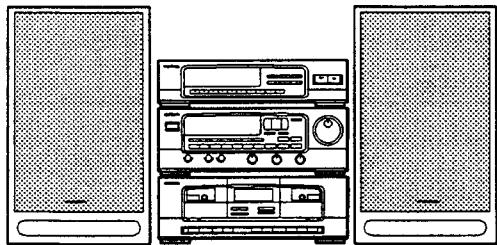


aiwa

Z-D3000M

MANUAL

SERVICE



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM - 1P1N,R1N
- BASIC CD MECHANISM : KSM - 2101ABM
- TYPE. HE,LH,E,K,Z

※ CENTER SYSTEM	AMPLIFIER	CASSETTE DECK	TUNER	SPEAKER	CD PLAYER (OPTIONAL)	TURNTABLE (OPTIONAL)
Z - D3000M HE,LH	MX - Z3000M	FX - WZ5000	TX - Z7000	※1 SX - Z3000	※2 DX - Z980M, DX - Z950M, DX - Z850, DX - Z830	※3 PX - E900, PX - E750
Z - D3000M E,K,Z	MX - Z3000M	FX - WZ5000	TX - Z7000	※1 SX - Z3000	※2 DX - Z850, DX - Z830, DX - Z7000M	※3 PX - E800, PX - E750

※1 CENTER SYSTEM dose not have※1.

※2 As to the service information of CD PLAYER,
see the individual service manual of original.

※3 As to the service information of TURNTABLE
see the individual service manual of original.

TABLE OF CONTENTS

• SPECIFICATIONS	3
• TRANSISTOR ILLUSTRATION (MX - Z3000M, FX - WZ5000, TX - Z7000)	4
• ACCESSORIES/PACKAGE LIST.....	4

[MX - Z3000M]

• ELECTRICAL MAIN PARTS LIST	5~7
• IC DESCRIPTION/IC BLOCK DIAGRAM/FL	8~10
• WIRING - 1	11~12
• SCHEMATIC DIAGRAM - 1.....	13~14
• BLOCK DIAGRAM.....	15~16
• SCHEMATIC DIAGRAM - 2.....	17~18
• WIRING - 2	19~20
• SCHEMATIC DIAGRAM - 3.....	21~22
• EXPLODED VIEW, MECHANICAL PARTS LIST	23~24

[FX - WZ5000]

• CAUTIONS WHEN SERVICING.....	25
• ELECTRICAL MAIN PARTS LIST	26~27
• IC BLOCK DIAGRAM	28
• BLOCK DIAGRAM	29~30
• SCHEMATIC DIAGRAM	31~32
• WIRING - 1	33~34
• WIRING - 2	35~36
• ADJUSTMENT/PRACTICAL SERVICE FIGURE.....	37~38
• IC DESCRIPTION	39~40
• EXPLODED VIEW - 1, MECHANICAL PARTS LIST	41~42
• EXPLODED VIEW - 2, MECHANICAL PARTS LIST	43~44
• EXPLODED VIEW - 3, MECHANICAL PARTS LIST	45~46
• SPRING APPLICATION POSITION.....	47

[TX - Z7000]

• CAUTIONS WHEN SERVICING.....	48
• ELECTRICAL MAIN PARTS LIST	49~50
• BLOCK DIAGRAM	51~52
• SCHEMATIC DIAGRAM - 1 (H)	53~54
• WIRING - 1 (H)	55~56
• SCHEMATIC DIAGRAM - 2 (E)	57~58
• WIRING - 2 (E)	59~60
• SCHEMATIC DIAGRAM - 3 (Z)	61~62
• WIRING - 3 (Z)	63~64
• ADJUSTMENT - 1/PRACTICAL SERVICE FIGURE - 1 (H)	65~66
• ADJUSTMENT - 2/PRACTICAL SERVICE FIGURE - 2 (E,Z)	67~68
• IC DESCRIPTION	69~70
• EXPLODED VIEW, MECHANICAL PARTS LIST	71~72

[SX - Z3000]

• SPEAKER LIST	73
• REFERENCE NAME LIST.....	74

SPECIFICATIONS

TUNER TX-Z7000		SPEAKER SX-Z3000	
<FM section>		Cabinet type	3 way, bass reflex
Frequency range	76 MHz to 108 MHz	Speaker	220 mm cone type woofer
Usable sensitivity (IHF)	2.2 μ V (75 ohms) 18.2 dB		60 mm cone type tweeter
Alternate channel selectivity	50 dB (± 400 kHz)		30 mm ceramic type super tweeter
Signal-to-noise ratio	70 dB (STEREO), 78 dB (MONO)	Impedance	6 ohms
Harmonic distortion	0.3% (MONO), 1 kHz	Music power	60 W
	0.8% (STEREO), 1 kHz	Output sound pressure level	90 dB/W/m
Frequency response	20 Hz to 15 kHz (+0.5 dB, -3 dB)	Dimensions (WxHxD)	270 x 442 x 255 mm (10 $\frac{3}{4}$ x 17 $\frac{1}{2}$ x 10 $\frac{1}{8}$ in.)
Stereo separation	40 dB at 1 kHz	Weight	6.0 kg (13.2 lb.)
Antenna	75 ohms (unbalanced)		
<AM section: YH, VLH>		COMMON SECTION	
Frequency range	531 (530) kHz to 1,602 (1,710) kHz	Power requirements	H, HE: 120/220/240 V AC, selectable, 50/60 Hz
Usable sensitivity	300 μ V/m	E, Z:	230 V AC, 50 Hz
Selectivity	22 dB (9 kHz)	K:	240 V AC, 50 Hz
Signal-to-noise ratio	53 dB (100 dB input)	Dimensions (WxHxD)	900 x 442 x 332.5 mm (35 $\frac{1}{2}$ x 17 $\frac{1}{2}$ x 13 $\frac{1}{8}$ in.) (vertical placement)
Antenna	Loop antenna		1,620 x 442 x 332.5 mm (63 $\frac{7}{8}$ x 17 $\frac{1}{2}$ x 13 $\frac{1}{8}$ in.) (horizontal placement)
<MW section: YE, YZ>		Weight	H, HE: 22.6 kg (49.72 lb.) E, K, Z: 22.7 kg (49.94 lb.)
Frequency range	522 kHz to 1,611 kHz		
Usable sensitivity	400 μ V/m		
Selectivity	22 dB (9 kHz)		
Signal-to-noise ratio	53 dB (100 dB input)		
Antenna	Loop antenna		
<LW section: YE, YZ>			
Frequency range	144 kHz to 290 kHz		
Usable sensitivity	1,000 μ V/m		
Antenna	Loop antenna		
<Timer section and general>			
Program timer	"Once" and/or "every"		
Sleep timer	Capable of setting in 10 minute increments, 99 minutes maximum		
Dimensions (WxHxD)	360 x 88 x 315 mm (14 $\frac{1}{4}$ x 3 $\frac{1}{2}$ x 12 $\frac{1}{2}$ in.)		
Weight	2.3 kg (5.28 lb.)		
AMPLIFIER MX-Z3000M			
Power output	50 W + 50 W (6 ohms, T.H.D. 10%, 1 kHz)		
	40 W + 40 W (6 ohms, T.H.D. 1%, 1 kHz)		
Harmonic distortion	0.05% (25 W, 1 kHz, 6 ohms)		
Input sensitivity (load impedance)	VIDEO 1/DAT: 300 mV (33 kohms) VIDEO 2/AUX: 600 mV (27 kohms)		
Signal-to-noise ratio	87 dB		
Power requirements	H, HE: 120/220/240 V AC, selectable, 50/60 Hz		
	E, Z: 230 V AC, 50 Hz		
	K: 240 V AC, 50 Hz		
Power consumption	H, HE: 90 W (System total 110 W)		
	E, K, Z: 230 W (System total 250 W)		
Dimensions (WxHxD)	360 x 128 x 332.5 mm (14 $\frac{1}{4}$ x 5 $\frac{1}{8}$ x 13 $\frac{1}{8}$ in.)		
Weight	H, HE: 5.3 kg (11.66 lb.)		
	E, K, Z: 5.4 kg (11.88 lb.)		
CASSETTE DECK FX-WZ5000			
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 ratio	65 dB (Dolby NR ON, Metal tape peak level above 5 kHz)		
Wow and flutter	0.12% (WRMS) \pm 0.19% (WPEAK)		
Tape speed	4.8 cm/sec. (1 $\frac{7}{8}$ ips)		
	9.5 cm/sec. (double speed)		
Rewind time	120 sec. (C-60)		
Fast forward time	120 sec. (C-60)		
Recording system	AC bias		
Erase system	AC erase		
Motor	DC servomotor \times 2		
Heads	Playback head \times 1 (deck 1) Record/playback/erasure head \times 1 (deck 2)		
Dimensions (WxHxD)	360 x 128 x 309.5 mm (14 $\frac{1}{4}$ x 5 $\frac{1}{8}$ x 12 $\frac{1}{4}$ in.)		
Weight	3.0 kg (6.6 lb.)		

Design and specifications are subject to change without notice.

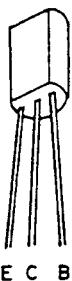
Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"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.

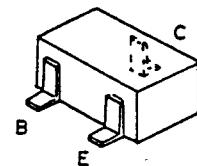
TRANSISTOR ILLUSTRATION (MX-Z3000M, FX-WZ5000, TX-Z7000)



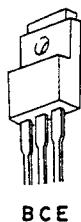
2SA1015
2SA1296
2SA1318
2SA952
2SC1815
2SC2001
2SC3266
2SC3331
2SD655
2SA1048
2SC2458
2SD1302



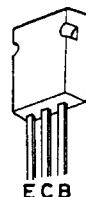
2SA933
2SC1740
DTA144ES
DTA114YS
DTC114YS
DTC144ES
2SD2144



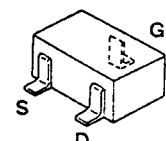
2SA1362
2SC1623
2SC2714
2SC3326
2SC2712
DTA114YK
DTA114EK
DTC143TK
DTC144EK
DTA123JK



2SB1370



2SB1354



2SK209
2SK211
2SK302
2SK368

■ 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.	カソリ NO.	DESCRIPTION
1	82-VP3-902-018	IB, H(G) <K>	
2	82-VP3-901-119	IB, H(S) <HE, H, Z, E>	
3	82-VP3-903-018	IB, E(G) <K>	
4	82-VP3-904-019	IB, E(S) <E>	
5	87-006-226-019	AM LOOP ANT CON2 <K, Z>	
6	87-006-225-019	AM LOOP ANT NC2 <HE, H, E>	
7	87-043-115-019	ANT, FEEDER FM <HE, H, K, Z>	
9	87-043-106-019	FM, WIRE ANT <Z> <E>	
10	82-VP3-644-019	RC, RC-TZ3000MF <HE, H>	
11	82-VP3-647-019	RC, RC-TZ3000ML <K, Z, E>	
12	82-009-724-019	PLUG, ADPTR, IR39 <H>	
13	87-042-062-019	PLUG, ADPTR S-16115 <HE>	

MODEL NO.

MX - Z3000M

ELECTRICAL MAIN PARTS LIST (MX - Z3000M)

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.	カソリ NO.	DESCRIPTION	REF. NO	PART NO.	カソリ NO.	DESCRIPTION
IC				C60	87-010-403-080	CAP, E 3. 3-50 SME	
87-002-950-010	IC, BA3826S	C61	CAP, E 47-10				
87-002-637-010	IC, BU4051B	C70	CAP, E 4700-25				
87-002-247-010	IC, BU4052B	C71	CAP, E 10-50 SME				
87-002-444-010	IC, BU4094B	C72	CAP, E 47-25 SME				
82-VP2-618-010	IC, CXP82316-135Q	C73	CAP, E 220-16 SME				
87-001-530-010	IC, LA3607	C74	CAP, E 330-16 SME				
87-017-311-080	IC, M65831FP (HE)	C75	CAP, E 47-10				
87-002-220-010	IC, MPA80C	C77	CAP, TC-U 0. 047-50 F				
87-002-727-010	IC, NJM4558L	C78	CAP, TC-U 0. 047-50 F				
87-001-134-010	IC, NJU4053BD	C79	CAP, TC-U 470P-50 B				
87-002-429-010	IC, NJU7305L	C101	CAP, E 4. 7-50 SME				
87-001-582-010	IC, STK4152-2	C102	CAP, E 22-50 SME				
87-002-218-010	IC, XRC5451AP	C103	CAP, E 47-10				
		C104	CAP, E 47-10				
TRANSISTOR				C105	87-010-263-080	CAP, E 100-10	
89-110-155-080	TR, 2SA1015GR	C106	CAP, E 470-10				
89-113-187-880	TR, 2SA1318TU	C141	CAP, E 22-50 SME				
87-026-463-080	TR, 2SA933S (RS)	C191	CAP, E 10-50 SME				
89-213-542-310	TR, 2SB1354EF	C192	CAP, E 10-50 SME				
89-213-702-010	TR, 2SB1370E	C193	CAP, E 10-50 SME				
87-026-462-080	TR, 2SC1740S (RS)	C194	CAP, E 10-50 SME				
89-318-155-080	TR, 2SC1815GR	C198	CAP, E 10-50 SME				
89-332-665-080	TR, 2SC3266GR	C199	CAP, E 10-50 SME				
89-333-317-880	TR, 2SC3331TU	C200	CAP, E 10-50 SME				
87-026-500-080	TR, 2SD2144S, UV	C201	CAP, TC-U 0. 01-16 Y				
89-406-555-080	TR, 2SD655E	C202	CAP, TC-U 0. 01-16 Y				
87-026-219-080	TR, DTA144ES	C250	CAP, E 1-50 SME				
87-026-215-080	TR, DTC114YS	C251	CAP, E 220-16 SME				
		C252	CAP, E 1-50 SME				
D1ODE				C253	87-010-401-080	CAP, E 1-50 SME	
87-001-574-080	D1ODE, 1SR139-200	C254	CAP, E 10-50 SME				
87-001-559-080	D1ODE, 1SS131	C255	CAP, E 10-50 SME				
87-020-691-080	D1ODE, 1SS132	C256	CAP, E 10-50 SME				
87-002-225-010	D1ODE, DBF 40C-K10	C257	CAP, E 10-50 SME				
87-002-608-080	D1ODE, DSF10TC (H)	C258	CAP, E 4. 7-50 SME				
87-001-408-080	D1ODE, GP 15B (E, K, Z)	C259	CAP, E 4. 7-50 SME				
87-027-606-080	ZENER, HZ7C2SL	C260	CAP, E 0. 47-50 SME				
87-017-086-080	ZENER, HZ55A2	C261	CAP, E 0. 47-50 SME				
87-017-091-080	ZENER, HZ55C1 (HE)	C262	CAP, E 4. 7-50 SME				
87-017-096-080	ZENER, HZ56A3	C263	CAP, E 4. 7-50 SME				
87-002-743-080	ZENER, MTZJ33B	C264	CAP, E 4. 7-50 SME				
87-001-916-080	ZENER, UTZJ10B	C265	CAP, E 10-50 SME				
87-001-911-080	ZENER, UTZJ4. 7A	C266	CAP, E 10-50 SME				
87-001-912-080	ZENER, UTZJ5. 1B	C267	CAP, E 10-50 SME				
87-001-913-080	ZENER, UTZJ5. 6B	C268	CAP, TC-U 150P-50 B				
87-001-915-080	ZENER, UTZJ6. 8A	C269	CAP, TC-U 150P-50 B				
87-002-430-080	ZENER, UTZJ8. 2C	C270	CAP, TC-U 150P-50 B				
		C273	CAP, TC-U 0. 01-16 Y				
		C274	CAP, TC-U 0. 01-16 Y				
		C275	CAP, TC-U 2700P-16 X				
MAIN C. B				C276	87-018-198-080	CAP, TC-U 2700P-16 X	
C1	87-018-214-080	CAP, TC-U 0. 1-50 F	C277	87-018-122-080	CAP, TC-U 180P-50 B		
C2	87-018-214-080	CAP, TC-U 0. 1-50 F (E, K, HE, H)	C278	87-018-122-080	CAP, TC-U 180P-50 B		
C3	87-018-214-080	CAP, TC-U 0. 1-50 F (Z)	C281	87-010-544-080	CAP, E 0. 1-50		
C4	87-010-804-010	CAP, E 4700-42V	C282	87-010-544-080	CAP, E 0. 1-50		
C5	87-010-804-010	CAP, E 4700-42V	C283	87-010-545-080	CAP, E 0. 22-50 SME		
C15	87-010-260-080	CAP, E 47-25 SME	C284	87-010-545-080	CAP, E 0. 22-50 SME		
C16	87-010-384-080	CAP, E 100-25 SME	C285	87-010-404-080	CAP, E 4. 7-50 SME		
C17	87-010-764-080	CAP, E 47-63	C286	87-010-405-080	CAP, E 10-50 SME		
C27	87-010-405-080	CAP, E 10-50 SME	C287	87-010-405-080	CAP, E 10-50 SME		
C28	87-010-101-080	CAP, E 220-16 SME	C288	87-010-405-080	CAP, E 10-50 SME		
C29	87-010-247-080	CAP, E 100-50 SME	C289	87-010-401-080	CAP, E 1-50 SME		
			C290	87-010-404-080	CAP, E 4. 7-50 SME		
			C291	87-018-195-080	CAP, TC-U 1200P-16 X		
			C292	87-018-195-080	CAP, TC-U 1200P-16 X		

REF. NO	PART NO.	カソリ NO.	DESCRIPTION	REF. NO	PART NO.	カソリ NO.	DESCRIPTION
C293	87-018-128-080		CAP, TC-U 560P-50 B	C766	87-018-214-080		CAP, TC-U 0.1-50 F
C294	87-018-128-080		CAP, TC-U 560P-50 B	C769	87-018-134-080		CAP, TC-U 0.01-16 Y(Z)
C360	87-010-404-080		CAP, E 4.7-50 SME	C770	87-018-134-080		CAP, TC-U 0.01-16 Y(Z)
C501	87-010-404-080		CAP, E 4.7-50 SME	C771	87-018-134-080		CAP, TC-U 0.01-16 Y(Z)
C502	87-010-404-080		CAP, E 4.7-50 SME	C772	87-018-134-080		CAP, TC-U 0.01-16 Y(Z)
C503	87-010-404-080		CAP, E 4.7-50 SME	C773	87-018-134-080		CAP, TC-U 0.01-16 Y(Z, HE, H)
C504	87-010-404-080		CAP, E 4.7-50 SME	C791	87-018-123-089		CAP, TC-U 220P-50 B(Z)
C505	87-010-404-080		CAP, E 4.7-50 SME	C792	87-018-123-089		CAP, TC-U 220P-50 B(Z)
C506	87-010-404-080		CAP, E 4.7-50 SME	C800	87-018-134-080		CAP, TC-U 0.01-16 Y
C507	87-010-404-080		CAP, E 4.7-50 SME	C810	87-018-131-089		CAP, TC-U 1000P-50 B(Z)
C508	87-010-404-080		CAP, E 4.7-50 SME	J280	87-099-277-010		JACK 6.3 W/S (PHONES)
C509	87-018-127-080		CAP, TC-U 470P-50 B	J281	87-099-064-010		JACK 6.3 W/S (MIC 1)
C510	87-018-127-080		CAP, TC-U 470P-50 B	J283	87-099-064-010		JACK 6.3 W/S (MIC 2)
C511	87-010-402-080		CAP, E 2.2-50 SME	J750	81-VP1-634-010		JACK, PIN 3P (MON. /REC OUT)
C512	87-010-402-080		CAP, E 2.2-50 SME	J751	81-VP1-634-010		JACK, PIN 3P (VIDEO 2/AUX)
C515	87-010-546-080		CAP, E 0.33-50 SME	J752	81-VP1-634-010		JACK, PIN 3P (VIDEO 1/DAT)
C516	87-010-546-080		CAP, E 0.33-50 SME	J753	87-009-393-010		JACK, PIN 2P EARTH (PHONO)
C519	87-010-544-080		CAP, E 0.1-50	J754	87-009-063-010		CONN, 11P FG (CD)
C520	87-010-544-080		CAP, E 0.1-50	J755	87-009-877-010		CONN, 9P FG (DECK)
C526	87-018-203-080		CAP, TC-U 8200P-16 Y	J756	87-009-063-410		CONN, 11P BLU (TUNER)
C529	87-018-199-080		CAP, TC-U 3300P-16 X	J759	87-009-393-010		JACK, PIN 2P (SURROUND SP)
C530	87-018-199-080		CAP, TC-U 3300P-16 X	J760	87-033-225-010		TERMINAL, SP-4PN (SPEAKERS)
C531	87-018-134-080		CAP, TC-U 0.01-16 Y	L751	87-005-366-010		COIL, 1UH(Z)
C532	87-018-134-080		CAP, TC-U 0.01-16 Y	L752	87-005-366-010		COIL, 1UH(Z)
C533	87-018-131-080		CAP, TC-U 1000P-50 B	R25	87-022-450-090		RES, NF 100-1/2WJ FMG(E, K, Z)
C534	87-018-131-080		CAP, TC-U 1000P-50 B	R26	87-022-536-090		RES, NF 47-1/2W J FMG(E, K, Z)
C535	87-018-199-080		CAP, TC-U 3300P-16 X	R27	87-022-450-090		RES, NF 100-1/2WJ FMG(E, K, Z)
C536	87-018-199-080		CAP, TC-U 3300P-16 X	R40	87-022-050-080		RES, METAL 1W-0.22J
C537	87-018-127-080		CAP, TC-U 470P-50 B	R45	87-022-050-080		RES, METAL 1W-0.22J
C538	87-018-127-080		CAP, TC-U 470P-50 B	R777	87-022-050-080		RES, METAL 1W-0.22J
C539	87-010-260-080		CAP, E 47-25 SME	R778	87-022-050-080		RES, METAL 1W-0.22J
C540	87-010-260-080		CAP, E 47-25 SME	R779	87-022-050-080		RES, METAL 1W-0.22J
C541	87-010-260-080		CAP, E 47-25 SME	R780	87-022-050-080		RES, METAL 1W-0.22J
C591	87-018-123-089		CAP, TC-U 220P-50 B(Z)	RY1	87-045-335-010		RELAY, G5Z-2A 12VDC
C592	87-018-123-089		CAP, TC-U 220P-50 B(Z)	VR141	81-MT3-631-010		VR, 50KBX2 (INPUT LEVEL)
C670	87-010-405-080		CAP, E 10-50 SME	VR281	81-VP1-622-010		VR, 10KA RK11K112 (MIC MIX)
C671	87-010-400-080		CAP, E 0.47-50 SME	VR282	81-VP1-622-010		VR, 10KA RK11K112 (MIC MIX)
C681	87-016-072-080		CAP, E 0.47-50 FX	VR372	81-VP1-627-010		VR, 100KW RK11K112 (BALANCE)
C682	87-016-072-080		CAP, E 0.47-50 FX	W101	82-VP2-634-110		F-CABLE 5P-2.5(E, K, Z)
C683	87-010-401-080		CAP, E 1-50 SME	W101	82-VP2-635-010		F-CABLE 5P-2.5(H) (HE, H)
C684	87-010-401-080		CAP, E 1-50 SME	W102	82-VP2-634-110		F-CABLE 5P-2.5(E, K, Z)
C685	87-010-400-080		CAP, E 0.47-50 SME				
C686	87-010-400-080		CAP, E 0.47-50 SME				
C687	87-010-401-080		CAP, E 1-50 SME				
C688	87-010-401-080		CAP, E 1-50 SME				
C689	87-016-096-080		CAP, E 47-16 FX				
C690	87-016-096-080		CAP, E 47-16 FX				
C691	87-010-401-080		CAP, E 1-50 SME				
C692	87-010-401-080		CAP, E 1-50 SME				
C693	87-010-402-080		CAP, E 2.2-50 SME				
C694	87-010-402-080		CAP, E 2.2-50 SME	C1	87-010-401-080		CAP, E 1-50 SME
C695	87-010-400-080		CAP, E 0.47-50 SME	C2	87-010-401-080		CAP, E 1-50 SME
C696	87-010-401-080		CAP, E 1-50 SME	C3	87-010-405-080		CAP, E 10-50 SME
C697	87-010-403-080		CAP, E 3.3-50 SME	C5	87-010-550-040		CAP, E 100-6.3 GAS
C698	87-010-403-080		CAP, E 3.3-50 SME	C15	87-018-134-080		CAP, TC-U 0.01-16 Y
C699	87-010-544-080		CAP, E 0.1-50	C16	87-018-134-080		CAP, TC-U 0.01-16 Y
C701	87-010-405-080		CAP, E 10-50 SME	C19	87-018-131-080		CAP, TC-U 1000P-50 B
C702	87-010-405-080		CAP, E 10-50 SME	C21	87-010-401-080		CAP, E 1-50 SME
C703	87-018-128-080		CAP, TC-U 560P-50 B	C25	87-018-134-080		CAP, TC-U 0.01-16 Y
C704	87-018-128-080		CAP, TC-U 560P-50 B	C151	87-018-134-080		CAP, TC-U 0.01-16 Y
C705	87-018-123-089		CAP, TC-U 220P-50 B(Z)	C153	87-018-134-080		CAP, TC-U 0.01-16 Y
C706	87-018-123-089		CAP, TC-U 220P-50 B(Z)	C160	87-010-263-080		CAP, E 100-10
C758	87-010-408-080		CAP, E 47-50 SME	C370	87-018-134-080		CAP, TC-U 0.01-16 Y(HE)
C759	87-010-374-080		CAP, E 47-10	C382	87-018-201-080		CAP, TC-U 5600P-16 X(HE)
C760	87-010-374-080		CAP, E 47-10	C383	87-018-131-080		CAP, TC-U 1000P-50 B(HE)
C761	87-018-111-080		CAP, TC-U 27P-50 SL	C384	87-018-209-080		CAP, TC-U 0.1-50 F(HE)
C762	87-018-111-080		CAP, TC-U 27P-50 SL	C385	87-010-374-080		CAP, E 47-10(HE)
C763	87-010-260-080		CAP, E 47-25 SME	C388	87-018-209-080		CAP, TC-U 0.1-50 F(HE)
C764	87-010-260-080		CAP, E 47-25 SME	C389	87-018-201-080		CAP, TC-U 5600P-16 X(HE)
C765	87-018-214-080		CAP, TC-U 0.1-50 F	C390	87-018-131-080		CAP, TC-U 1000P-50 B(HE)
				C391	87-010-401-080		CAP, E 1-50 SME(HE)

