZM3-616-010		RING MAGNET 4
14	82-ZM1-227-310		LVR,TRIG
15	82-ZM1-305-210		SPR-E,TRIG 2
16	82-ZM1-255-310		SPR-E,LVR DIR
17	82-ZM1-322-010		SPR-T,FR 60
18	82-ZM1-358-010		CHAS ASSY,FPC
19	82-ZM3-627-010		SOL ASSY,27 SO
20	82-ZM1-341-210		LVR ASSY,PINCH L2
21	82-ZM1-258-210		SPR-T,PINCH L
22	82-ZM1-333-210		PLATE,LINK2
23	82-ZM1-244-510		SPR-C,BT
24	82-ZM1-266-310		LVR,DIR
25	82-ZM1-214-010		SPR-T,DIR
26	82-ZM1-269-210		SPR-T,BRG
27	82-ZM1-217-410		REEL TABLE
28	82-ZM1-206-910		CHAS,HEAD
29	82-ZM1-219-110		SPR-T,LINK
30	82-ZM1-218-010		SPR-E,HB
31	82-ZM1-240-110		LVR,REC(*)
32	82-ZM1-259-210		SPR-T,PINCH R
33	82-ZM1-257-010		SPR-T,CAS
34	82-ZM1-285-410		SPR-C,BT L
35	82-ZM1-242-010		LVR,CAS
36	82-ZM1-243-010		LVR,STOP
37	82-ZM1-338-110		BELT,FR 4
38	82-ZM3-353-010		SPR-T,HEAD 2
39	82-ZM1-207-910		GUIDE,TAPE
40	82-ZM1-314-110		PLATE,HEAD
41	82-ZM1-208-310		HLDR,HEAD
42	87-A90-367-110		HEAD,RPH YK56R-BF414
43	82-ZM1-210-110		GEAR,H T
44	82-ZM1-222-310		LVR,PLAY(*)
45	82-ZM1-344-210		LVR ASSY,PINCH R2
A	87-251-070-410		U+2.6-3
B	87-741-073-410		UT2+2.6-6 GLD
C	87-B10-008-010		W-P,2.08-8-0.4-SLIP
D	80-ZM6-243-010		SH 1.75-3.6-0.5 SLT
E	82-ZM3-334-010		PW 2.16-6-0.4
F	86-ZM4-206-110		S-SCREW,AZIMUTH L
G	85-ZM3-202-010		S-SCREW,TG
H	82-ZM3-222-010		S-SCREW,SHILD PLATE
I	80-ZM6-207-010		V+1.6-7

CD MECHANISM EXPLODED VIEW-1/1 (DA-11T3C)



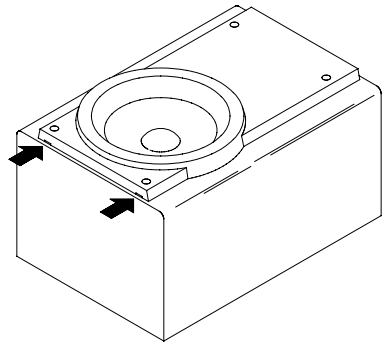
CD MECHANISM PARTS LIST-1/1 (DA-11T3C)

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	M8-ZZK-E90-070	2B	DA11T3C
2	S2-121-A28-400	1A	COVER GEAR
3	S2-511-A21-000	0E	GEAR MIDDLE
4	S2-511-A21-100	1A	GEAR,DRIVE
A	S1-PN2-03R-OSE	0E	SCR PAN PCS 2-3

SPEAKER DISASSEMBLY INSTRUCTIONS-1/1

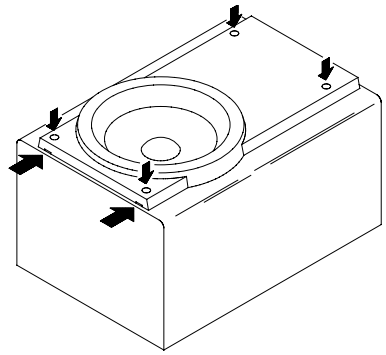
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit andthen remove the speaker units.



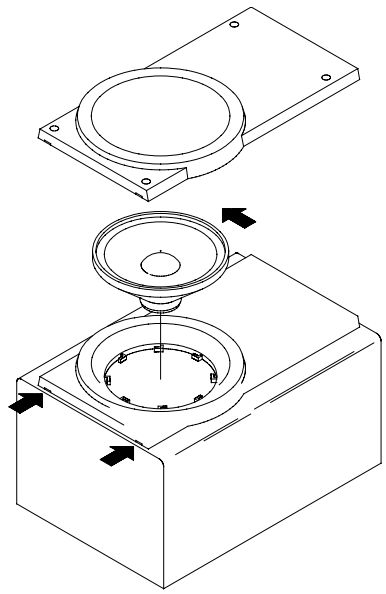
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hold where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



Type.3

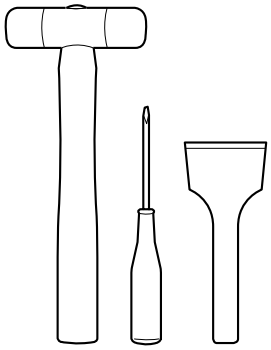
Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counterclockwise direction while inserting a flat-bladed screwdriver into one of the hollows arround speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turnning to clockwise direction unitil "click" sound comes out.



Type.4

TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel



How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

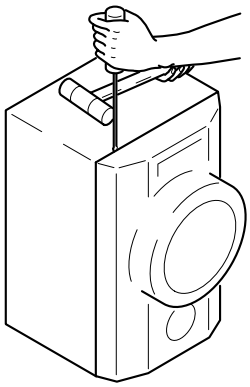


Fig-1

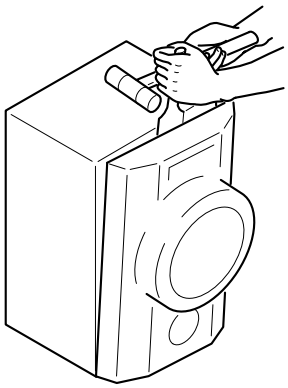


Fig-2

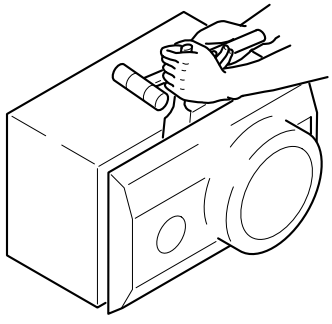


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST-1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8B-CPL-005-010		CABI,
2	8A-CLL-409-010		CORD,SP
3	8B-CPL-002-010		GRILLE,FRAME ASSY
4	8B-CPL-001-010		PANEL,SP
5	8A-CLL-408-010		SPKR, 100 4 OHMS

*NOTE 141EZ: SX-SLM141 YJMN
161LH, HA: SX-SLM161 YJMN

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