REF. NO.	PART NO.	カソリ NO.	DESCRIPTION	REF. NO.	PART NO.	カソリ NO.	DESCRIPTION
C392	87-018-213-080		CAP, TC-U 0.047-50F(HE)	△PT1	82-VP2-622-010		PT, 2VP-2 H(HE, H)
C394	87-018-209-080		CAP, TC-U 0.1-50 F(HE)				
CSA1	87-008-497-080		CERALOCK CST7. 68MTW				
FL1	82-VP3-615-010		FL, BJ189GK (DISPLAY)				
L1	87-003-098-080		COIL, 2. 2UH				
L2	87-003-098-080		COIL, 2. 2UH				
L5	87-003-102-080		COIL, 10UH				
SW1	87-036-215-080		SW, TACT EVO-21404M				
SW2	87-036-215-080		SW, TACT EVO-21404M				
SW3	87-036-215-080		SW, TACT EVO-21404M				
SW4	87-036-215-080		SW, TACT EVO-21404M				
SW5	87-036-215-080		SW, TACT EVO-21404M				
SW6	87-036-215-080		SW, TACT EVO-21404M				
SW7	87-036-215-080		SW, TACT EVO-21404M				
SW8	87-036-215-080		SW, TACT EVO-21404M				
SW9	87-036-215-080		SW, TACT EVO-21404M				
SW10	87-036-215-080		SW, TACT EVO-21404M				
SW11	87-036-215-080		SW, TACT EVO-21404M				
SW12	87-036-215-080		SW, TACT EVO-21404M				
SW13	87-036-215-080		SW, TACT EVO-21404M				
SW14	87-036-215-080		SW, TACT EVO-21404M				
SW15	87-036-215-080		SW, TACT EVO-21404M				
SW16	87-036-215-080		SW, TACT EVO-21404M				
SW17	87-036-215-080		SW, TACT EVO-21404M				
SW18	87-036-215-080		SW, TACT EVO-21404M				
SW19	87-036-215-080		SW, TACT EVO-21404M				
SW20	87-036-215-080		SW, TACT EVO-21404M				
SW21	87-036-215-080		SW, TACT EVO-21404M				
SW22	87-036-215-080		SW, TACT EVO-21404M				
SW23	87-036-215-080		SW, TACT EVO-21404M				
SW24	87-036-215-080		SW, TACT EVO-21404M				
SW25	87-036-215-080		SW, TACT EVO-21404M				
SW26	87-036-215-080		SW, TACT EVO-21404M				
SW27	87-036-215-080		SW, TACT EVO-21404M				
VR370	82-VP2-636-010		VR, SL 10KB(HE)				
X301	87-008-496-080		CERALOCK CST2. OMG(HE)				

VOLUME C. B

C201	87-010-405-080	CAP, E 10-50 SME
C202	87-010-405-080	CAP, E 10-50 SME
C203	87-010-404-080	CAP, E 4. 7-50 SME
C204	87-010-404-080	CAP, E 4. 7-50 SME
C205	87-010-404-080	CAP, E 4. 7-50 SME
C206	87-010-404-080	CAP, E 4. 7-50 SME
C210	87-018-134-080	CAP, TC-U 0. 01-16 Y
VR1	82-VP2-639-010	VR, 50KB MOTOR (VOLUME)

AC C. B

R70	87-022-184-080	RES, METAL 0.33-1W
R96	87-022-200-080	RES, METAL 0.56-1W
R97	87-022-200-080	RES, METAL 0.56-1W

AC VOLTAGE C. B

87-033-213-010	CLAMP, FUSE SMK(HE, H)
82-304-743-010	TERMINAL, 1P
△F1	87-035-366-010
△SW1	87-036-229-010

FUSE, 2.5A 250V T, E/K(HE, H)
SW, SL DP3CRA(HE, H)

MISCELLANEOUS

△	87-050-034-010	AC CORD ASSY, E(HE)
△	87-050-016-010	AC CORD ASSY, E(E, Z)
△	87-050-029-010	AC CORD ASSY, K 3P(K)
△	87-034-749-010	AC CORD, H W/PLUG(H)
△	87-085-184-010	BUSHING, AC CORD D(H)
△	87-085-185-010	BUSHING, AC CORD E(E, K, Z, HE)
△PT1	82-VP2-624-010	PT, 2VP-2 E, K(E, K, Z)

IC DESCRIPTION (MX-Z3000M)

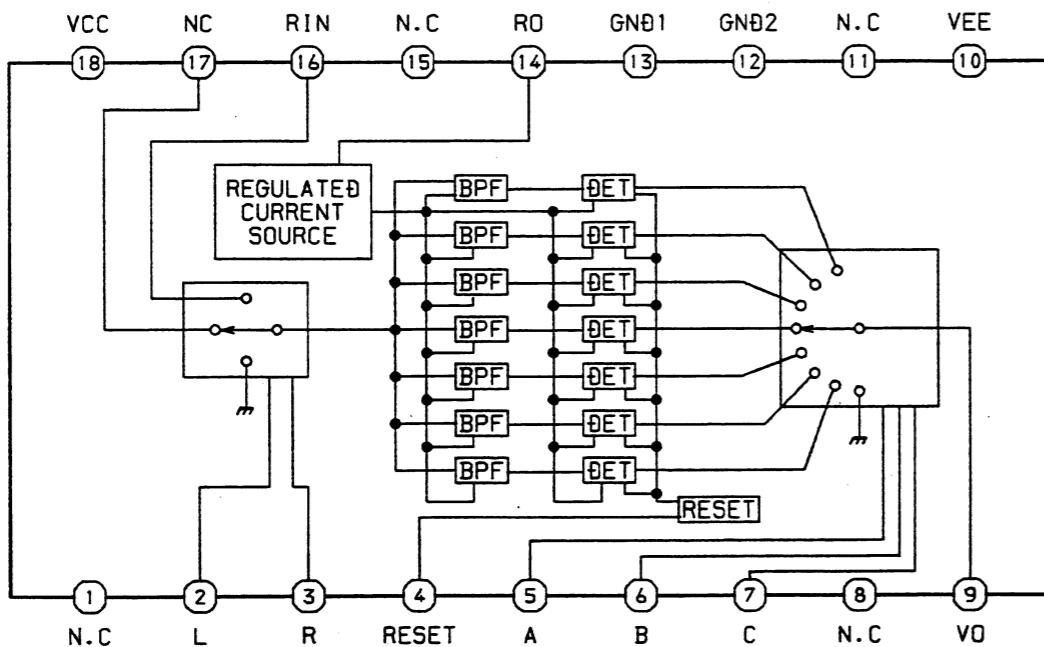
IC, CXP82316

Pin No.	Pin Name	I/O	Description
1	I-HOLD	I	HOLD mode at "Low" and normal mode at "High".
2	I-REMOTE	I	Remote control signal input.
3 ↓ 5	NC	—	Not used.
6	O-CS (DSP)	O	Not used.
7	NC	—	Not used
8	O-CLK	O	Serial data clock signal. (4094)
9	O-CLK (GEQ)	O	Clock signal output for GEQ IC NJU7305.
10	O-DATA	O	Serial data output.
11	I/O-SERIAL	I/O	Serial signal for system controller (8 bit).
12	O-STB	O	Strobe signal output. (4094)
13	NC	O	Not used.
14	O-S16	O	FL display segment output.
15	O-S5		
16	O-S28		
17	O-S17		
18	O-S6		
19	O-S29		
20	I-INTIAL	I	Initialize signal.
21	O-VOL LED	O	VOL LED display output.
22	I-KEY1	I	Key A/D input.
23	I-KEY2	I	
24	NC	—	Not used.
25	I-KEY4	I	Key A/D input.
26	O-FS RESET	O	Output to reset output of IC BA3826.
27	I-SPE	I	Spectrum analyzer display input.
28	I-MIC	I	Mic signal input. Vocal fader turns on when this input is more than 3.4V in vocal fader mode.
29	NC	—	Not used.
30	RESET	I	Reset signal for microcomputer.
31	EXTAL	—	Crystal connection terminal for oscillating system clock. (7.68MHz)
32	XTAL	—	
33	VSS	—	GND.
34 ↓ 60	O-S1 ↓ O-S33	O	FL Display segment output. 37~39 pins are also used for band selection of spectrum analyzer.
61 ↓ 70	O-G9 ↓ O-G1	O	FL Display grid drive signal.
71	VFDP	I	Negative power supply (-30V).
72	VDD	—	Power supply (4.9V).
73	NC	—	Not used.
74	VOL UP	O	MOTOR VOL UP output.

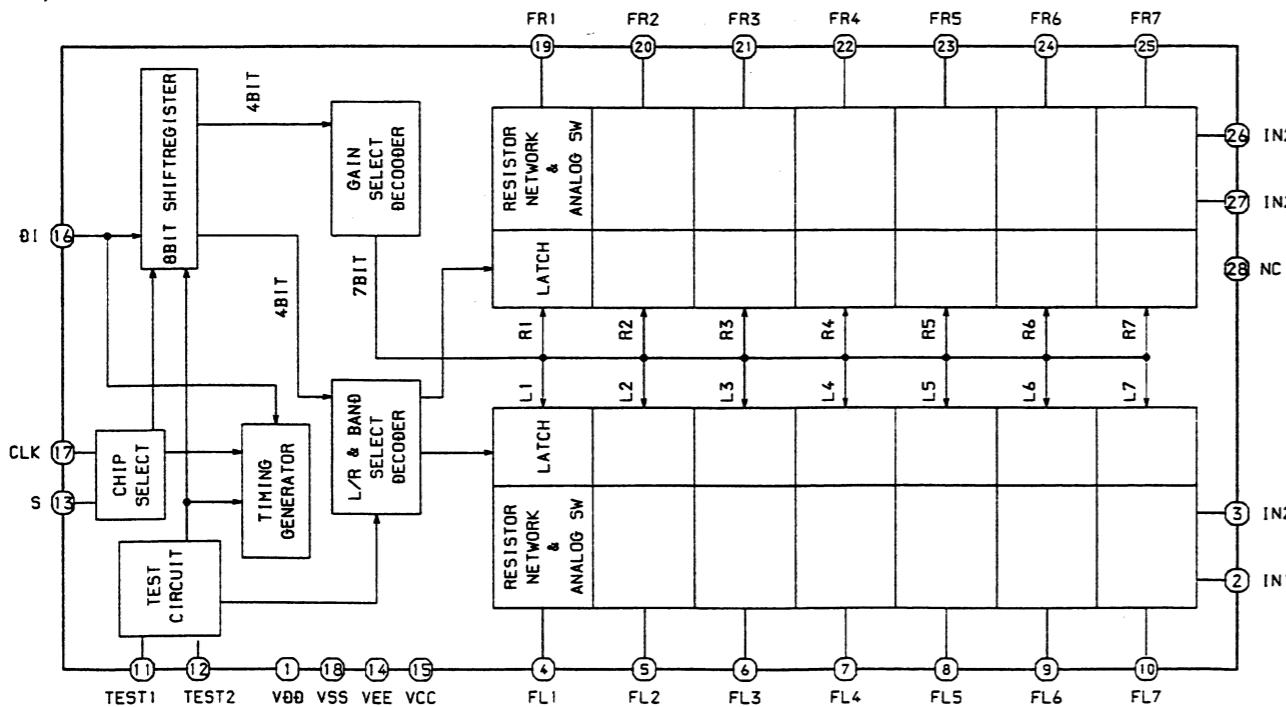
Pin No.	Pin Name	I/O	Description
75	VOL DOWN	O	MOTOR VOL DOWN output.
76	O-MUTE	O	Audio MUTE output.
77	O-POWER	O	Power ON/OFF control output.
78	I-GRID	I	GRID input for microcomputer extention.
79	I-G1	I	G1 input for microcomputer extention.
80	NC	-	Not used.

IC BLOCK DIAGRAM (MX-Z3000M)

IC, BA3826S



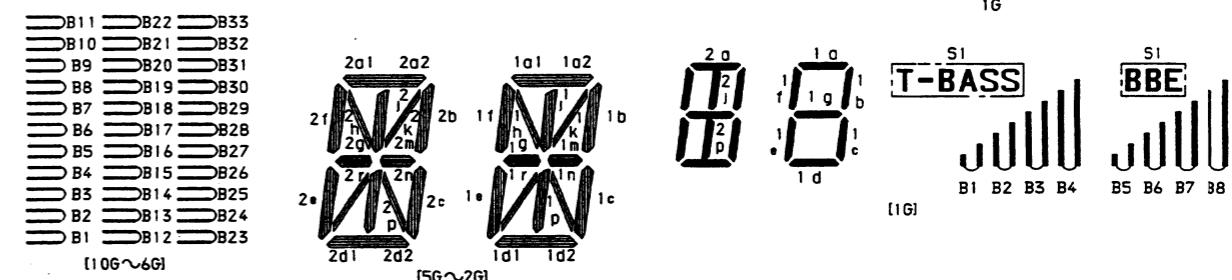
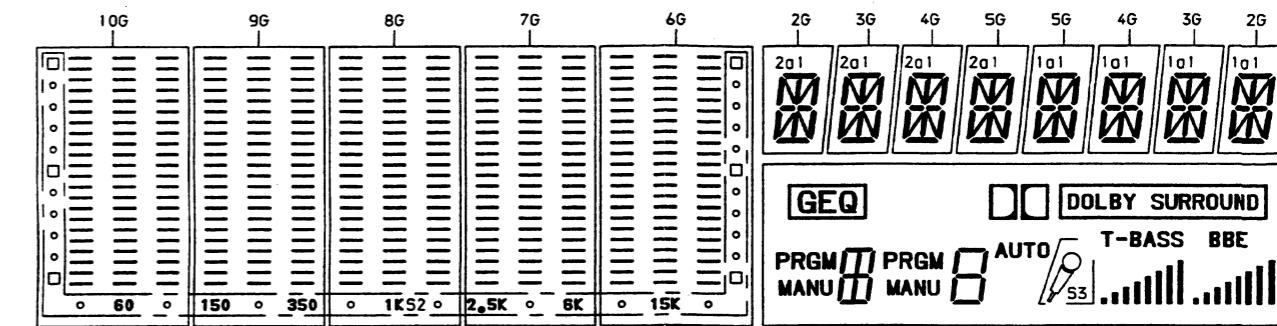
IC, NJU7305



FL (MX-Z3000M)

FL, BJ189GK

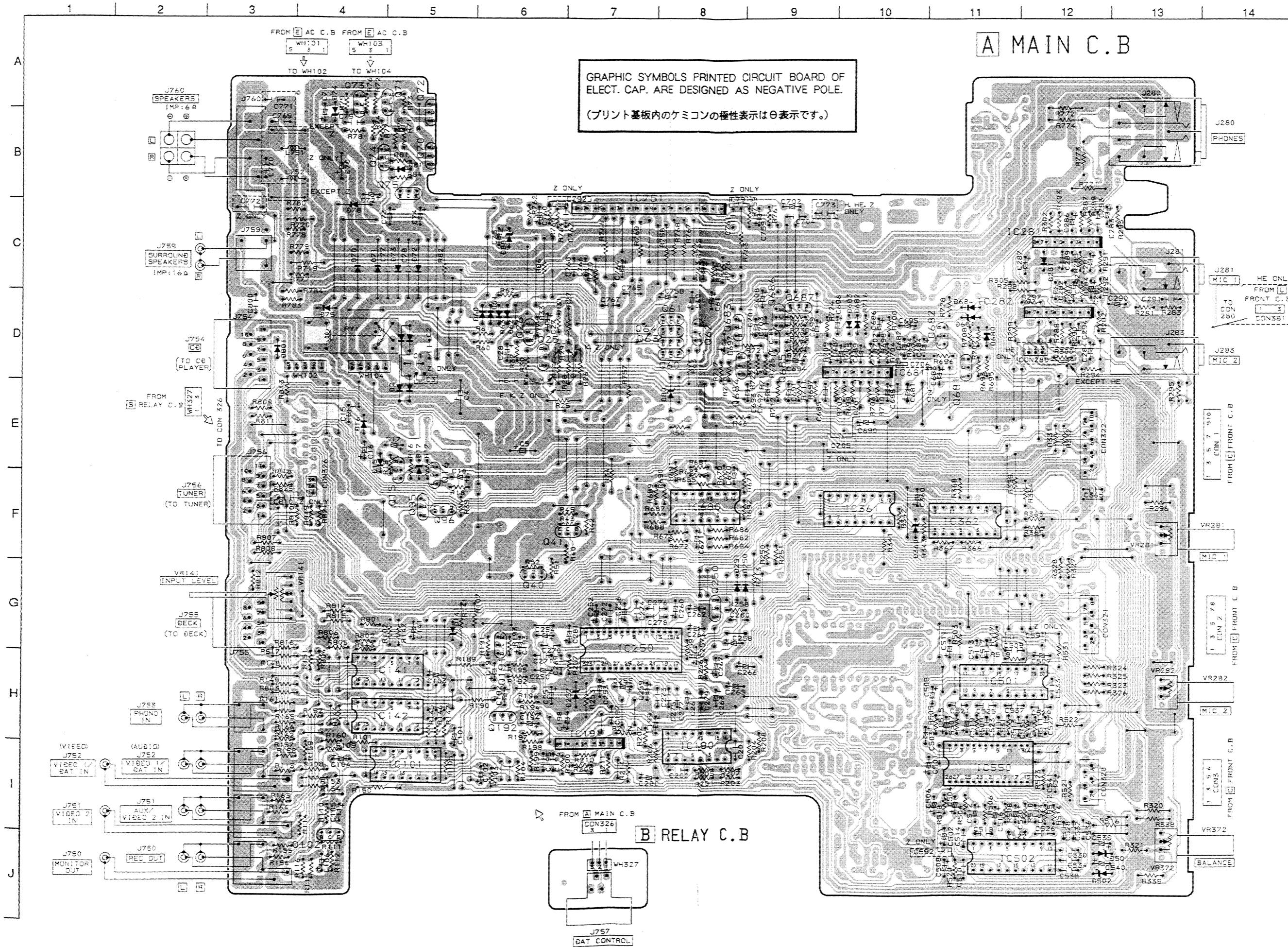
GRID ASSIGNMENT



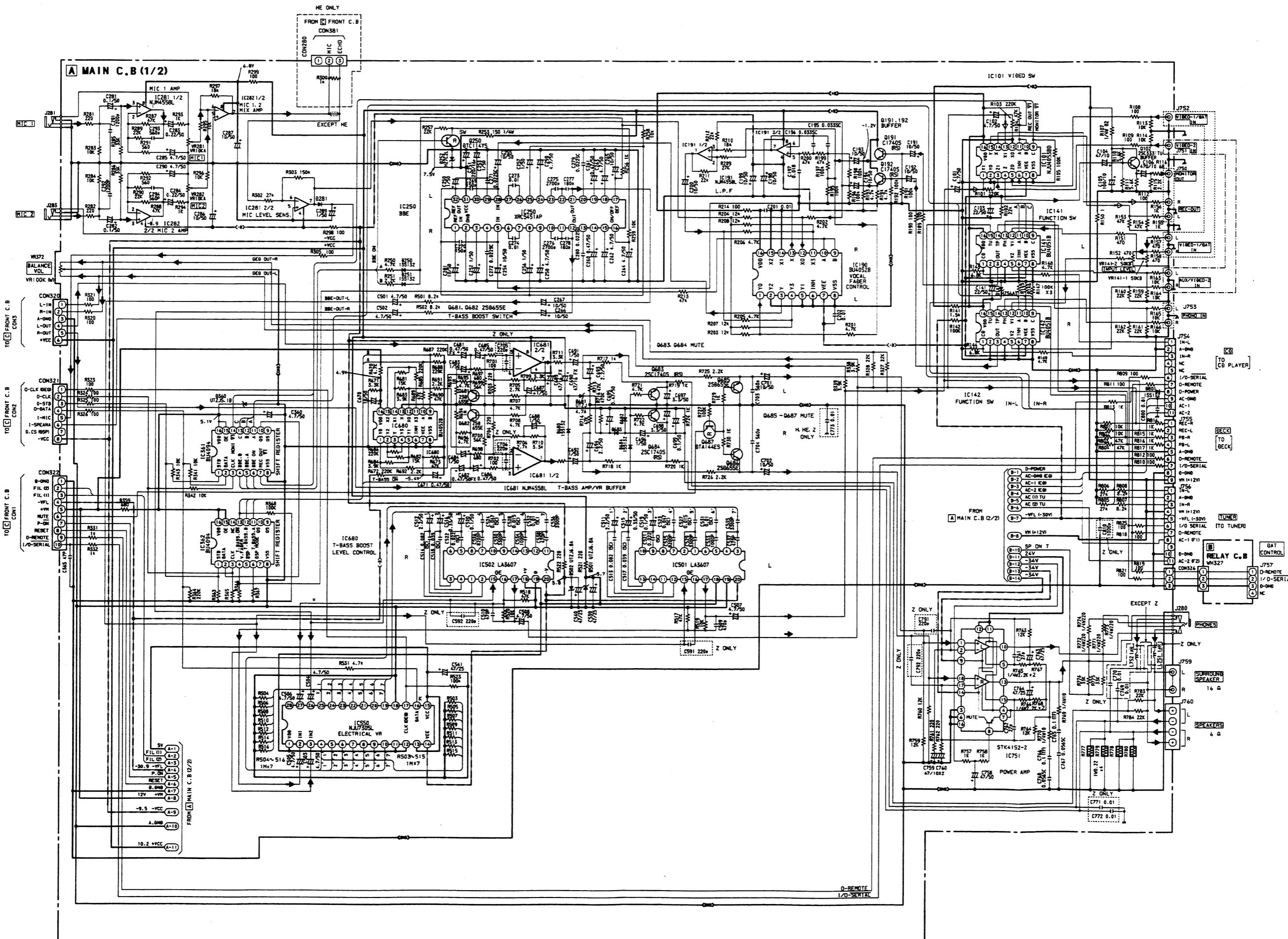
ANODE CONNECTION

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	B1	B1	B1	B1	B1	1a2	1a2	1a2	1a2	B6
P2	B2	B2	B2	B2	B2	1K	1K	1K	1K	B3
P3	B3	B3	B3	B3	B3	1g	1g	1g	1g	
P4	B4	B4	B4	B4	B4	1e	1e	1e	1e	AUTO
P5	B5	B5	B5	B5	B5	1p	1p	1p	1p	1a, 1d
P6	B6	B6	B6	B6	B6	2d2	2d2	2d2	2d2	GEQ
P7	B7	B7	B7	B7	B7	2n	2n	2n	2n	2b
P8	B8	B8	B8	B8	B8	2c	2c	2c	2c	-
P9	B9	B9	B9	B9	B9	2f	2f	2f	2f	2d
P10	B10	B10	B10	B10	B10	2h	2h	2h	2h	PRGM [GEQ]
P11	B11	B11	B11	B11	B11	2a1	2a1	2a1	2a1	1f
P12	B12	B12	B12	B12	B12	1a1	1a1	1a1	1a1	B7
P13	B13	B13	B13	B13	B13	1h	1h	1h	1h	B4
P14	B14	B14	B14	B14	B14	1f	1f	1f	1f	B1
P15	B15	B15	B15	B15	B15	1c	1c	1c	1c	DOLBY
P16	B16	B16	B16	B16	B16	1n	1n	1n	1n	1b
P17	B17	B17	B17	B17	B17	1d2	1d2	1d2	1d2	1e
P18	B18	B18	B18	B18	B18	2p	2p	2p	2p	2c
P19	B19	B19	B19	B19	B19	2e	2e	2e	2e	PRGM
P20	B20	B20	B20	B20	B20	2g	2g	2g	2g	2g
P21	B21	B21	B21	B21	B21	2k	2k	2k	2k	2f
P22	B22	B22	B22	B22	B22	2a2	2a2	2a2	2a2	-
P23	B23	B23	B23	B23	B23	-	-	-	-	B8
P24	B24	B24	B24	B24	B24	1j	1j	1j	1j	B5
P25	B25	B25	B25	B25	B25	1b	1b	1b	1b	B2
P26	B26	B26	B26	B26	B26	1m	1m	1m	1m	S3
P27	B27	B27	B27	B27	B27	1r	1r	1r	1r	1c
P28	B28	B28	B28	B28	B28	1d1	1d1	1d1	1d1	1g
P29	B29	B29	B29	B29	B29	2d1	2d1	2d1	2d1	2a
P30	B30	B30	B30	B30	B30	2r	2r	2r	2r	MANU
P31	B31	B31	B31	B31	B31	2m	2m	2m	2m	2j, 2p
P32	B32	B32	B32	B32	B32	2b	2b	2b	2b	2e
P33	B33	B33	B33	B33	B33	2j	2j	2j	2j	MANU [GEQ]
P34	S2	S2	S2	S2	S2	-	-	-	-	-
P35	-	-	-	-	-	-	-	-	-	GEQ S1

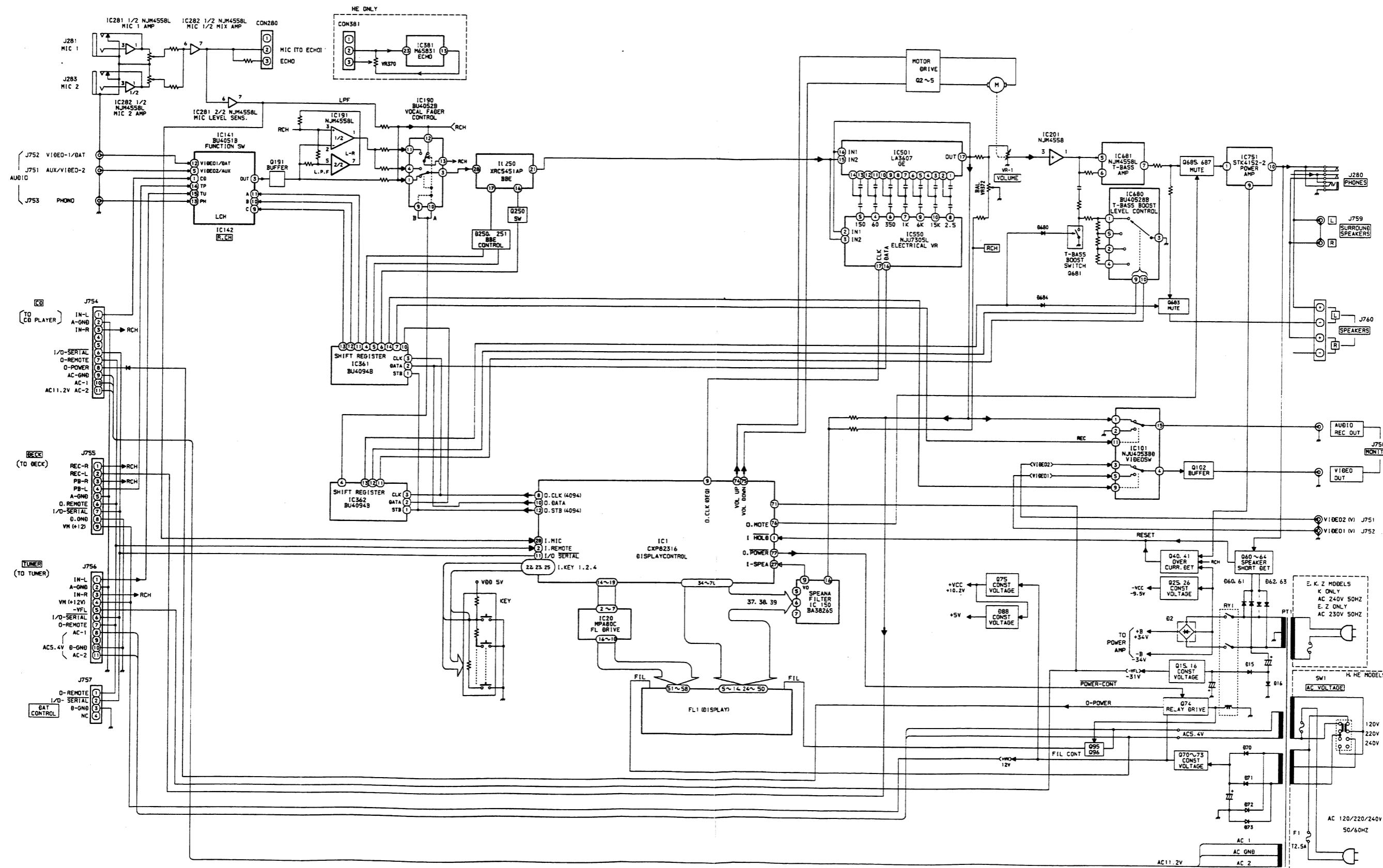
WIRING — 1 (MX-Z3000M)



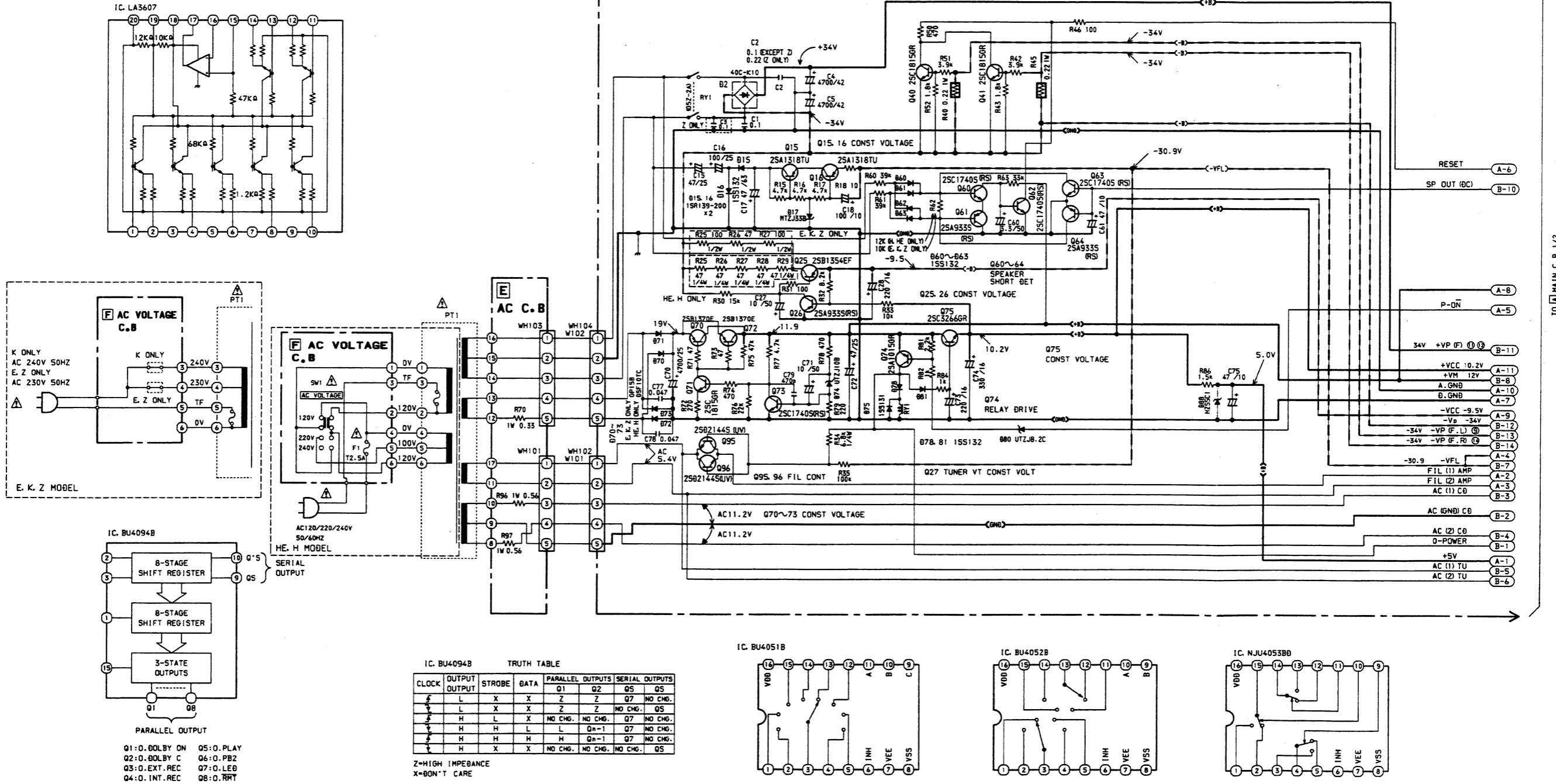
SCHEMATIC DIAGRAM — 1 (MX-Z3000M)



BLOCK DIAGRAM (MX-Z3000M)



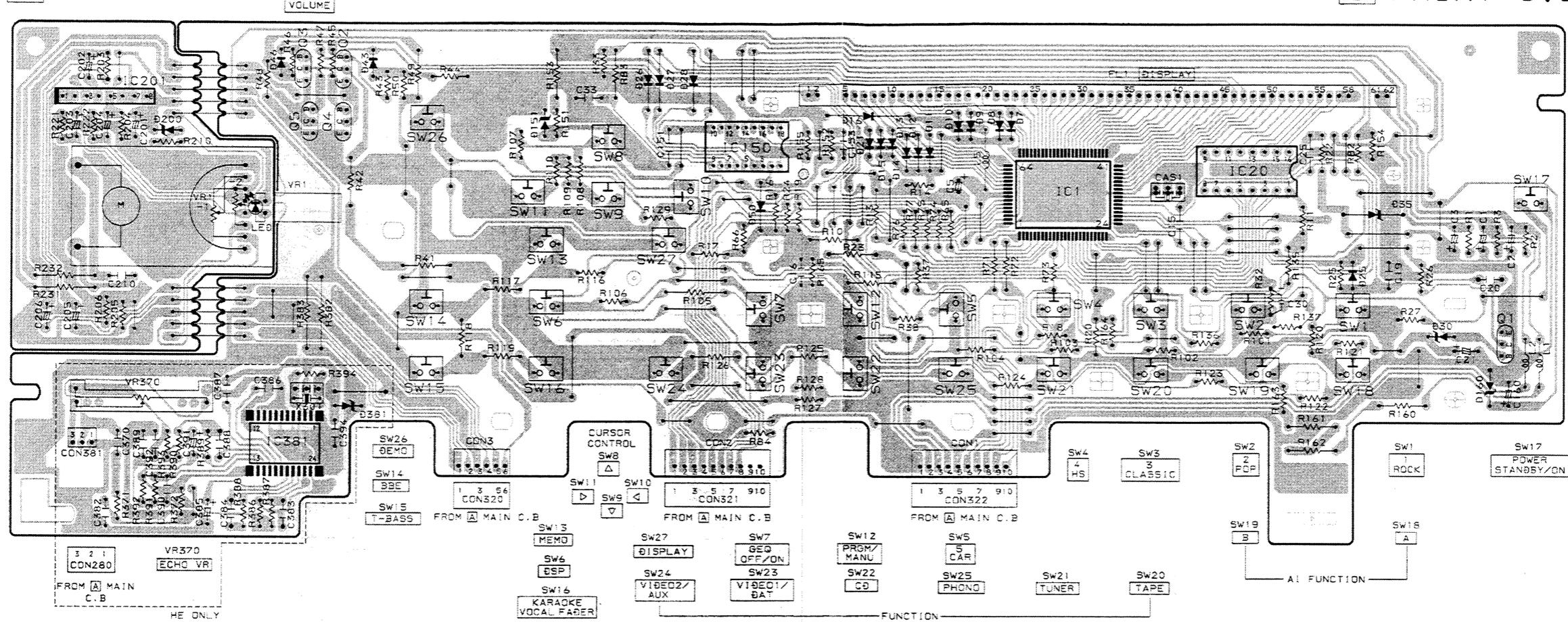
SCHEMATIC DIAGRAM — 2 (MX-Z3000M)



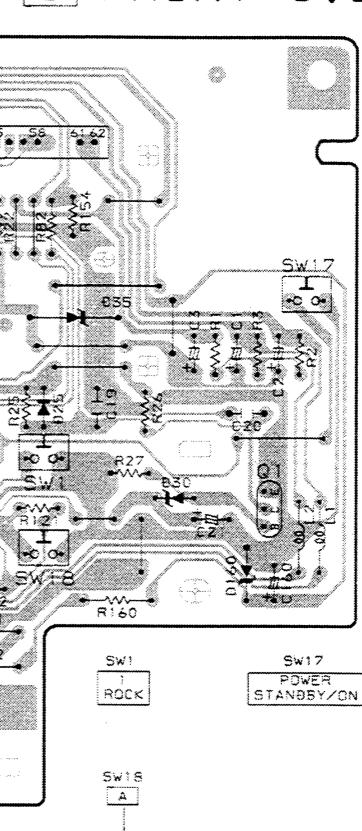
WIRING — 2 (MX-Z3000M)

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14

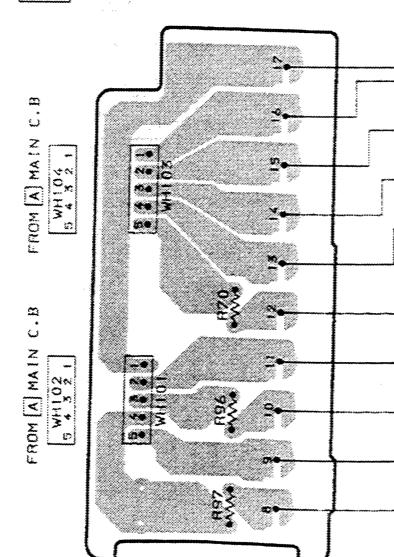
D VOLUME C.B



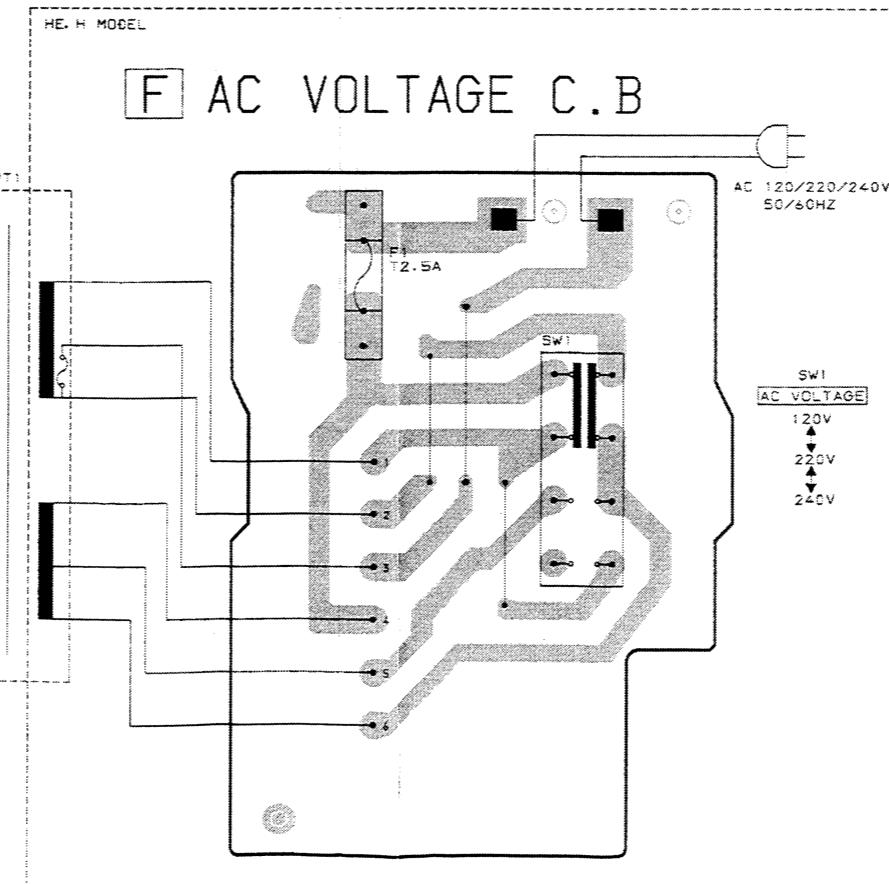
C FRONT C.B



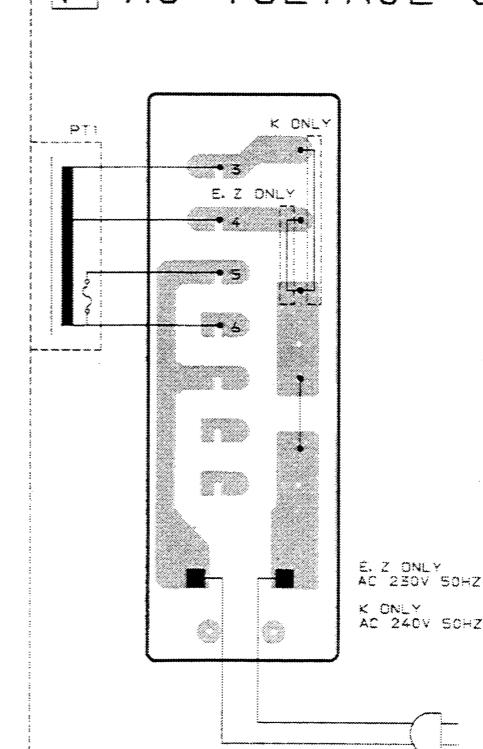
E AC C.B



F AC VOLTAGE C.B



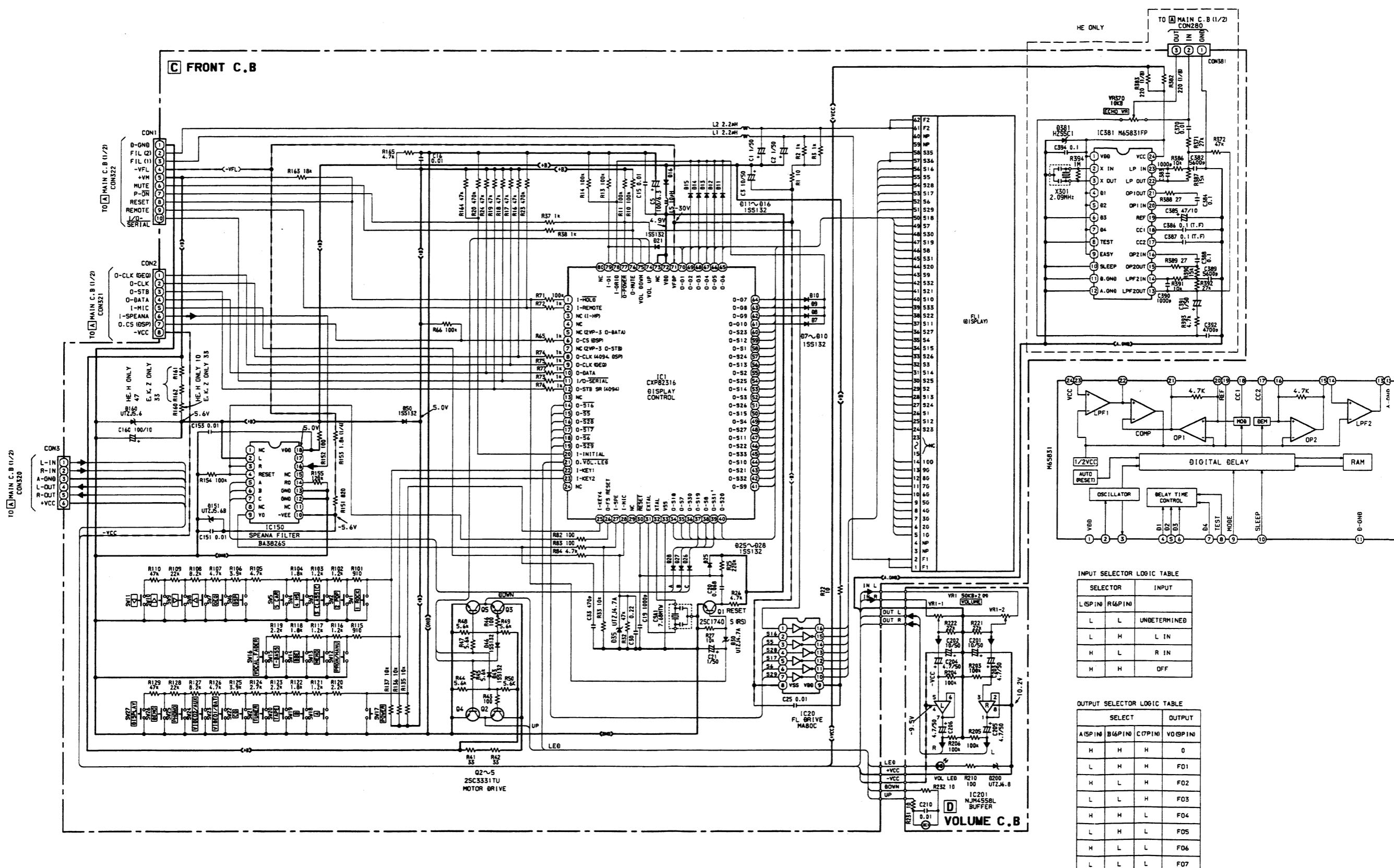
F AC VOLTAGE C.B



GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

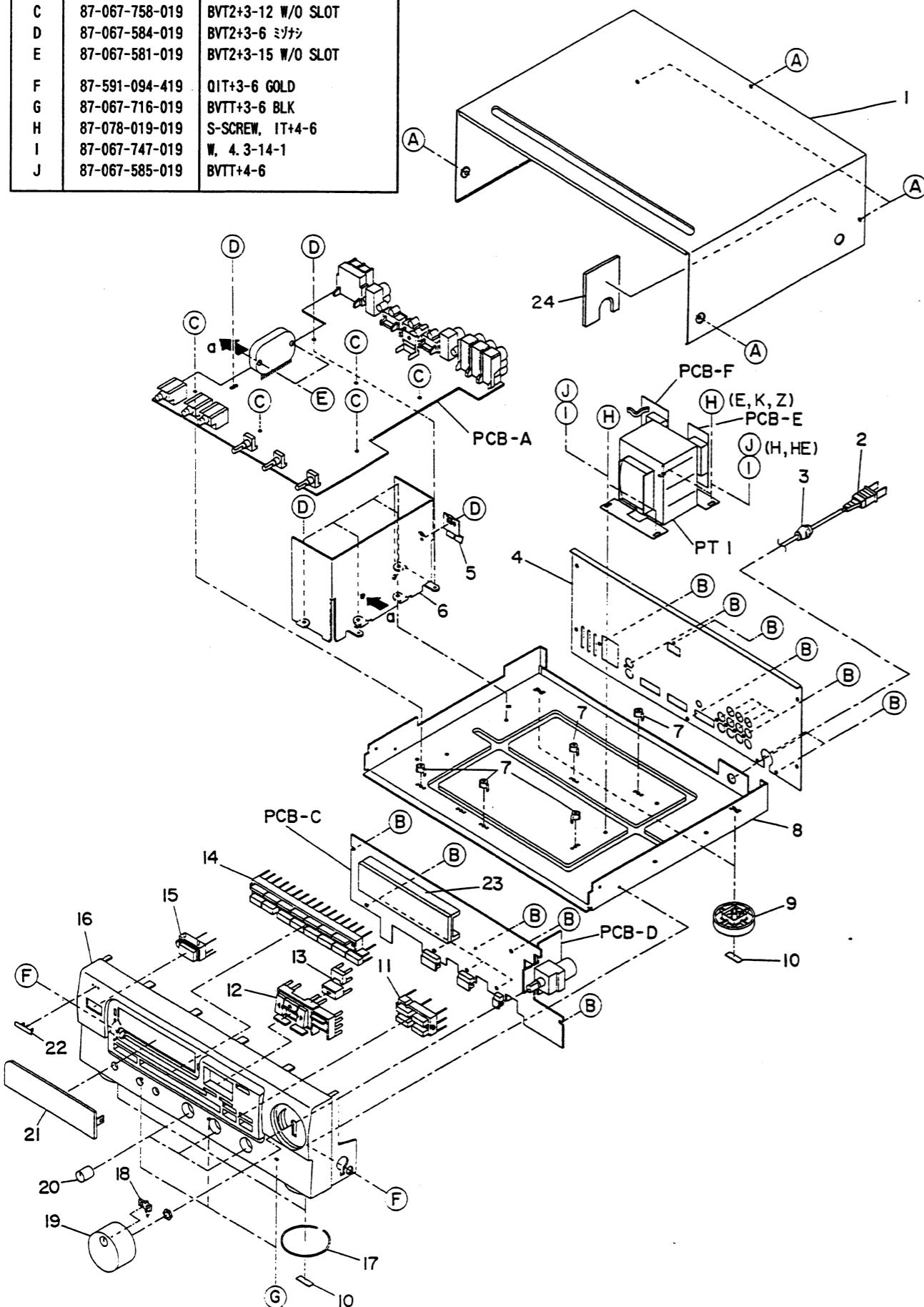
(プリント基板内のケミコンの極性表示は印表示です。)

SCHEMATIC DIAGRAM – 3 (MX-Z3000M)



EXPLODED VIEW (MX-Z3000M)

REF.	PART NO.	DESCRIPTION
A	87-067-641-019	UTT2+3-8 W/O SLOT BLK
B	87-067-660-019	BVT2+3-8 W/O SLOT BLK
C	87-067-758-019	BVT2+3-12 W/O SLOT
D	87-067-584-019	BVT2+3-6 ミナシ
E	87-067-581-019	BVT2+3-15 W/O SLOT
F	87-591-094-419	QIT+3-6 GOLD
G	87-067-716-019	BVTT+3-6 BLK
H	87-078-019-019	S-SCREW, IT+4-6
I	87-067-747-019	W, 4.3-14-1
J	87-067-585-019	BVTT+4-6



MECHANICAL PARTS LIST (MX-Z3000M)

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".

PART NO.	REF. CHANGED TO NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
1	★82-VP2-011-019	CAB, STEEL (H, HE, E, K, Z)			1
1	★82-VP1-016-018	CAB, STEEL G (EE)			1
2	★87-034-749-019	AC CORD, H W/PLUG (H)			1
2	★87-050-034-019	AC CORD ASSY, E (HE, E, Z)			1
2	★87-050-016-018	AC CORD ASSY, E (EE)			1
2	★87-050-032-018	AC CORD ASSY, K 3P S (K)			1
3	★87-085-184-010	BUSHING, AC CORD D (H)			1
3	★87-085-185-010	BUSHING, AC CORD E (HE, E, EE, K, Z)			1
4	★82-VP3-006-019	PANEL, REAR HJBN (H)		*	1
4	★82-VP3-005-019	PANEL, REAR HEJBN (HE)		*	1
4	★82-VP3-013-019	PANEL, REAR EBN (E)		*	1
4	★82-VP3-007-019	PANEL, REAR EBNE (EE)		*	1
4	★82-VP3-014-019	PANEL, REAR KBN (K)		*	1
4	★82-VP3-015-019	PANEL, REAR ZBN (Z)		*	1
5	---	HLDR, IC			1
6	---	HT - SINK, 110			1
7	---	HLDR, PCB 6.0		5	
8	---	CHAS, MAIN		1	
9	★81-VX1-012-019	FOOT, REAR		2	
10	★82-VW2-211-019	FELT, 20 - 7.5 - 2		4	
11	★82-VP3-004-019	KEY, BBE		*	1
12	★82-VP2-004-019	KEY, CRSR		1	
13	★82-VP2-005-019	KEY, CRSR DOWN		1	
14	★82-VP2-003-119	KEY, FUN		1	
15	★82-VP2-002-019	KEY, POWER		1	
16	★82-VP3-002-019	CAB, FR LH (H)		*	1
16	★82-VP3-001-019	CAB, FR H (HE)		*	1
16	★82-VP3-003-019	CAB, FR EX (E, EE, K, Z)		*	1
17	★81-VW1-015-019	RING FOOT		2	
18	★82-MA2-026-019	IND, VOL		1	
19	★82-MA2-023-019	KNOB, VOL		1	
20	★81-VP1-005-019	KNOB, BBE		3	
21	★82-VP2-007-019	WINDOW, AMP		1	
22	★81-DS1-011-019	BADGE, AIWA N		1	
23	★82-VP2-203-019	GUIDE, FL		1	
24	★82-VP2-206-019	SH, CAB STEEL (HE)			1

MODEL NO.

FX - WZ5000

CAUTIONS WHEN SERVICING (FX - WZ5000)

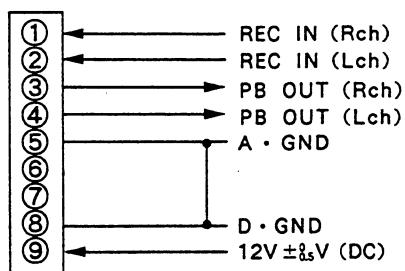
Model FX - WZ5000 does not have a power supply circuit. Power is supplied to it through a 9-pin flat cable and the signal inputs/outputs are also performed through this cable.

When servicing the FX - WZ5000 connect it to the MX - Z3000M so power is supplied to the FX - WZ5000. If the MX - Z3000M is not available, follow the procedure below.

[When servicing the unassembled FX - WZ5000]

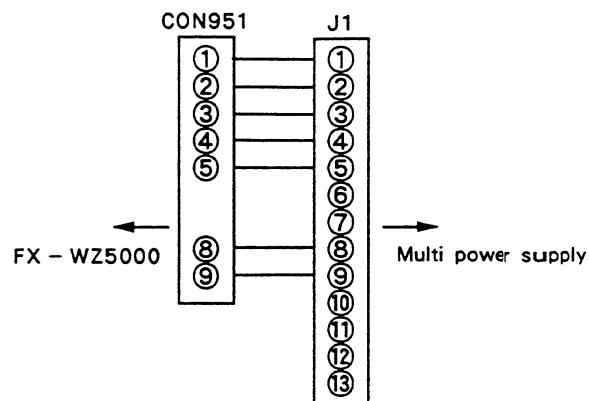
① Supply the following voltages to each terminal from an external power supply.

CON951



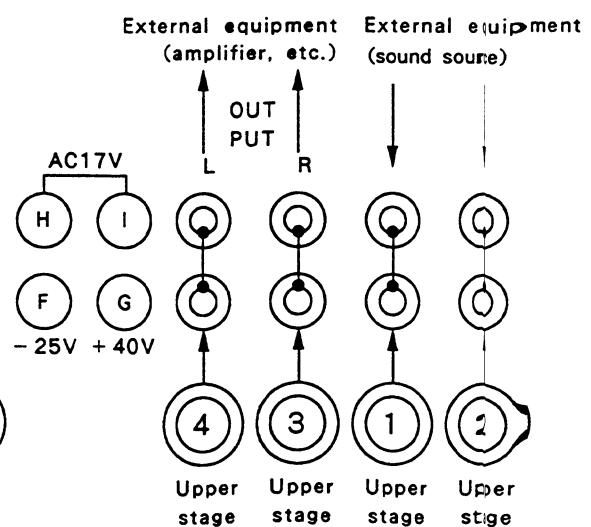
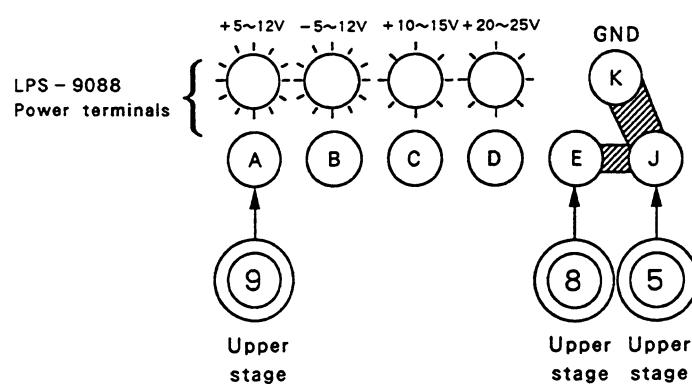
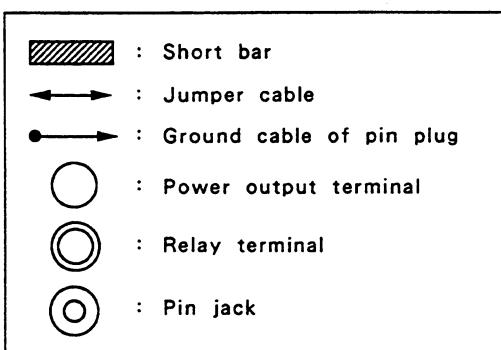
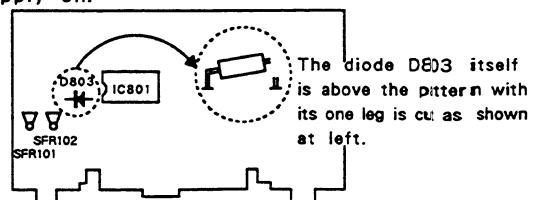
② Connection diagram when using multi power supply. (LPS - 9088)

- Connect a multi-conversion harness for the D5 type to J1.



Connect a multi-conversion harness

- After connecting the multi-conversion harness, connect the leg of the diode D803 on the pattern of the main C.B and then turn the multi-power supply on.



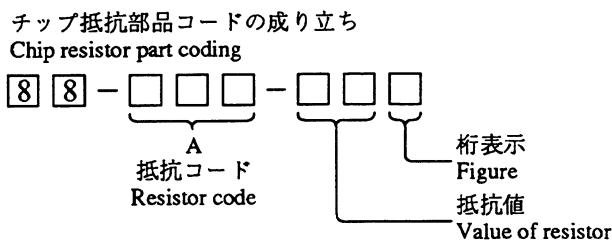
ELECTRICAL MAIN PARTS LIST (FX - WZ5000)

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.	カソリ NO.	DESCRIPTION	REF. NO	PART NO.	カソリ NO.	DESCRIPTION
IC				C214	87-010-197-080	C-CAP, S 0.01-25 B	
87-002-444-010	IC, BU4094B	C215	87-010-197-080	C-CAP, S 0.01-25 B			
87-001-874-010	IC, HA12134A	C251	87-010-186-080	C-CAP, S 4700P-50 B			
87-001-334-010	IC, LB9051A	C252	87-010-149-080	C-CAP, S 5P-50 CH			
82-VW2-631-010	IC, LC66406-4B19	C253	87-010-182-080	C-CAP, S 2200P-50 B			
87-017-022-080	IC, NJM2068M-D (T1)	C254	87-010-596-080	C-CAP, S 0.047-16 RK			
87-001-607-080	IC, NJM4558M	C255	87-012-154-080	C-CAP, S 150P-50 CH			
87-017-023-080	IC, NJU4052BM	C256	87-010-374-080	CAP, E 47-10			
87-001-224-080	IC, NJU4066BM	C257	87-010-401-080	CAP, E 1-50 SME			
87-020-730-080	IC, TC4069UBF	C258	87-010-149-080	C-CAP, S 5P-50 CH			
TRANSISTOR				C259	87-010-178-080	C-CAP, S 1000P-50 B	
89-503-685-089	C-FET, 2SK368GR	C301	87-010-322-080	C-CAP, S 100P-50 CH			
87-026-223-089	C-TR, DTC143TK	C302	87-010-322-080	C-CAP, S 100P-50 CH			
89-113-625-080	C-TR, 2SA1362GR	C303	87-010-183-080	C-CAP, S 2700P-50 B			
89-327-125-080	C-TR, 2SC2712GR	C304	87-010-183-080	C-CAP, S 2700P-50 B			
89-333-266-080	C-TR, 2SC3326B	C305	87-010-404-080	CAP, E 4.7-50 SME			
87-026-227-080	C-TR, DTA114EK	C306	87-010-404-080	CAP, E 4.7-50 SME			
87-026-580-080	C-TR, DTA123JK	C323	87-012-157-080	C-CAP, S 330P-50 CH			
87-026-210-080	C-TR, DTC144EK	C324	87-012-157-080	C-CAP, S 330P-50 CH			
89-112-965-080	TR, 2SA1296GR	C401	87-012-156-080	C-CAP, S 220P-50 CH			
87-026-463-080	TR, 2SA933S (RS)	C402	87-012-156-080	C-CAP, S 220P-50 CH			
89-109-521-080	TR, 2SA952K	C403	87-014-071-080	CAP, PP 3900P-100 J			
89-318-155-080	TR, 2SC1815GR	C405	87-010-221-080	CAP, E 470-10			
89-320-011-080	TR, 2SC2001K	C409	87-010-402-080	CAP, E 2.2-50 SME			
87-026-214-080	TR, DTA114YS	C451	87-010-178-080	C-CAP, S 1000P-50 B			
87-026-218-080	TR, DTC144ES	C453	87-010-322-080	C-CAP, S 100P-50 CH			
DIODE				C454	87-010-322-080	C-CAP, S 100P-50 CH	
87-017-024-080	C-DIODE, DA204K	C501	87-012-140-080	C-CAP, S 470P-50 CH			
87-020-331-080	C-DIODE, DAN202K	C502	87-012-140-080	C-CAP, S 470P-50 CH			
87-020-330-080	C-DIODE, DAP202K	C503	87-010-182-080	C-CAP, S 2200P-50 B			
87-001-559-050	DIODE, 1SS131 RA	C504	87-010-182-080	C-CAP, S 2200P-50 B			
87-002-564-080	DIODE, 1SS133 RA	C505	87-010-404-080	CAP, E 4.7-50 SME			
87-020-123-080	DIODE, DS446	C506	87-010-404-080	CAP, E 4.7-50 SME			
87-020-109-019	LED, SLF-201C (YJ)	C511	87-010-545-080	CAP, E 0.22-50 SME			
87-001-290-050	ZENER, HZS6B1L RA	C512	87-010-545-080	CAP, E 0.22-50 SME			
87-001-731-050	ZENER, HZS6C2L RA	C517	87-010-371-080	CAP, E 470-6.3			
87-020-584-080	ZENER, 02C25.6Y	C518	87-010-401-080	CAP, E 1-50 SME			
MAIN C. B				C519	87-010-404-080	CAP, E 4.7-50 SME	
C101	87-012-158-080	C-CAP, S 390P-50 CH	C520	87-010-404-080	CAP, E 4.7-50 SME		
C102	87-012-158-080	C-CAP, S 390P-50 CH	C601	87-010-404-080	CAP, E 4.7-50 SME		
C103	87-010-318-080	C-CAP, S 47P-50 CH	C602	87-010-381-080	CAP, E 330-16 SME		
C104	87-010-318-080	C-CAP, S 47P-50 CH	C603	87-010-101-080	CAP, E 220-16 SME		
C105	87-010-426-080	C-CAP, S 0.012-25 B	C604	87-010-237-080	CAP, E 1000-16		
C106	87-010-426-080	C-CAP, S 0.012-25 B	C605	87-010-198-080	C-CAP, S 0.022-25 B		
C109	87-012-154-080	C-CAP, S 150P-50 CH	C606	87-010-546-080	CAP, E 0.33-50 SME		
C110	87-012-154-080	C-CAP, S 150P-50 CH	C607	87-010-371-080	CAP, E 470-6.3		
C111	87-010-404-080	CAP, E 4.7-50 SME	C608	87-010-198-080	C-CAP, S 0.022-25 B		
C112	87-010-404-080	CAP, E 4.7-50 SME	C609	87-015-822-080	C-CAP, 0.022		
C113	87-010-404-080	CAP, E 4.7-50 SME	C801	87-010-404-080	CAP, E 4.7-50 SME		
C114	87-010-404-080	CAP, E 4.7-50 SME	C951	87-012-140-080	C-CAP, S 470P-50 CH		
C115	87-010-101-080	CAP, E 220-16 SME	C952	87-010-186-080	C-CAP, S 4700P-50 B		
C116	87-010-197-080	C-CAP, S 0.01-25 B	CF801	89-MX1-704-080	CERA LOCK (MU) 3.9MHZ		
C117	87-010-197-080	C-CAP, S 0.01-25 B	L301	87-005-525-080	COIL, 22MH-J		
C201	87-012-157-080	C-CAP, S 330P-50 CH	L302	87-005-525-080	COIL, 22MH-J		
C202	87-012-157-080	C-CAP, S 330P-50 CH	L303	87-003-131-080	COIL, 10MH J		
C203	87-010-318-080	C-CAP, S 47P-50 CH	L304	87-003-131-080	COIL, 10MH J		
C204	87-010-318-080	C-CAP, S 47P-50 CH	L305	87-003-123-080	COIL, 2.2MH J		
C205	87-010-426-080	C-CAP, S 0.012-25 B	L306	87-003-123-080	COIL, 2.2MH J		
C206	87-010-426-080	C-CAP, S 0.012-25 B	L401	80-VW1-605-010	COIL, OSC BIAS 108K		
C207	87-012-156-080	C-CAP, S 220P-50 CH	L601	87-005-474-080	COIL, 12UH J FLR50		
C208	87-012-156-080	C-CAP, S 220P-50 CH	R408	87-025-471-080	RES, NF 4.7-1/4W J		
C209	87-010-318-080	C-CAP, S 47P-50 CH	SFR101	87-024-349-080	SFR, 1K DIA6 H		
C210	87-010-318-080	C-CAP, S 47P-50 CH	SFR102	87-024-349-080	SFR, 1K DIA6 H		
C211	87-010-404-080	CAP, E 4.7-50 SME	SFR201	87-024-349-080	SFR, 1K DIA6 H		
C212	87-010-404-080	CAP, E 4.7-50 SME	SFR202	87-024-349-080	SFR, 1K DIA6 H		
C213	87-010-101-080	CAP, E 220-16 SME	SFR301	87-024-353-080	SFR, 10K DIA6 H		
			SFR302	87-024-353-080	SFR, 10K DIA6 H		
			SFR401	87-024-356-080	SFR, 47K DIA6 H		
			SFR402	87-024-356-080	SFR, 47K DIA6 H		

REF. NO	PART NO.	カソリ NO.	DESCRIPTION	REF. NO	PART NO.	カソリ NO.	DESCRIPTION		
FRONT-1 C. B									
S905	87-036-215-080		SW, TACT EVO-21404M (STOP)	M1	87-045-348-010		MOT, SHW 2L 70		
S906	87-036-215-080		SW, TACT EVO-21404M (F. FWD)	PIN701	87-009-236-010		CONN, 8P PH H		
S907	87-036-215-080		SW, TACT EVO-21404M (PLAY)	SFR1	87-024-170-080		SFR, 3.3K DIA 6V		
S908	87-036-215-080		SW, TACT EVO-21404M (REW)	SFR2	87-024-171-080		SFR, 4.7K DIA 6V		
				SOL1	82-ZM1-618-010		SOL ASSY, 27		
FRONT-2 C. B									
C901	87-010-405-080		CAP, E 10-50 SME	SW4	87-036-110-010		SW, PUSH SPPB 62 (CR02)		
C902	87-018-134-080		CAP, TC-U 0.01-16 Y	SW5	87-036-110-010		SW, PUSH SPPB 62 (CST)		
D901	81-DS2-639-080		LED, SEL-1321G TP7 (DECK 1)	SW6	87-036-110-010		SW, PUSH SPPB 62 (STOP)		
D902	81-DS2-639-080		LED, SEL-1321G TP7 (DECK 1)	DECK-1 C. B					
D903	81-DS2-639-080		LED, SEL-1321G TP7 (DECK 2)	M2	87-045-348-010		MOT, SHW 2L 70		
D904	81-DS2-639-080		LED, SEL-1321G TP7 (DECK 2)	PIN702	87-009-752-010		CONN, 11P PH H WHT		
D905	81-DS2-639-080		LED, SEL-1321G TP7 (DOLBY NR)	SFR1	87-024-170-080		SFR, 3.3K DIA 6V		
D907	81-DS2-639-080		LED, SEL-1321G TP7 (DECK 2)	SFR2	87-024-171-080		SFR, 4.7K DIA 6V		
D908	81-DS2-639-080		LED, SEL-1321G TP7 (REVERSE)	SOL2	82-ZM1-618-010		SOL ASSY, 27		
D909	81-DS2-639-080		LED, SEL-1321G TP7 (MODE)	SW1	87-036-110-010		SW, PUSH SPPB 62 (MT)		
D910	87-017-295-080		LED, SEL-1921D TP7 (PAUSE)	SW2	87-036-110-010		SW, PUSH SPPB 62 (REC B)		
D911	87-032-637-080		LED, SEL-1121R TP7 (REC/MUTE)	SW3	87-036-110-010		SW, PUSH SPPB 62 (REC A)		
D912	87-032-637-080		LED, SEL-1121R TP7 (CD S REC)	SW4	87-036-110-010		SW, PUSH SPPB 62 (CR02)		
D913	87-032-637-080		LED, SEL-1121R TP7 (SYNC DUB)	SW5	87-036-110-010		SW, PUSH SPPB 62 (CST)		
S901	87-036-215-080		SW, TACT EVO-21404M (CD S RE)	SW6	87-036-110-010		SW, PUSH SPPB 62 (STOP)		
S902	87-036-215-080		SW, TACT EVO-21404M (NORMAL)	RELAY-1 C. B					
S903	87-036-215-080		SW, TACT EVO-21404M (HIGH)	RELAY-2 C. B					
S904	87-036-215-080		SW, TACT EVO-21404M (DOLBY)	MISCELLANEOUS					
S909	87-036-215-080		SW, TACT EVO-21404M (REV MD)	PH	87-046-355-010		HEAD, PH HADKH2529B (J1)		
S912	87-036-215-080		SW, TACT EVO-21404M (REC/MUT)	RPH	87-046-356-010		HEAD, RPH HADKH5581B (D2)		
S913	87-036-215-080		SW, TACT EVO-21404M (REW/MS)						
S914	87-036-215-080		SW, TACT EVO-21404M (PB/DIR)						
S915	87-036-215-080		SW, TACT EVO-21404M (MS/FF)						
S916	87-036-215-080		SW, TACT EVO-21404M (STOP)						
S917	87-036-215-080		SW, TACT EVO-21404M (PAUSE)						

○チップ抵抗部品コード / CHIP RESISTOR PART CODE

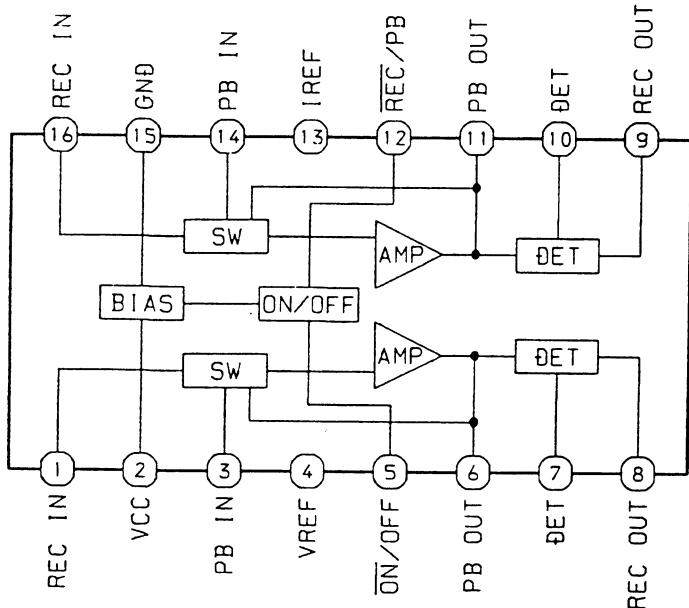


チップ抵抗
Chip resistor

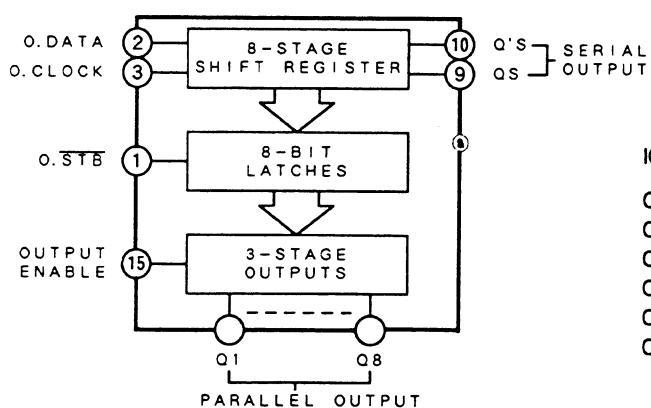
Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions / 尺寸 (mm)			Resistor code : A 抵抗コード : A
				Form/外形	L	W	
1/32W	1608	±5%	CJ		1.6	0.8	0.35 108
1/10W	2125	±5%	CJ		2	1.25	1.45 118
1/8W	3216	±5%	CJ		3.2	1.6	0.5 ~0.7 128

IC BLOCK DIAGRAM (FX-WZ5000)

IC, HA12134A



IC, BU4094B



IC901

Q1 : O.LED DOLBY B
Q2~Q4 : NC
Q5 : O.LED ▷ 1
Q6 : O.LED ▲ 1
Q7 : O.LED ▷ 2
Q8 : O.LED ▲ 2

IC902

Q1 : O.LED REC
Q2 : O.LED CD
Q3 : O.LED DECK
Q4 : NC
Q5 : O.LED ←←
Q6 : O.LED ←→
Q7 : O.LED ←→
Q8 : O.LED PAUSE

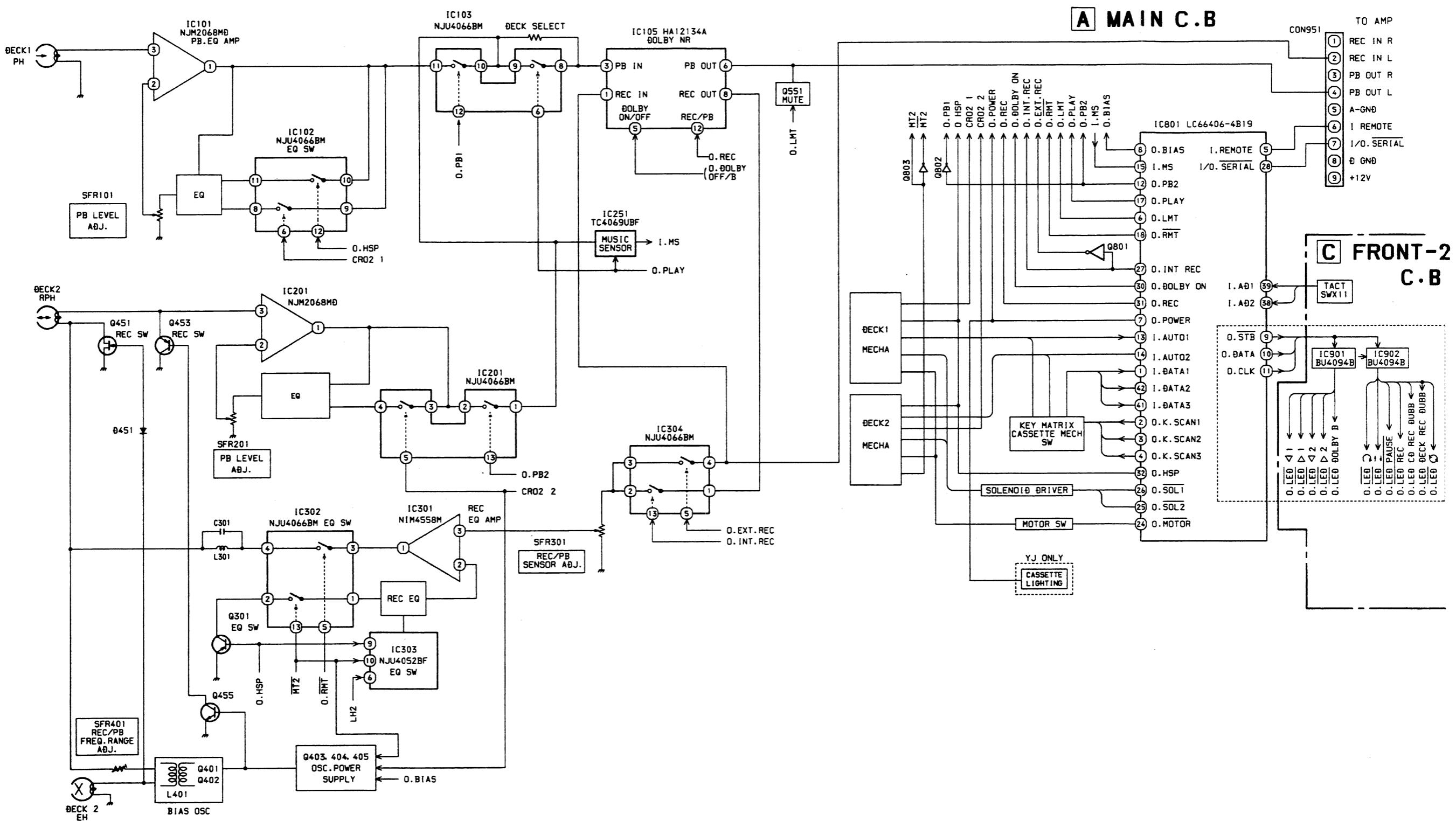
TRUTH TABLE

CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	QS	Q'S
↑	L	X	X	Z	Z	Q7	NO CHG.
↓	L	X	X	Z	Z	NO CHG.	QS
↑	H	L	X	NO CHG.	NO CHG.	Q7	NO CHG.
↓	H	H	L	L	Qn - 1	Q7	NO CHG.
↑	H	H	H	H	Qn - 1	Q7	NO CHG.
↓	H	X	X	NO CHG.	NO CHG.	NO CHG.	QS

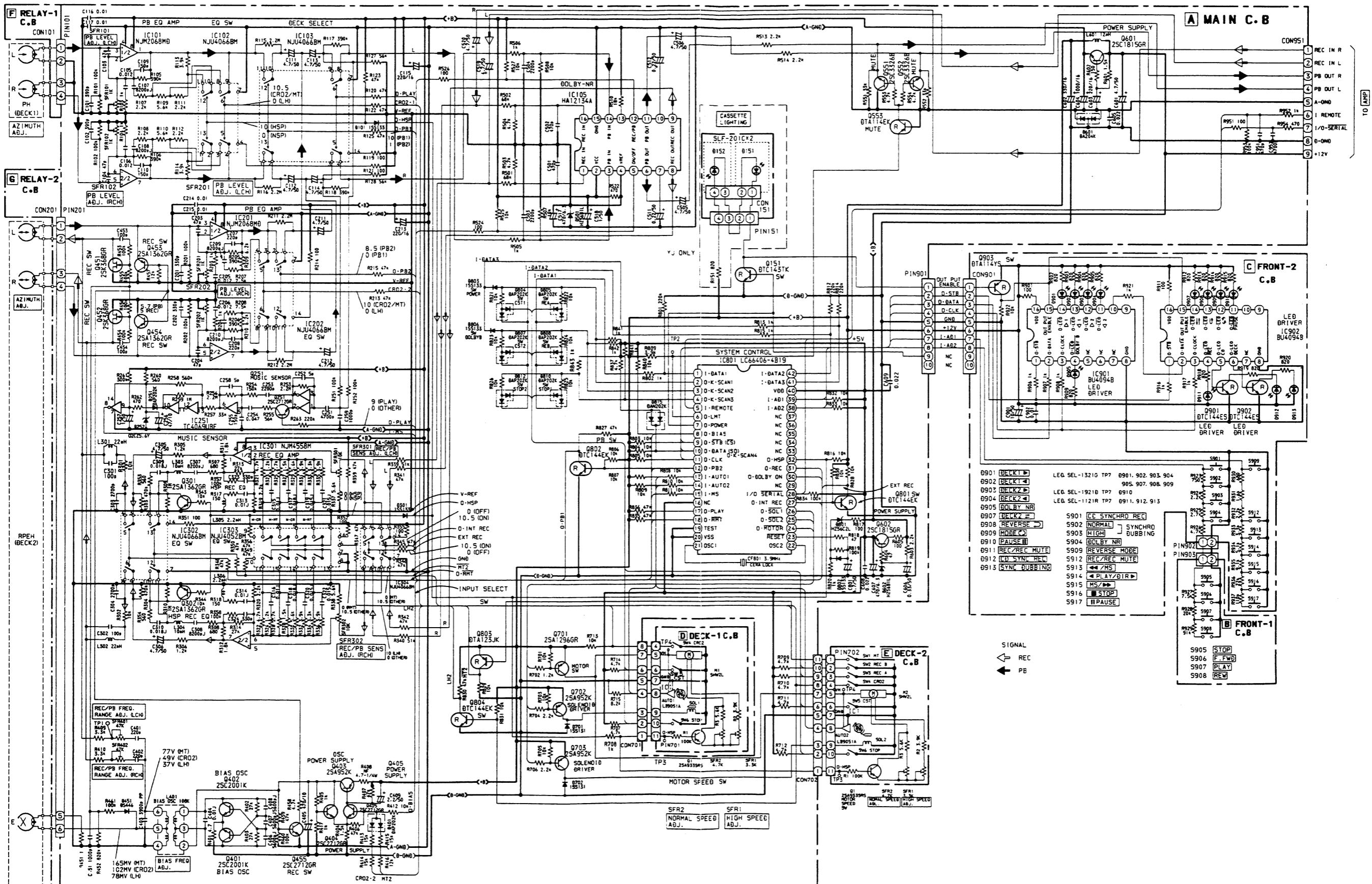
Z = HIGH IMPEDANCE

X = DON'T CARE

BLOCK DIAGRAM (FX - WZ5000)



SCHEMATIC DIAGRAM (FX - WZ5000)



WIRING - 1 (FX - WZ5000)

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14

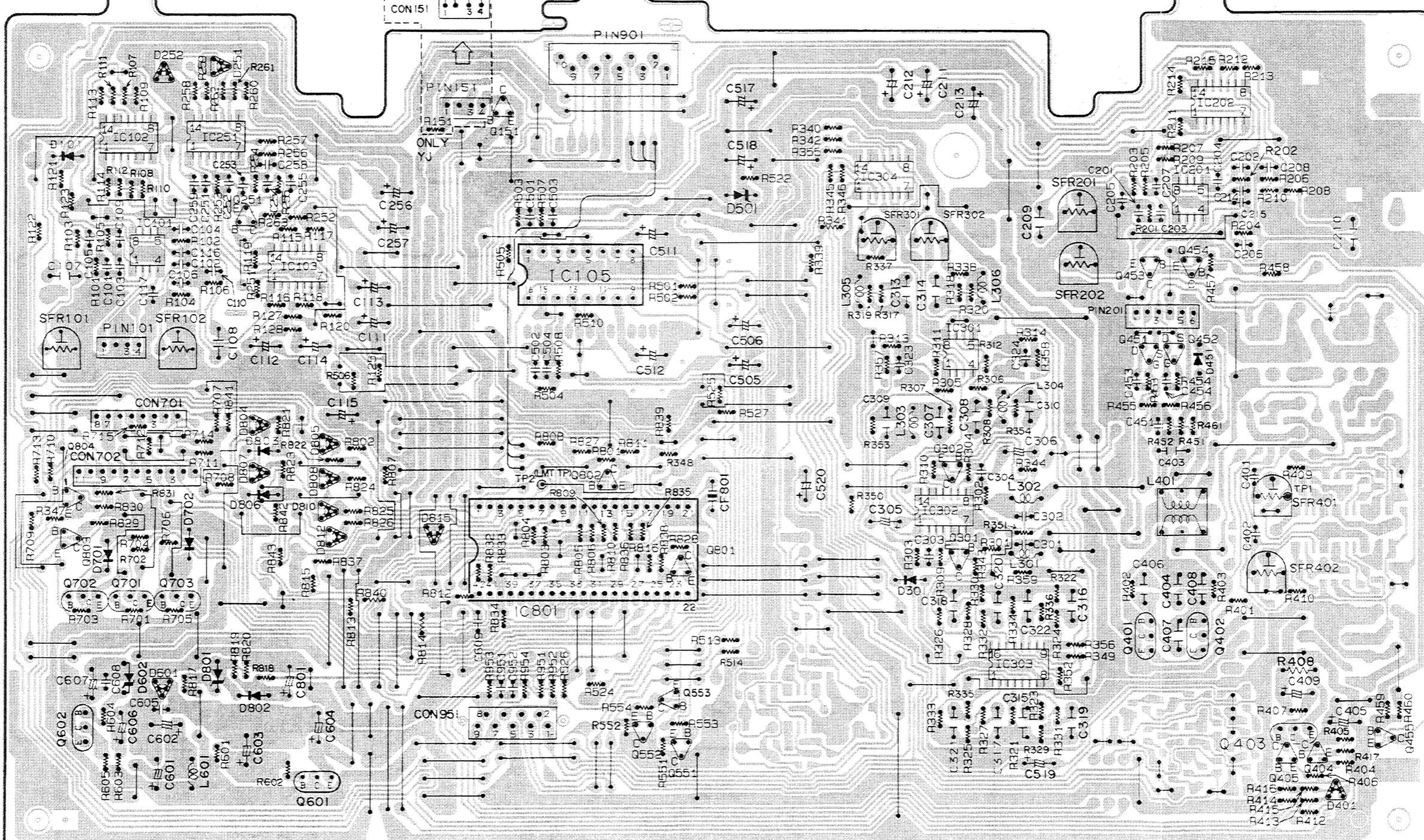
A MAIN C. B

TO [] RELAY-1 C. B
CON 101
1 2 3 4

CASSETTE
LIGHTING
D152 D151

TO [] FRONT-2 C. B
CON 901
IO 9 8 7 6 5 4 3 2 1

TO [] RELAY-2 C. B
CON 201
1 2 3 4 5 6



1 1 1 0 9 8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

9 8 7 6 5 4 3 2 1
CON 951

TO [] DECK-2 C. B
PIN 702

TO [] DECK-1 C. B
PIN 701

TO [] AMP

GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF
ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

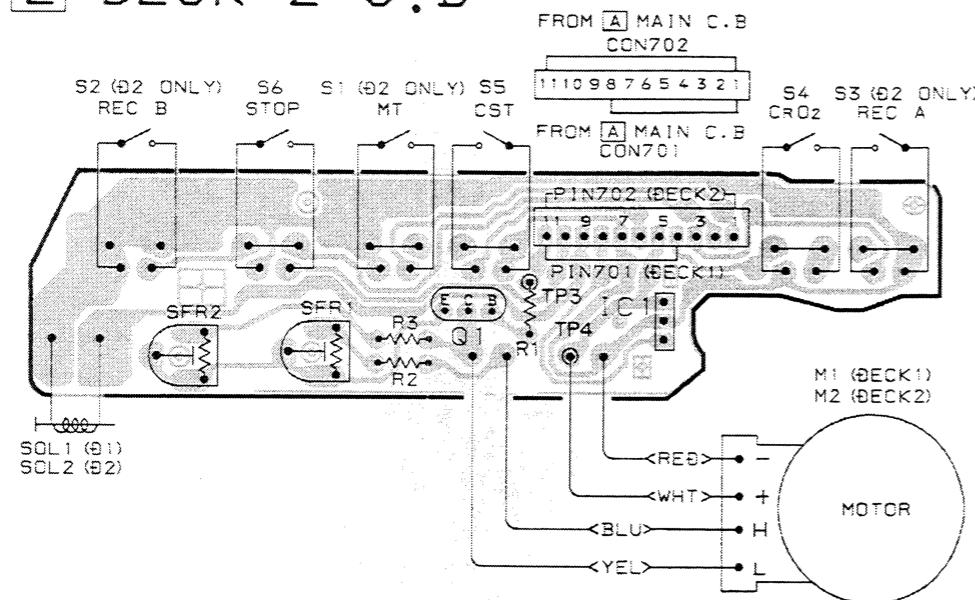
(プリント基板内のケミコンの極性表示はθ表示です。)

WIRING - 2 (FX - WZ5000)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

D DECK-1 C.B

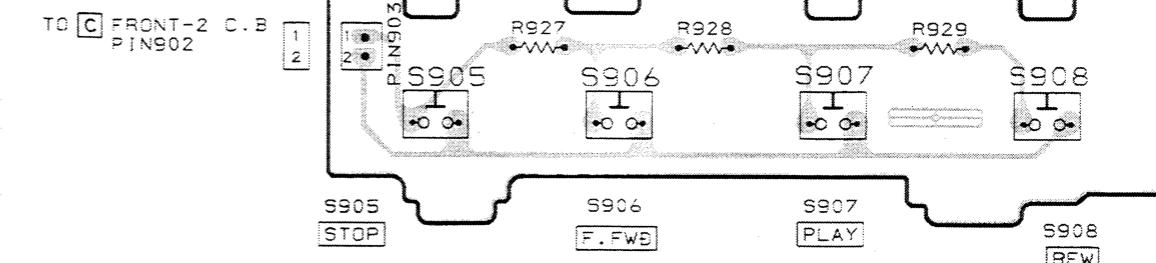
E DECK-2 C.B



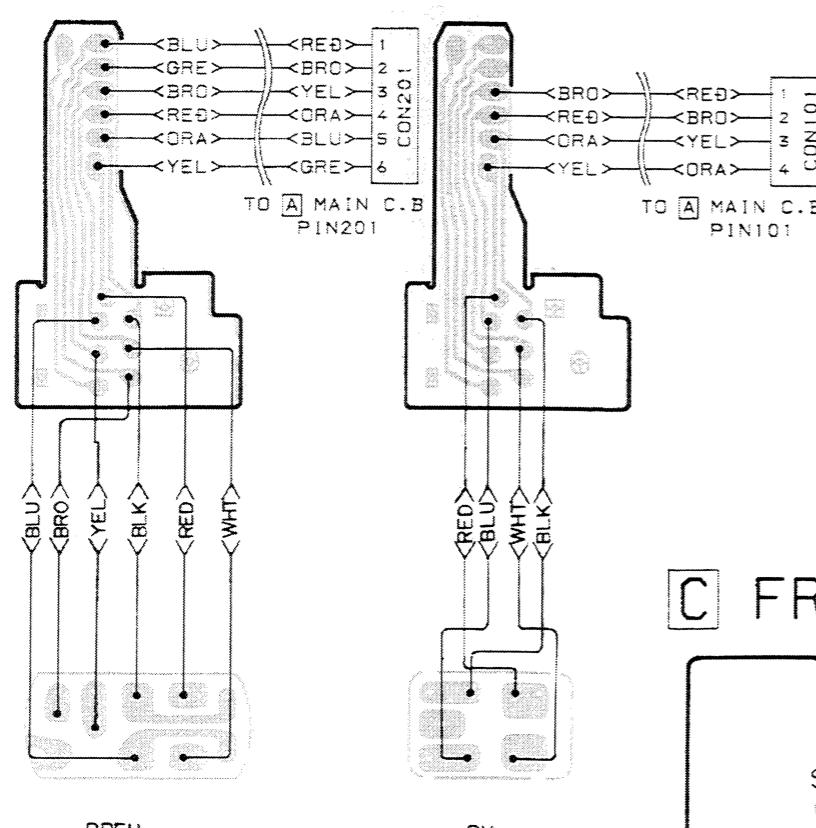
GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF
ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示は印表示です。)

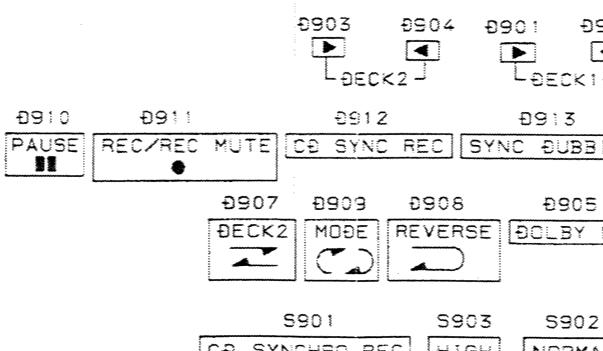
B FRONT-1 C.B



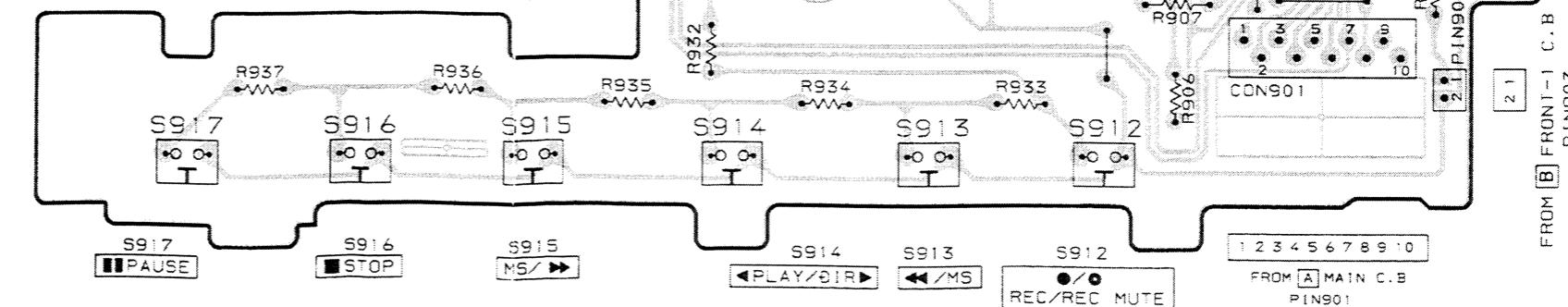
G RELAY-2 C.B



F RELAY-1 C.B

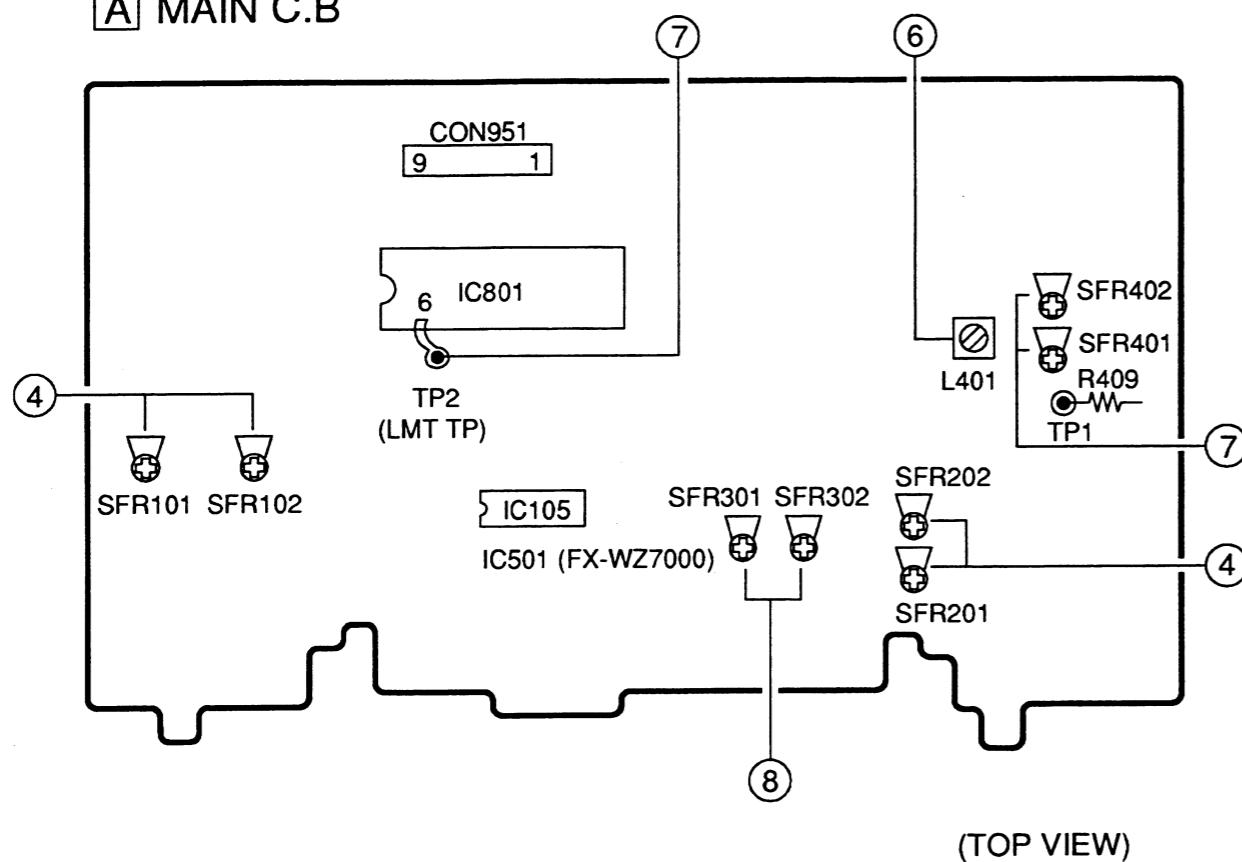


C FRONT-2 C.B



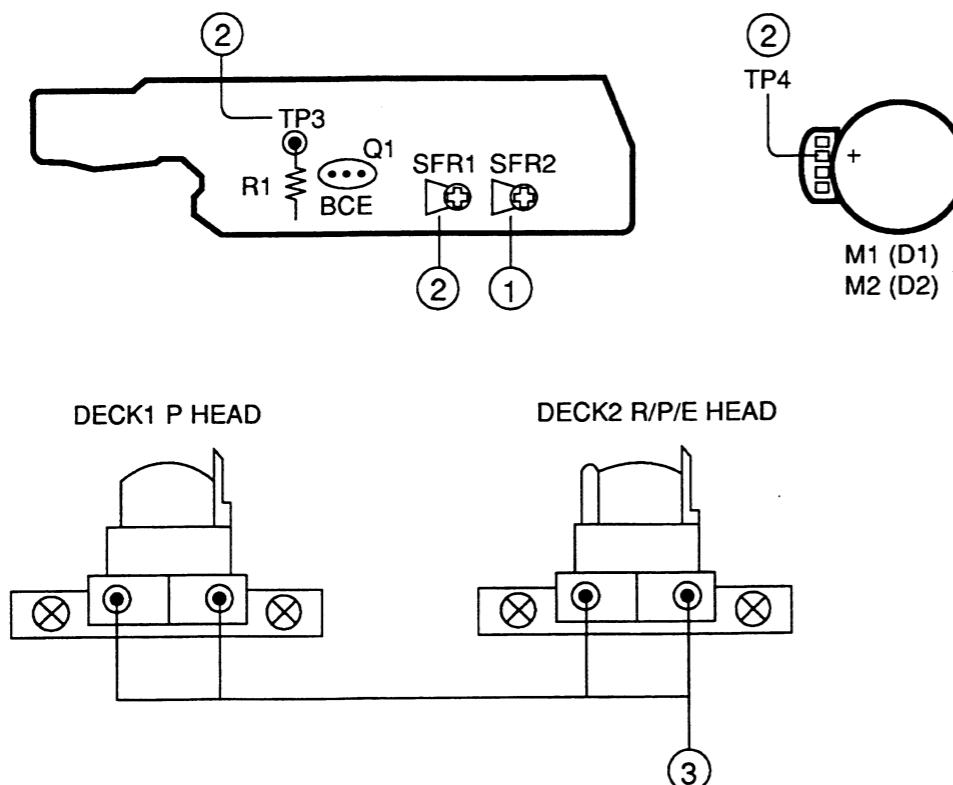
ADJUSTMENT (FX-WZ5000)

A MAIN C.B



D DECK-1 C.B

E DECK-2 C.B



1. Normal Speed Adjustment (DECK1, DECK2)

- Settings: • Test tape: TTA-100 (TTA-111S)
- Test Point: PB-OUT (CON951)
- Adjustment Location: SFR2 (DECK1)
SFR2 (DECK2)

Method: Play back the test tape, adjust for $3000 \pm 7\text{Hz}$.

2. High Speed Adjustment (DECK1, DECK2)

- Settings: • Test tape: TTA-100 (TTA-111S)
- Test Point: PB-OUT (CON951)
- Adjustment Location: SFR1 (DECK1)
SFR1 (DECK2)

Method: After normal speed adjustment, play back the test tape, and make the high speed condition to be shorted between TP3 and TP4. Adjust for $6000 \pm 10\text{Hz}$.

3. Head Azimuth Adjustment (DECK1, DECK2)

- Settings: • Test tape: TTA-310 (TTA-317E, SCC-1429)
- Test Point: PB-OUT (CON951)
- Adjustment Location: Head azimuth adjustment screw

Method: Play back the 10kHz signal of the test tape and adjust so that the output becomes maximum in each FWD PLAY and REV PLAY mode.

4. PB Level Adjustment (DECK1, DECK2)

- Settings: • Test tape: TTA-200 (TTA-161, TCC-130)
- Test Point: PB-OUT (CON951)
- Adjustment Location: SFR101 (DECK1, Lch)
SFR102 (DECK1, Rch)
SFR201 (DECK2, Lch)
SFR202 (DECK2, Rch)

Method: Play back the test tape and adjust so that the output becomes $280\text{mV} \pm 15\text{mV}$.

5. FWD/REV Playback Output Difference Check (DECK1, DECK2)

- Settings: • Test tape: TTA-200 (TTA-161, TCC-130)
- Test Point: PB-OUT (CON951)

Method: Play back the test tape and make sure that the output difference between the FWD and REV modes is $0\text{dB} \pm 0.7\text{dB}$.

6. Bias Frequency Adjustment (DECK2)

- Settings: • Test tape: TTA-601 (TTA-600, TTA-119K)
- Test Point: TP1
- Adjustment Location: L401

Method: Set DECK2 to the record mode and adjust L401 so that the frequency at TP1 is $107.5\text{kHz} \pm 1.5\text{kHz}$.

7. REC/PB Frequency Response Adjustment (DECK2)

- Settings: • Test tape: TTA-601 (TTA-600, TTA-119K)
- Test Point: PB-OUT (CON951)
- Adjustment Location: SFR401 (Lch)
SFR402 (Rch)

Method: Connect TP2 (LMT TP) to ground (chassis), apply a 1kHz signal and adjust attenuator so that the level at the PB OUT is 25mV . Record and play back the 1kHz and 10kHz signals and adjust so that the output level of 10kHz signal is $0\text{dB} \pm 0.3\text{dB}$ for 1kHz signal. After adjustment, remove the grounding lead wire.

8. REC/PB Sensitivity Adjustment (DECK2)

- Settings: • Test tape: TTA-601 (TTA-600, TTA-119K)
- Test Point: PB-OUT (CON951)
- Adjustment Location: SFR301(Lch)
SFR302 (Rch)

Method: Connect TP2 (LMT TP) to ground (chassis), apply a 1kHz signal and adjust attenuator so that the level at the PB OUT is 25mV . Record and play back the 1kHz signal and adjust so that the output level of is $25\text{mV} \pm 0.3\text{dB}$. After adjustment, remove the grounding lead wire.

PRACTICAL SERVICE FIGURE (FX-WZ5000)

PB output level:	$280\text{mV} \pm 34\text{mV}$ TTA-200 (TTA-161, TCC-130)
REC/PB output level: Distortion (REC/PB):	$250\text{mV} \pm 1\text{dB}$ (PB-OUT, 1kHz) Less than 2.0% (NORM., CrO ₂)
Erasing ratio:	More than 60dB
Crosstalk:	More than 60dB
Channel separation:	More than 35dB
Noise (REC/PB):	Less than 2.0mV (DOLBY OFF NORM.) Less than 1.0mV. (DOLBY B ON CrO ₂ , MT) Less than 0.8mV (DOLBY C ON CrO ₂ , MT)
Noise (PB):	Less than 1.8mV (DOLBY OFF NORM.) Less than 0.9mV (DOLBY B ON CrO ₂) Less than 0.8mV (DOLBY C ON CrO ₂)
Recording bias frequency:	108kHz
Tape speed:	$3000\text{Hz} \pm 1.5\%$
Wow & flutter (RMS):	Less than 0.35% (DECK1, 2)
Take-up torque:	30~55g·cm (DECK1, 2)
F.F & REW torque:	75~160g·cm (DECK1, 2)
Back tension:	2~6g·cm (DECK1, 2)
Test tape:	NORMAL:TTA-601 (TTA-600, TTA-119K) CrO ₂ : TTA-610 (TTA-119H)

IC DESCRIPTION (FX-WZ5000)

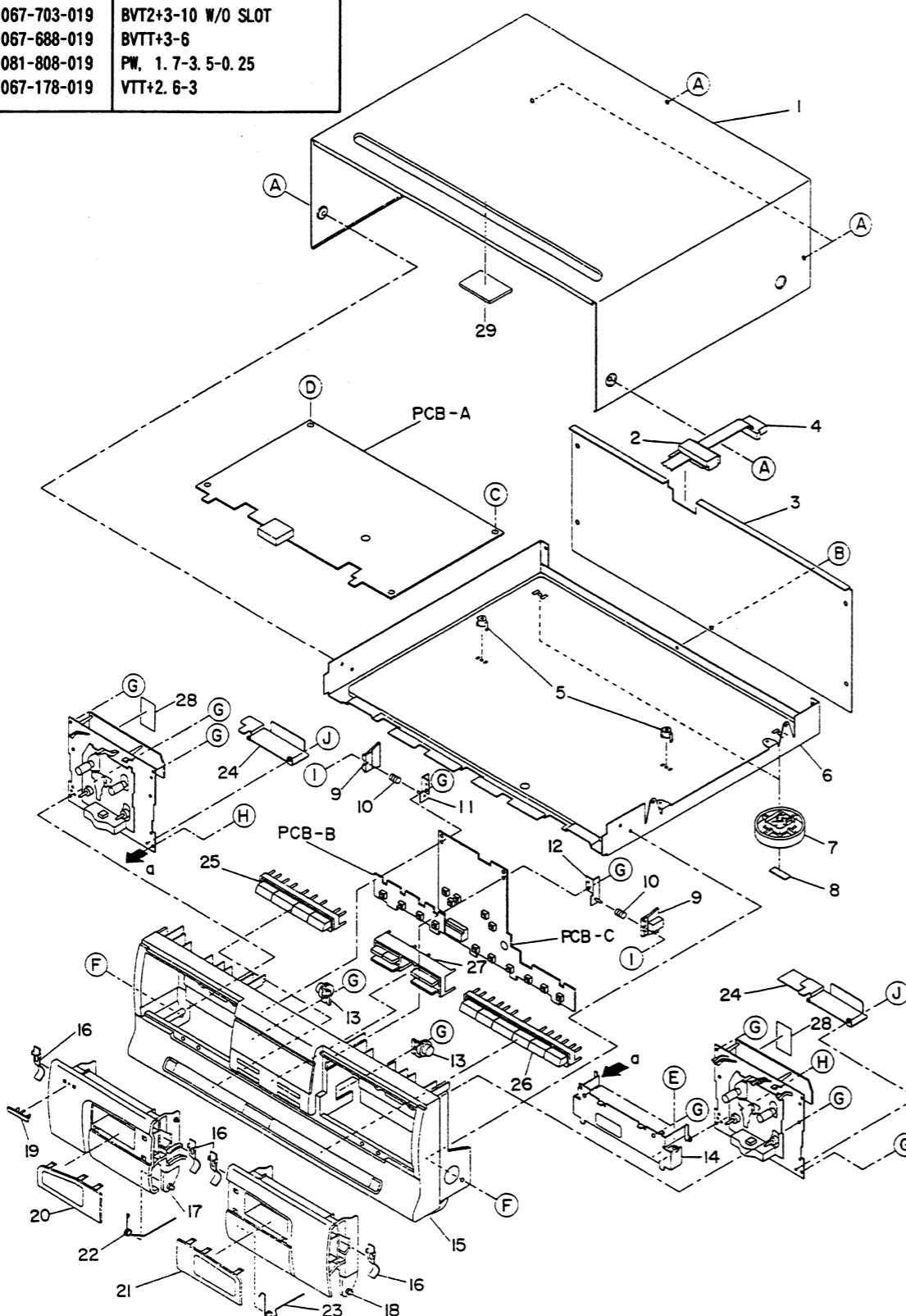
IC, LC66406-4B19

Pin No.	Pin Name	I/O	Description			
			KEY DATA input			
			When K · SCAN1 is "H"	When K · SCAN2 is "H"	When K · SCAN3 is "H"	When K · SCAN4 is "H"
1	I · DATA1	I	DECK2 REC A SW input	DECK2 REC B SW input	DECK1 STOP SW input	SW CD HIGH SPEED (ON/OFF)
42	I · DATA2	I	DECK1 CST SW input	DECK2 CST SW input	DECK2 STOP SW input	SW CAL (Calibration) (ON/OFF)
41	I · DATA3	I	SW · POWER input	SW · DOLBY C (ON/OFF)	DECK1/2 SW input	
2	O · K · SCAN1	O	SCAN output terminal of DATA 1~3.			
3	O · K · SCAN2	O				
4	O · K · SCAN3	O				
5	I · REMOTE	I	Serial data input terminal of remote controller.			
6	O · LMT	O	Output terminal for record/playback monitor output signal muting. "H" at muting.			
7	O · POWER	O	POWER ON/OFF control. "H" at ON.			
8	O · BIAS	O	Bias oscillation output terminal for DECK 2. "H" at recording/dubbing. "L" at resetting.			
9	O · STB (CS)	O	Strobe signal for the shift register (IC, BU4094).			
10	O · DATA (SO) / K · SCAN4	O	Serial data for the shift register (IC, BU4094).			
11	O · CLK	O	Serial data clock signal for the shift register (IC, BU4094).			
12	O · PB2	O	Playback output control terminal for DECKS 1 and 2. "H" at playback with DECK 2.			
13	I · AUTO1	I	Reel pulse input terminal for DECK 1.			
14	I · AUTO2	I	Reel pulse input terminal for DECK 2.			
15	I · MS	I	MS signal input terminal. Active "H".			
16	NC	—	Not used. (Connected to +5V)			
17	O · PLAY	O	Cue/review mute output and MS sensitivity switching output terminal. "H" at playback.			
18	O · RMT	O	Muting output terminal for recording input. "H" at record mute, record start, record clear and record pause.			
19	TEST	—	MPU test terminal. Connected to D-GND.			
20	VSS	—	Connected to D-GND.			
21	OSC1	—	3.9MHz Oscillation terminal			
22	OSC2	—				
23	RESET	I	Reset input terminal. Active "L".			
24	O · MOTOR	O	Main motor control output terminal for DECK 1 and 2. "H" with both decks at STOP.			
25	O · SOL2	O	Solenoid drive output terminal for DECK 2. Active "L".			
26	O · SOL1	O	Solenoid drive output terminal for DECK 1. Active "L".			
27	O · INT REC	O	Recording input source switching output terminal for deck 2. "H": Deck 1 at STOP, FF or REW (with DECK NOR, DECK HI, CD NOR, DECK2 REC). "L": In other modes: Deck 2 at REC, etc. (with CD HI, DECK2 PLAY/STOP, DECK1 PLAY).			
28	I/O · SERIAL	I/O	Input/output terminal for serial data with CD, AMPLIFIER and TUNER.			

Pin No.	Pin Name	I/O	Description	
29	NC	—	Not used.	
30	O · DOLBY ON	O	DOLBY NR ON/OFF switching output terminal. "H" at DOLBY NR ON.	
31	O · REC	O	Dolby encoder/decoder switching output terminal. "H" at recording and "L" at dubbing.	
32	O · HSP	O	High-speed control output terminal for DECKS 1 and 2. "H" at HIGH-SPEED DUBBING.	
33	NC	—	Not used.	
34				
35				
36				
37				
38	I · AD2	I	Key function control input terminal.	
39	I · AD1	I		
40	VDD	—	Power terminal (+5V).	

EXPLODED VIEW – 1 (FX – WZ5000)

REF.	PART NO.	DESCRIPTION
A	87-743-094-419	UT2+3-6 W/O SLOT BLK
B	87-067-660-019	BVT2+3-8 W/O SLOT BLK
C	87-067-758-019	BVT2+3-12 W/O SLOT
D	87-067-776-019	BVT2+3-12W CONVEX
E	87-067-584-019	BVT2+3-6
F	87-721-095-419	QT2+3-8 GLD W/O SLOT
G	87-067-703-019	BVT2+3-10 W/O SLOT
H	87-067-688-019	BVTT+3-6
I	87-081-808-019	PW. 1.7-3.5-0.25
J	87-067-178-019	VTT+2.6-3

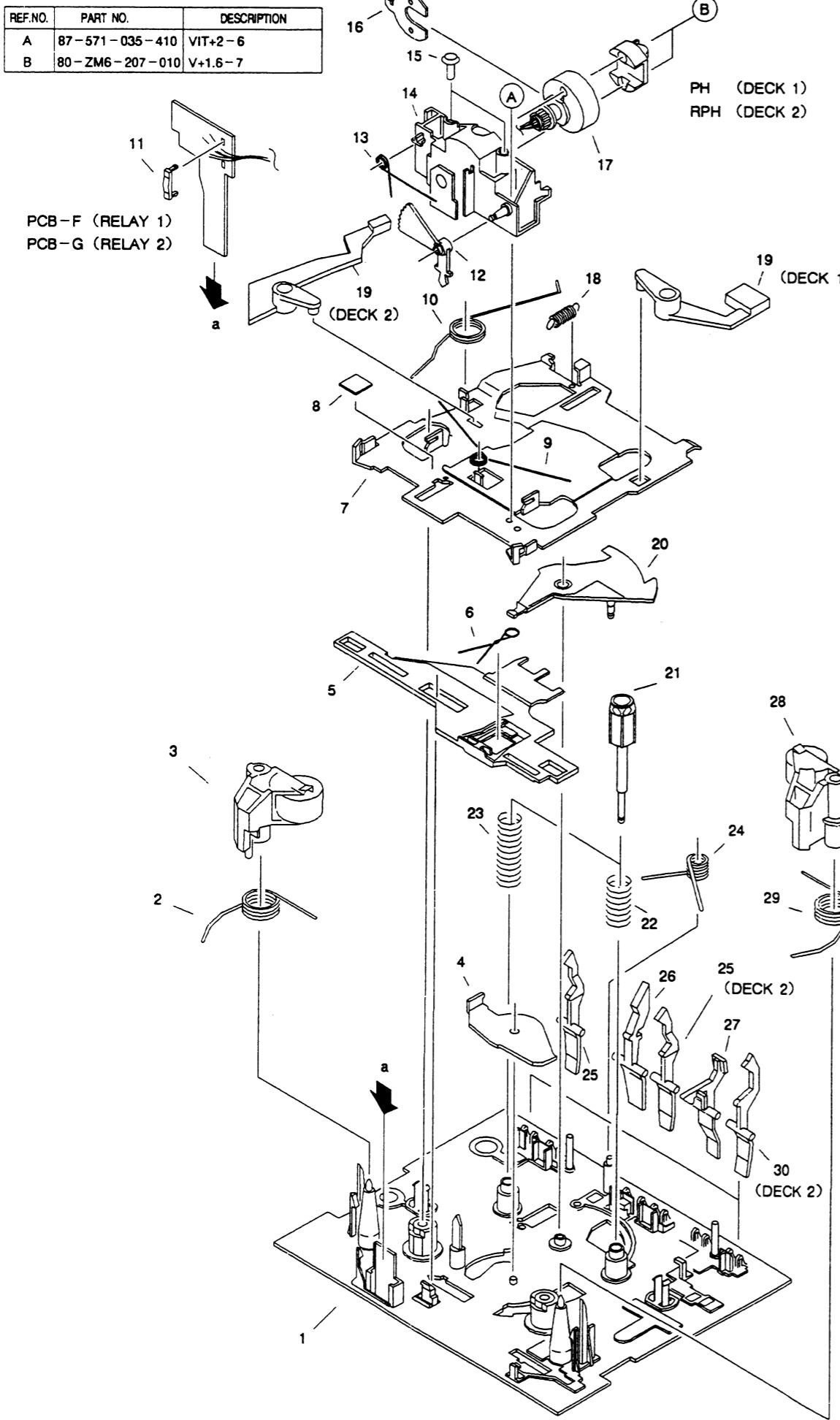


MECHANICAL PARTS LIST (FX – WZ5000)

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”.

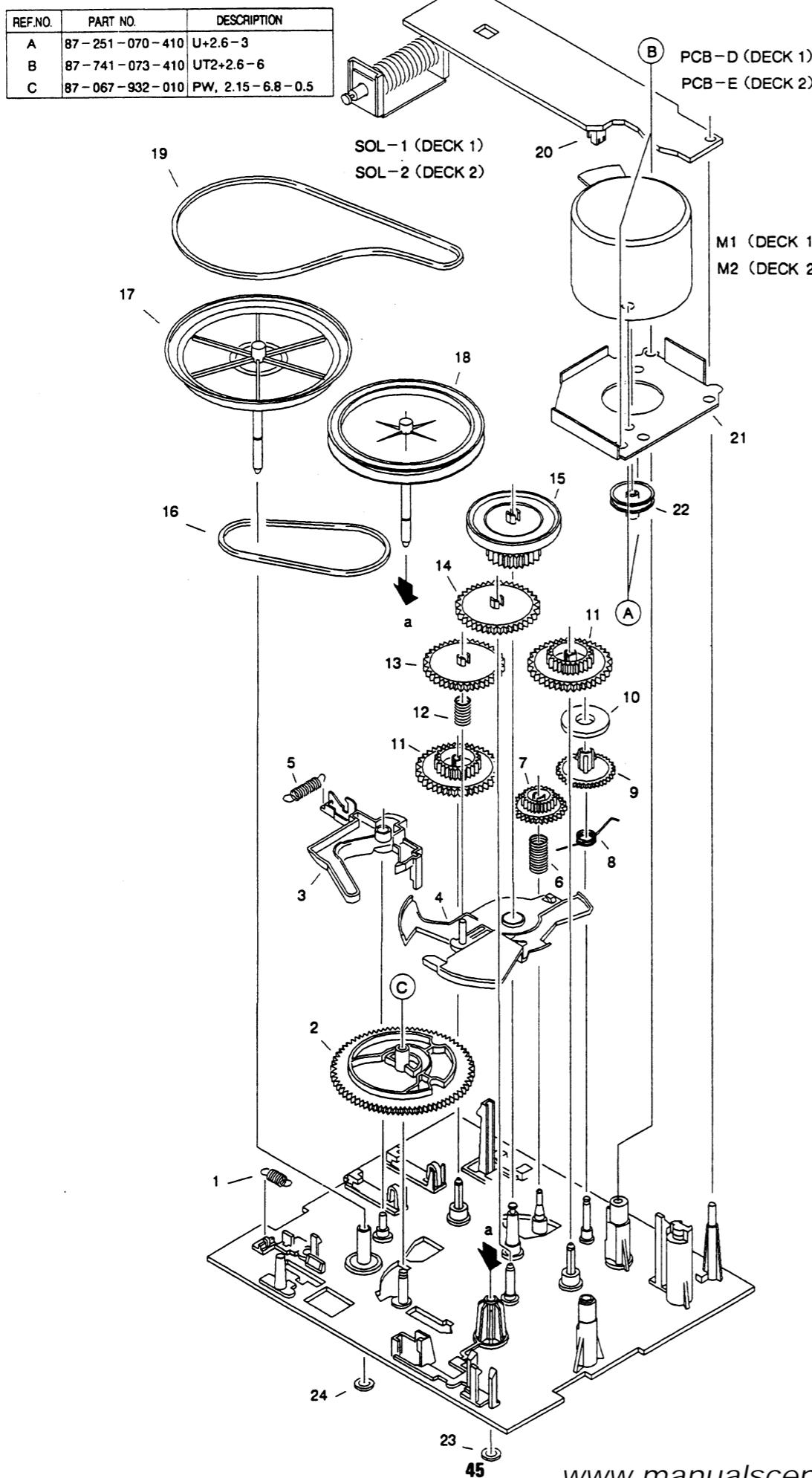
PART NO.	REF. CHANGED TO NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
1-1	★81-VW1-028-018	CAB, STEEL G (YNE)			1
1-1	★81-VW1-017-119	CAB, STEEL (YJ)			1
1-2	★89-VT5-202-010	BUSHING, CORD			1
1-3	★82-VW2-018-119	PANEL, REAR YBNE (YNE)	※	1	
1-3	★82-VW2-017-119	PANEL, REAR YJBN (YJ)	※	1	
1-4	★82-VW2-623-019	CORD, FG 9P 750	※	1	
1-5	---	HLDR, PCB 6.0	2		
1-6	---	CHASSIS, AMP	1		
1-7	★81-VX1-012-019	FOOT, REAR	2		
1-8	★82-VW2-211-019	FELT 20 - 7.5 - 2	※	2	
1-9	★80-CD3-233-010	PLATE, LOCK	2		
1-10	★81-715-234-019	SPR - C, LOCK PLATE 5V	2		
1-11	★82-VW2-201-019	HLDR ASSY, LOCK 1	※	1	
1-12	★82-VW2-202-010	HLDR ASSY, LOCK 2	※	1	
1-13	★87-063-143-010	OIL - DMPR 75	2		
1-14	★82-VW2-207-019	HLDR, BOX	1		
1-15	★09-047-737-010	CAB, FR ASSY	1		
1-16	★81-MX4-223-019	SPR - P, CASS	4		
1-17	★82-VW2-015-219	BOX, CASS 1 EX	1		
1-18	★82-VW2-020-219	BOX, CASS 2 EX	1		
1-19	★81-DS1-011-019	BADGE, AIWA N	1		
1-20	★82-VW2-010-019	WINDOW, CASS 1	1		
1-21	★82-VW2-011-019	WINDOW, CASS 2	1		
1-22	★82-VW2-208-019	SPR - T, EJECT 1	1		
1-23	★82-VW2-209-019	SPR - T, EJECT 2	1		
1-24	★82-VW2-618-119	PLATE, SHLD MECHA	2		
1-25	★82-VW2-005-019	KEY, PLAY	1		
1-26	★82-VW2-006-019	KEY, REC	1		
1-27	★82-VW2-007-019	KEY, DUBB	1		
1-28	★80-MK2-206-010	DMPR, 27 - 44.5 - 5.3	2		
1-29	★82-226-274-010	DMPR, 80 - 60 - 3 (YNE)	1		

EXPLODED VIEW - 2 (FX-WZ5000)

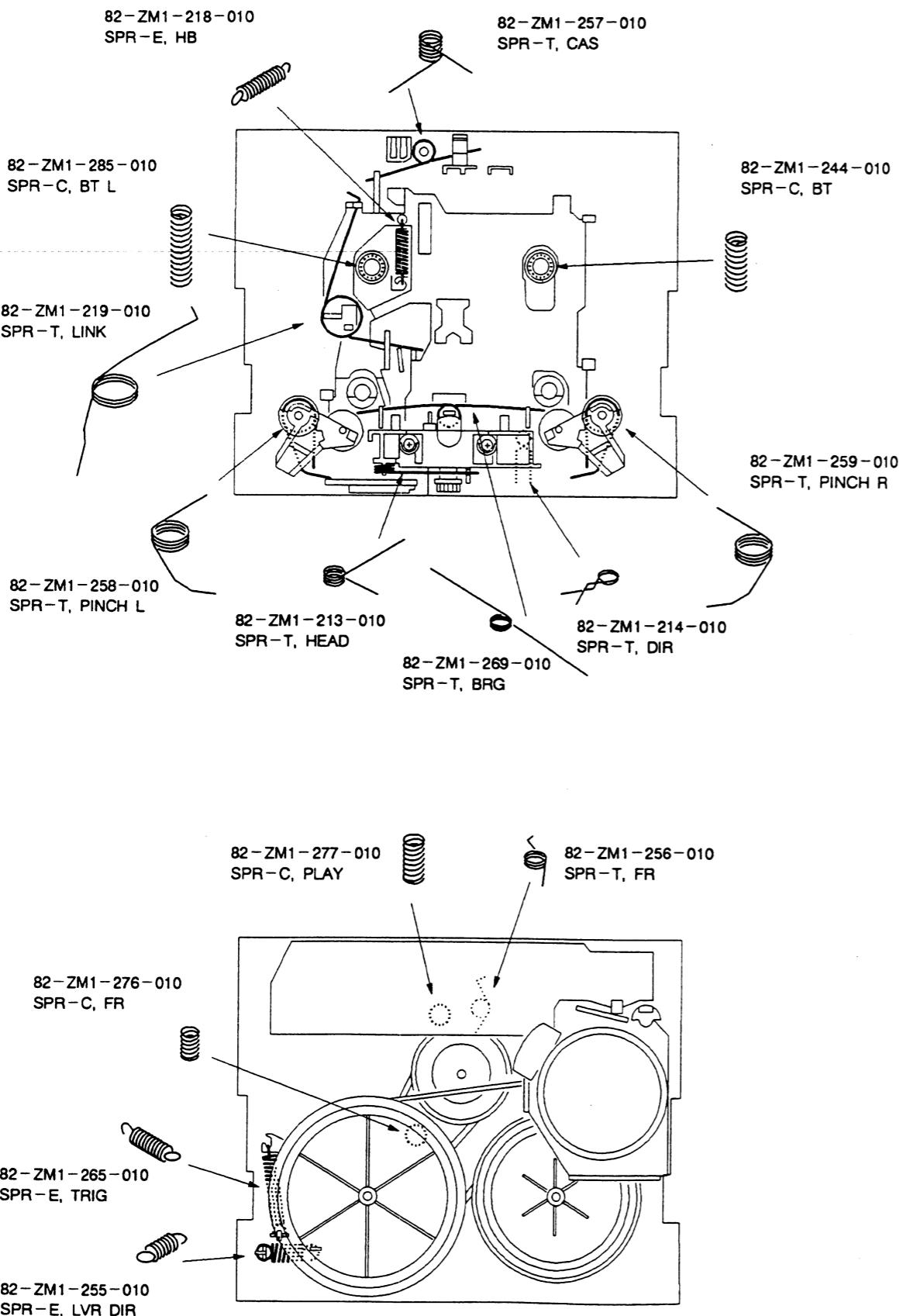


PART NO. CHANGED TO NO.	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
2-1	★82-ZM1-201-010	CHAS ASSY, MECH	※	1	
2-2	★82-ZM1-258-010	SPR - T, PINCH L	※	1	
2-3	★82-ZM1-248-110	LVR ASSY, PINCH L	※	1	
2-4	★82-ZM1-295-010	PLATE ASSY, LINK	※	1	
2-5	★82-ZM1-266-010	LVR, DIR	※	1	
2-6	★82-ZM1-214-010	SPR - T, DIR	※	1	
2-7	★82-ZM1-206-010	CHAS, HEAD	※	1	
2-8	★87-078-014-010	SH, 5 - 5 - 0.05	1		
2-9	★82-ZM1-269-010	SPR - T, BRG	※	1	
2-10	★82-ZM1-219-010	SPR - T, LINK	※	1	
2-11	---	HLDR WIRE 2	1		
2-12	★82-ZM1-210-010	GEAR, H T	※	1	
2-13	★82-ZM1-213-010	SPR - T, HEAD	※	1	
2-14	★82-ZM1-207-010	GUIDE, TAPE	※	1	
2-15	★82-ZM1-283-010	S - SCREW, AZIMUTH	※	2	
2-16	★82-ZM1-209-010	PLATE, HEAD	※	1	
2-17	★82-ZM1-208-010	HLDR, HEAD	※	1	
2-18	★82-ZM1-218-010	SPR - E, HB	※	1	
2-19	★82-ZM1-264-010	LVR, EJECT R (DECK 1)	※	1	
2-19	★82-ZM1-263-010	LVR, EJECT L (DECK 2)	※	1	
2-20	★82-ZM1-222-010	LVR, PLAY	※	1	
2-21	★82-ZM1-217-010	REEL TABLE	※	2	
2-22	★82-ZM1-244-010	SPR - C, BT	※	1	
2-23	★82-ZM1-285-010	SPR - C, BT L	※	1	
2-24	★82-ZM1-257-010	SPR - T, CAS	※	1	
2-25	★82-ZM1-241-010	LVR, MC (DECK 1) (DECK 2)	※	1	
2-26	★82-ZM1-242-010	LVR, CAS	※	2	
2-27	★82-ZM1-243-010	LVR, STOP	※	1	
2-28	★82-ZM1-253-110	LVR ASSY, PINCH R	※	1	
2-29	★82-ZM1-259-010	SPR - T, PINCH R	※	1	
2-30	★82-ZM1-240-010	LVR, REC (DECK 2)	※	2	

EXPLODED VIEW — 3 (FX-WZ5000)



PART NO. CHANGED TO NO.	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
3-1	★82-ZM1-255-010	SPR - E, LVR DIR	※	1	
3-2	★82-ZM1-221-010	GEAR, CAM	※	1	
3-3	★82-ZM1-227-010	LVR, TRIG	※	1	
3-4	★82-ZM1-224-010	LVR, FR	※	1	
3-5	★82-ZM1-265-010	SPR - E, TRIG	※	1	
3-6	★82-ZM1-277-010	SPR - C, PLAY	※	1	
3-7	★82-ZM1-223-010	GEAR, PLAY	※	1	
3-8	★82-ZM1-256-010	SPR - T, FR	※	1	
3-9	★82-ZM1-220-010	GEAR, IDLER	※	1	
3-10	★80-ZM6-217-010	RING MAGNET 2	1		
3-11	★82-ZM1-216-010	GEAR, REEL	※	2	
3-12	★82-ZM1-276-010	SPR - C, FR	※	1	
3-13	★82-ZM1-225-010	GEAR, FR	※	1	
3-14	★82-ZM1-226-010	GEAR, REW	※	1	
3-15	★82-ZM1-228-010	SLIP DISK ASSY	※	1	
3-16	★82-ZM1-261-010	BELT, FR	※	1	
3-17	82-ZM1-237-010	FLY - WHL ASSY, R	※	1	
3-18	82-ZM1-234-010	FLY - WHL ASSY, L	※	1	
3-19	★82-ZM1-260-010	BELT, MAIN	※	1	
3-20	★82-ZM1-245-010	HLDR, IC	※	1	
3-21	★82-ZM1-246-010	HLDR, MOTOR	※	1	
3-22	★82-ZM1-247-010	PULLEY, MOTOR	※	1	
3-23	★82-ZM1-288-010	SH, 1.63 - 3.2 - 0.5 SLT	※	1	
3-24	★80-ZM6-243-010	SH, 1.75 - 3.6 - 0.5 SLT	1		

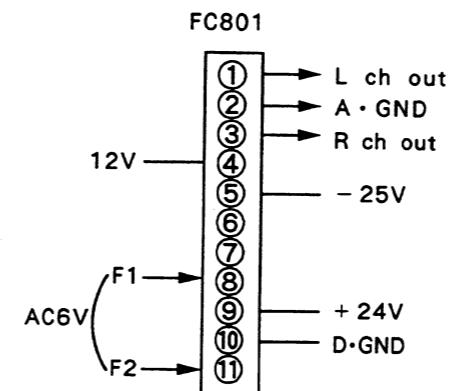


CAUTIONS WHEN SERVICING (TX - Z7000)

Model TX - Z7000 does not have a power supply circuit. Power is supplied to it through a 11-pin flat cable and the signal inputs/outputs are also performed through this cable. When servicing the TX - Z7000 connect it to the MX - Z3000M so that power is supplied to the TX - Z7000. If the MX - Z3000M is not available, follow the procedure below.

[When servicing the unassembled TX - Z7000]

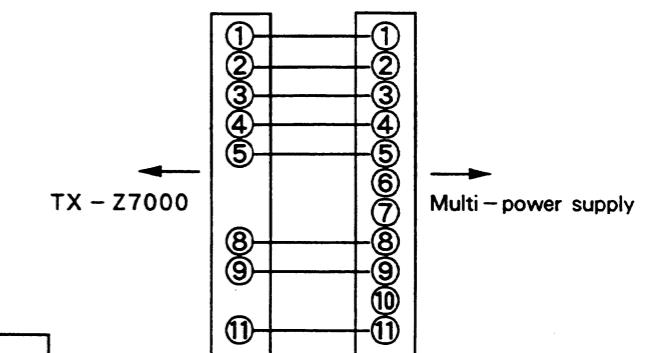
- ① Supply the following voltages to each terminal from an external power supply.



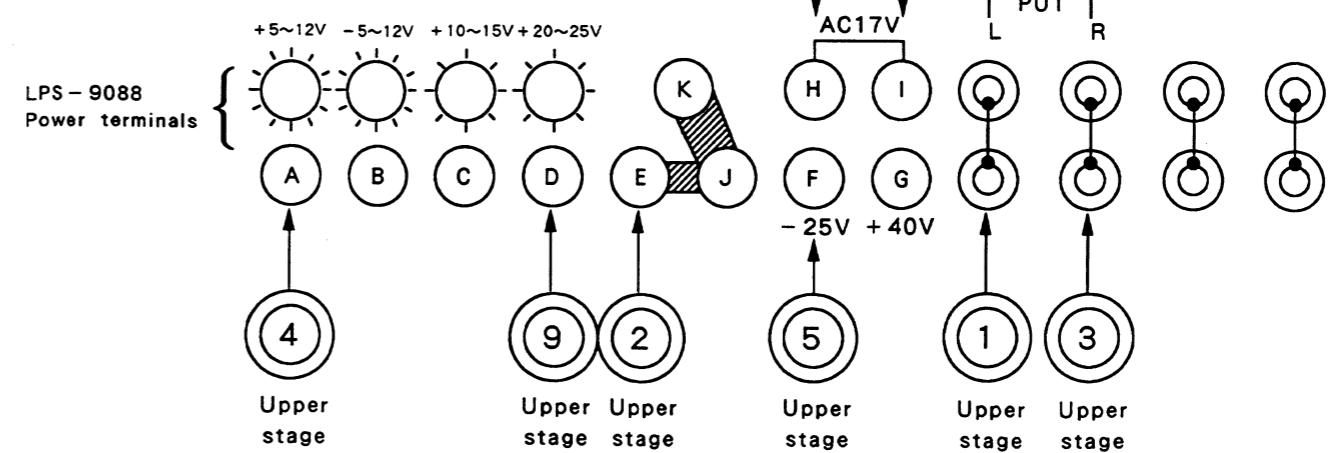
- ② Connection diagram when using multi power supply (LPS - 9088).

- Turn the TX - Z7000 on using the SLEEP function since the POWER SW is not supplied.
- Connect the multi-conversion harness for the X5 type (modified harness for F550) to J1.

Connection diagram of multi-conversion harness



■	: Short bar
↔	: Jumper cable
● →	: Ground cable of pin plug
○	: Power output terminal
○	: Relay terminal
○	: Pin jack



ELECTRICAL MAIN PARTS LIST (TX - Z7000)

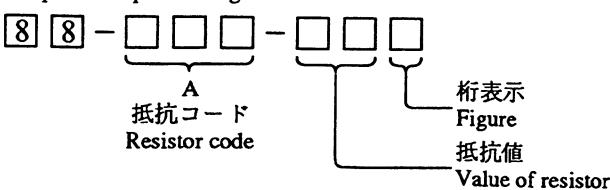
DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カタリ NO.	DESCRIPTION	REF. NO	PART NO.	カタリ NO.	DESCRIPTION
IC				C31	87-010-197-080	C-CAP, S 0.01-25 B	
87-001-376-010	IC, LC7218			C32	87-010-197-080	C-CAP, S 0.01-25 B	
87-001-942-010	IC, LA1265S(G)			C33	87-010-405-080	CAP, E 10-50 SME	
87-020-446-010	IC, TA7343AP			C34	87-010-166-080	C-CAP, S 100P-50 SL	
81-VT1-610-010	IC, UPD75268CW-029			C35	87-010-197-080	C-CAP, S 0.01-25 B	
TRANSISTOR				C36	87-010-401-080	CAP, E 1-50 SME	
89-502-094-080	C-FET, 2SK209Y			C37	87-010-404-080	CAP, E 4.7-50 SME	
89-502-115-080	C-FET, 2SK211GR (YE, YZ)			C38	87-010-405-080	CAP, E 10-50 SME	
89-503-025-080	C-FET, 2SK302GR			C39	87-010-544-080	CAP, E 0.1-50	
89-327-143-080	C-TR, 2SC2714(0)			C40	87-010-403-080	CAP, E 3.3-50 SME	
89-316-235-080	C-TR, 2SC1623J5			C41	87-010-404-080	CAP, E 4.7-50 SME	
89-327-125-080	C-TR, 2SC2712GR			C42	87-010-404-080	CAP, E 4.7-50 SME (YZ)	
89-333-266-080	C-TR, 2SC3326B			C43	87-010-197-080	C-CAP, S 0.01-25 B	
87-026-230-080	C-TR, DTA114YK			C45	87-010-404-080	CAP, E 4.7-50 SME	
89-110-485-080	TR, 2SA1048GR			C46	87-010-197-080	C-CAP, S 0.01-25 B	
89-318-155-080	TR, 2SC1815GR			C47	87-010-197-080	C-CAP, S 0.01-25 B	
89-320-011-080	TR, 2SC2001K			C48	87-010-197-080	C-CAP, S 0.01-25 B	
89-324-585-080	TR, 2SC2458GR			C49	87-010-197-080	C-CAP, S 0.01-25 B	
87-026-214-080	TR, DTA114YS			C50	87-010-197-080	C-CAP, S 0.01-25 B	
DIODE				C51	87-010-197-080	C-CAP, S 0.01-25 B	
87-020-125-080	C-DIODE, 1SS181			C52	87-010-197-080	C-CAP, S 0.01-25 B (YE, YZ)	
87-020-027-080	C-DIODE, 1SS184			C53	87-010-196-080	C-CAP, S 0.1-25 F	
87-026-360-080	C-VARICAP, KV1430 (YLH, YH, YZ)			C54	87-010-197-080	C-CAP, S 0.01-25 B (YE, YZ)	
87-026-360-010	C-VARICAP, KV1430 (YE)			C55	87-014-049-080	CAP, PP 470P-100 J (YE, YZ)	
87-020-583-080	C-ZENER, 02CZ5.1Y			C56	87-010-158-080	C-CAP, S 22P-50 SL (YE, YZ)	
87-020-585-080	C-ZENER, 02CZ6.2Y			C56	87-010-152-080	C-CAP, S 8P-50 CH (YLH, YH)	
87-020-110-080	DIODE, 1SS177			C57	87-010-169-080	C-CAP, S 180P-50 SL (YE, YZ)	
81-754-634-090	VARI-CAP, KV1260 (YE, YZ)			C58	87-014-050-080	CAP, PP 510P-100 J (YE, YZ)	
87-027-449-080	ZENER, HZ15-3L			C60	87-010-404-080	CAP, E 4.7-50 SME (YZ)	
87-017-172-080	ZENER, HZS11A1L			C61	87-010-401-080	CAP, E 1-50 SME	
MAIN C. B				C62	87-010-403-080	CAP, E 3.3-50 SME	
	81-MT3-655-010		AM PACK 1, S (YLH, YH)	C63	87-014-057-080	CAP, PP 1000P-100 J	
	81-689-212-010		PLATE, EARTH	C64	87-010-405-080	CAP, E 10-50 SME	
C1	87-010-312-080		C-CAP, S 15P-50 CH	C67	87-010-220-080	C-CAP, S 0.018-25 B	
C2	87-015-819-080		C-CAP, S 0.01	C68	87-010-220-080	C-CAP, S 0.018-25 B	
C3	87-010-197-080		C-CAP, S 0.01-25 B	C69	87-010-404-080	CAP, E 4.7-50 SME	
C4	87-010-197-080		C-CAP, S 0.01-25 B	C70	87-010-404-080	CAP, E 4.7-50 SME	
C5	87-010-197-080		C-CAP, S 0.01-25 B	C73	87-010-404-080	CAP, E 4.7-50 SME	
C6	87-010-197-080		C-CAP, S 0.01-25 B	C74	87-010-404-080	CAP, E 4.7-50 SME	
C7	87-010-147-080		C-CAP, S 3P-50 CH (YZ)	C75	87-010-248-080	CAP, E 220-10 SME	
C7	87-010-150-080		C-CAP, S 6P-50 CH (YLH, YH, YE)	C76	87-010-312-080	C-CAP, S 15P-50 CH	
C8	87-018-102-080		CAP, TC-U 6.8P-50 SL (YLH, YH, YE)	C77	87-010-197-080	C-CAP, S 0.01-25 B	
C9	87-010-158-080		C-CAP, S 22P-50 SL	C78	87-010-197-080	C-CAP, S 0.01-25 B	
C10	87-010-154-080		C-CAP, S 10P-50 CH	C79	87-010-197-080	C-CAP, S 0.01-25 B	
C11	87-010-312-080		C-CAP, S 15P-50 CH	C80	87-010-384-080	CAP, E 100-25 SME	
C12	87-010-312-080		C-CAP, S 15P-50 CH	C81	87-010-186-080	C-CAP, S 4700P-50 B	
C13	87-010-197-080		C-CAP, S 0.01-25 B	C82	87-010-400-080	CAP, E 0.47-50 SME	
C14	87-010-146-080		C-CAP, S 2P-50 CH	C83	87-015-762-080	C-CAP, S 68P SL	
C15	87-010-145-080		C-CAP, S 1P-50 CH (YLH, YH, YE)	C84	87-010-164-080	C-CAP, S 68P-50 SL	
C15	87-010-148-080		C-CAP, S 4P-50 CH (YZ)	C85	87-010-164-080	C-CAP, S 68P-50 SL	
C16	87-010-154-080		C-CAP, S 10P-50 CH (YLH, YH, YE)	C86	87-018-134-080	CAP, TC-U 0.01-16 Y	
C16	87-010-149-080		C-CAP, S 5P-50 CH (YZ)	C87	87-010-263-080	CAP, E 100-10 (YLH, YH, YE)	
C17	87-010-197-080		C-CAP, S 0.01-25 B	C87	87-010-404-080	CAP, E 4.7-50 SME (YZ)	
C18	87-010-170-080		C-CAP, S 220P-50 SL	C88	87-010-381-080	CAP, E 330-16 SME	
C19	87-010-197-080		C-CAP, S 0.01-25 B	C100	87-010-197-080	C-CAP, S 0.01-25 B	
C20	87-010-197-080		C-CAP, S 0.01-25 B	C101	87-010-197-080	C-CAP, S 0.01-25 B	
C21	87-010-197-080		C-CAP, S 0.01-25 B	C102	87-010-311-080	C-CAP, S 12P-50 CH (YE, YZ)	
C22	87-010-400-080		CAP, E 0.47-50 SME	C103	87-010-197-080	C-CAP, S 0.01-25 B (YE)	
C23	87-010-197-080		C-CAP, S 0.01-25 B	C103	87-010-311-080	C-CAP, S 12P-50 CH (YZ)	
C24	87-010-149-080		C-CAP, S 5P-50 CH	C104	87-010-197-080	C-CAP, S 0.01-25 B (YZ)	
C25	87-010-197-080		C-CAP, S 0.01-25 B (YLH, YH, YE)	C106	87-010-145-080	C-CAP, S 1P-50 CH (YZ)	
C26	87-010-312-080		C-CAP, S 15P-50 CH	C110	87-010-263-080	CAP, E 100-10	
C27	87-010-197-080		C-CAP, S 0.01-25 B	C111	87-010-405-080	CAP, E 10-50 SME	
C28	87-010-401-080		CAP, E 1-50 SME	C112	87-010-401-080	CAP, E 1-50 SME	
C29				C781	87-010-197-080	C-CAP, S 0.01-25 B	
C30				CF1	87-030-105-010	FLTR, BPMB6A (YZ)	
				CF2	82-799-621-010	FLTR, SFE10.7MS2-A (YZ)	
				CF2	87-008-261-010	FLTR, SFE10.7MA5-A (YLH, YH, YE)	
				CF3	87-008-261-010	FLTR, SFE10.7MA5-A (YZ)	
				CF4	87-008-261-010	FLTR, SFE10.7MA5-A	

REF. NO	PART NO.	カソリ NO.	DESCRIPTION	REF. NO	PART NO.	カソリ NO.	DESCRIPTION
CF5	82-794-670-010	BFU450C4N		C912	87-018-209-080	CAP, TC-U 0.1-50 F	
J1	81-653-648-010	ANT TERM EARTH PAL<YE, YZ>		C913	87-018-209-080	CAP, TC-U 0.1-50 F	
J1	81-653-638-110	ANT TERMINAL EARTH<YLH, YH>		C915	87-010-381-080	CAP, E 330-16 SME	
J1	81-631-646-010	ANT TERM 2P PAL<YE, YZ>		C916	87-010-381-080	CAP, E 330-16 SME	
J1	87-033-214-010	ANT TERM 4P(JT)<YLH, YH>		CF901	87-008-394-080	CF CST 4.19 MGW	
J2	81-754-629-010	CONNECTOR XH M 2P (UL)<YE>		FL901	80-VT1-608-010	FL, 9BT-83GK	
L1	87-006-209-010	COIL, ANT FM 3/4 T		L901	87-003-102-080	COIL, 10UH	
L2	87-006-210-010	COIL, ANT FM 2 3/4T		L902	87-003-102-080	COIL, 10UH	
L3	87-006-200-010	COIL, RF FM 3-1/2T, L5		L903	87-003-102-080	COIL, 10UH	
L4	87-006-201-010	COIL, RF FM3-1/2TS, L5		L904	87-003-102-080	COIL, 10UH	
L5	87-006-201-010	COIL, RF FM3-1/2TS, L5<YZ>		RU901	87-002-669-010	IC, GP1U571X	
L6	87-006-205-010	COIL, OSC FM(7K)		SW901	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
L7	87-003-231-080	C-COIL, SIUH		SW901	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
L8	87-008-427-010	COIL, FMIFT(4T)		SW902	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
L9	81-631-611-010	COIL, QUAD(SINGLE)		SW902	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
L11	87-008-452-010	FILTER, CFAZ-450		SW903	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
L12	87-006-207-010	COIL, ANT MW (3B)<YE, YZ>		SW903	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
L13	87-006-208-010	COIL, ANT LW<YE, YZ>		SW904	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
L14	82-794-687-010	COIL, OSC<YE, YZ>		SW904	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
L15	87-008-461-010	COIL, 2POLE MPX		SW905	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
L16	87-008-461-010	COIL, 2POLE MPX		SW905	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
L17	82-794-688-010	COIL, OSC LW<YE, YZ>		SW906	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
L18	87-008-421-010	COIL, FILTER AMTI-BIRDIE<YZ>		SW906	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
L19	87-003-098-080	COIL, 2. 2UH		SW907	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
SFR1	87-024-174-080	SFR, 33K DIA6 V		SW907	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
SFR2	87-024-171-080	SFR, 4. 7K DIA6 V		SW908	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
TC1	87-011-219-080	CAP, TRIMMER 10P VCT		SW908	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
TC2	87-011-219-080	CAP, TRIMMER 10P VCT		SW909	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
TC3	87-011-219-080	CAP, TRIMMER 10P VCT<YZ>		SW909	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
TC4	87-011-220-080	CAP, TRIMMER 20P VCT<YE, YZ>		SW910	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
TC5	87-011-221-080	TRIMMER 30P VCT51		SW910	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
TC6	87-011-221-080	TRIMMER 30P VCT51<YE, YZ>		SW911	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
WH802	82-VT1-605-010	CORD, FG 11P		SW911	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
X1	87-030-163-010	VIB, XTAL 7. 2MHz(NDK)		SW912	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
				SW912	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
FRONT C. B				SW913	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
C901	87-018-131-080	CAP, TC-U 1000P-50 B		SW913	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
C902	87-010-553-080	CAP, E 47-16		SW914	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
C903	87-010-498-080	CAP, E 10-16 5L		SW914	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
C904	87-010-494-080	CAP, E GAS 1/50		SW915	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
C905	87-018-131-080	CAP, TC-U 1000P-50 B		SW915	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
C906	87-010-497-080	CAP, E 4. 7-35 5L		SW916	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
C907	87-010-494-080	CAP, E GAS 1/50		SW916	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
C908	87-010-494-080	CAP, E GAS 1/50		SW917	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
C909	87-018-134-080	CAP, TC-U 0. 01-16 Y		SW917	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	
C910	87-010-252-080	CAP, E(TAPG) 1000-6. 3V		SW918	87-036-215-080	SW, TACT EVO21404M<YLH, YH>	
C911	87-018-209-080	CAP, TC-U 0. 1-50 F		SW918	87-036-259-080	SW, TACT SKHVBB<YE, YZ>	

○チップ抵抗部品コード / CHIP RESISTOR PART CODE

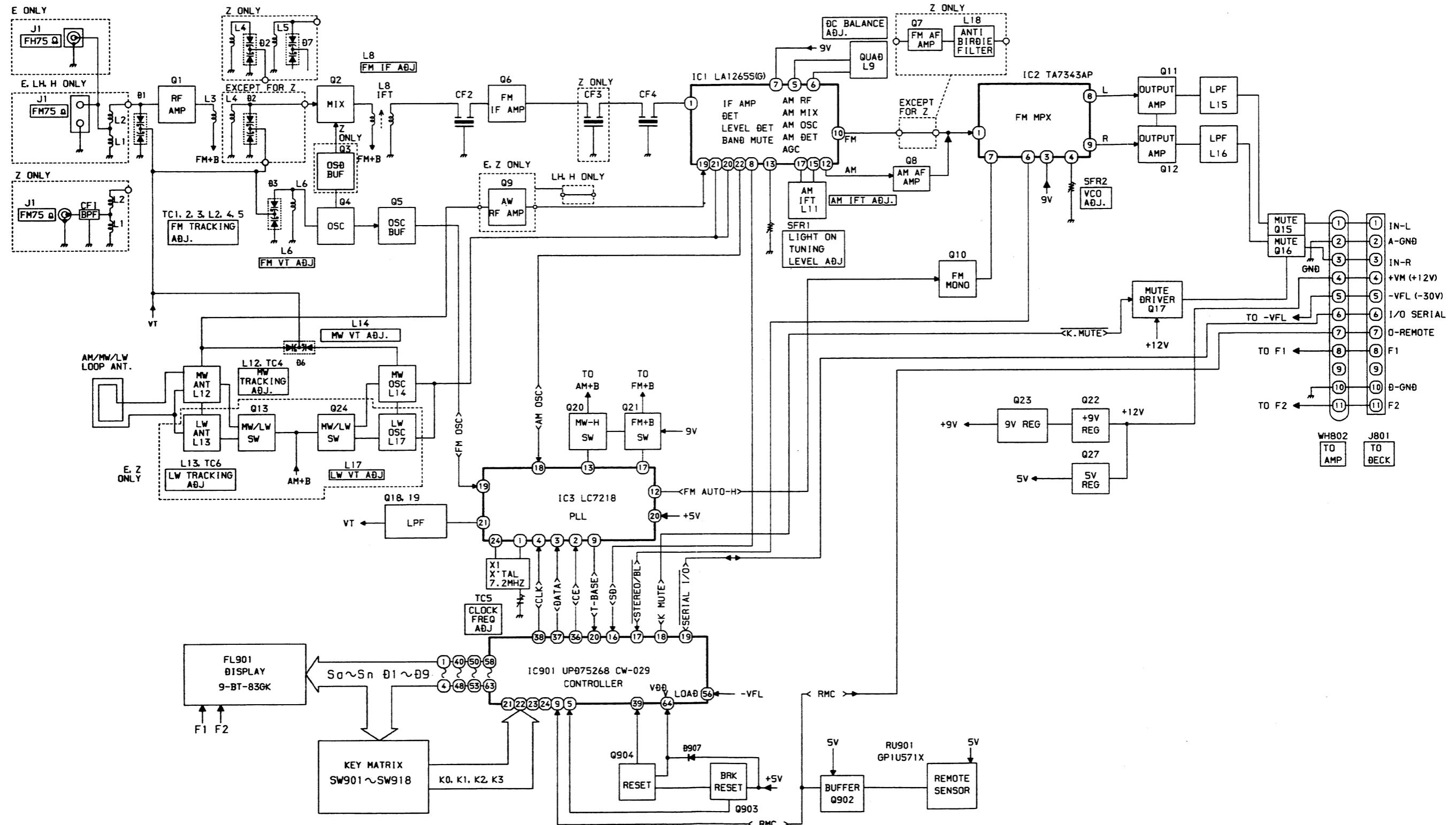
チップ抵抗部品コードの成り立ち
Chip resistor part coding



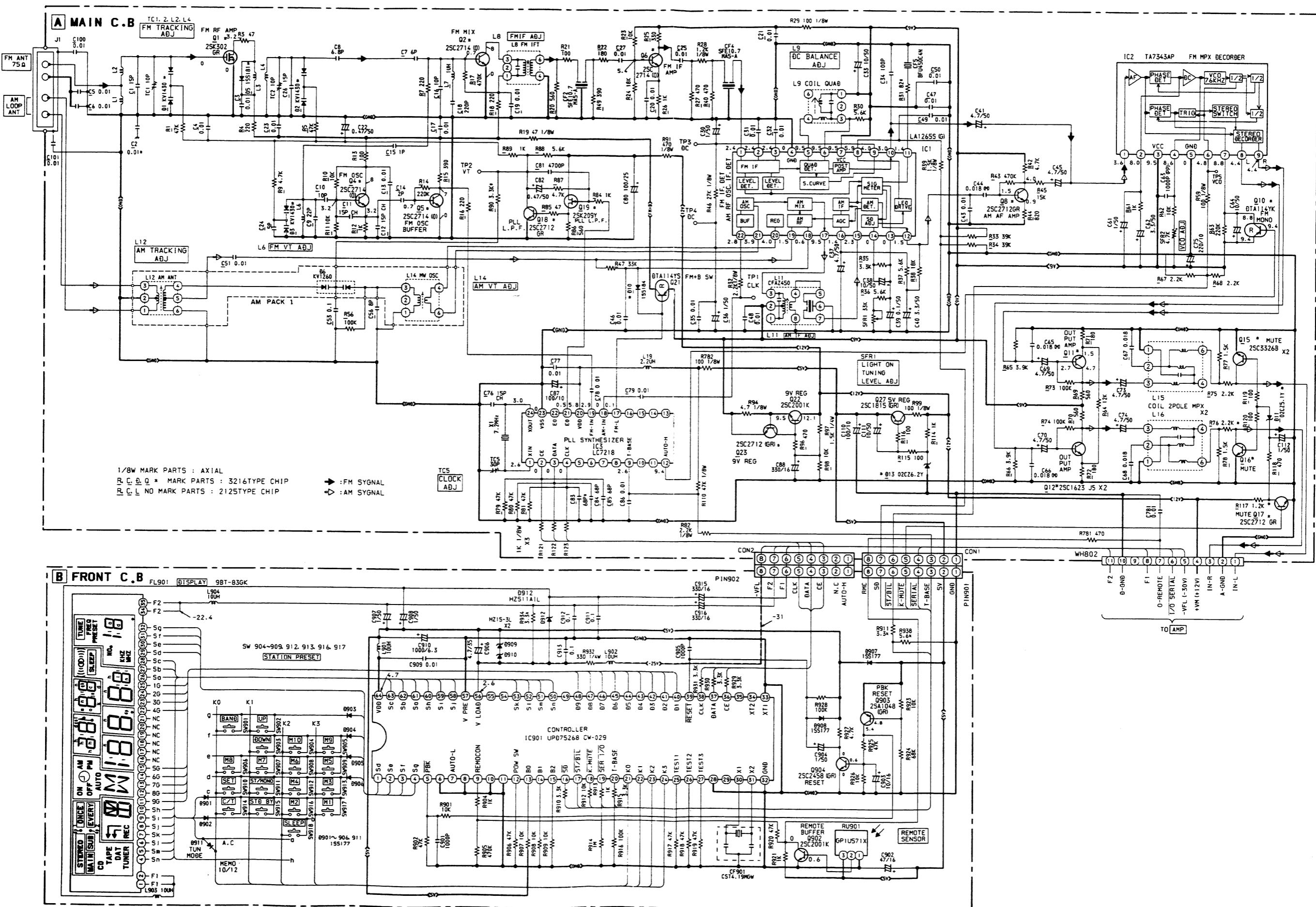
チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions / 尺寸 (mm)			Resistor code : A 抵抗コード : A	
				Form/外形	L	W		
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	3216	±5%	CJ		3.2	1.6	0.5 ~0.7	128

BLOCK DIAGRAM (TX-Z7000)

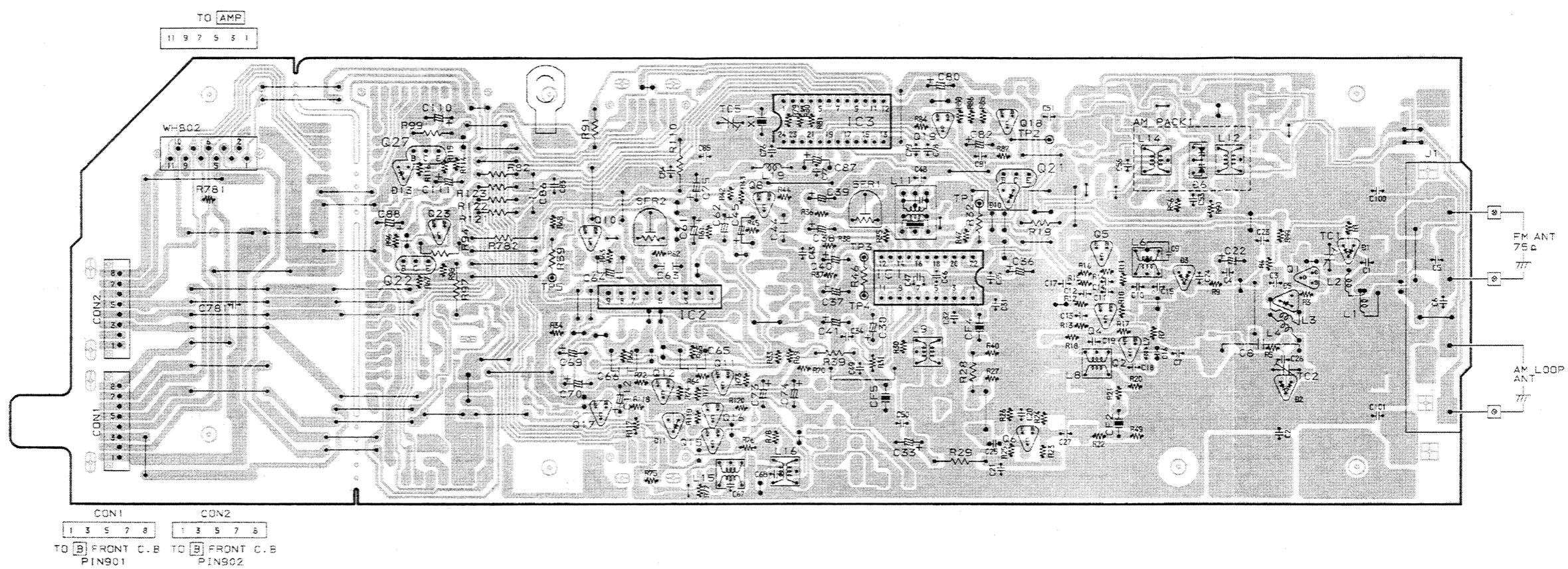


SCHEMATIC DIAGRAM – 1 (TX-Z7000H)

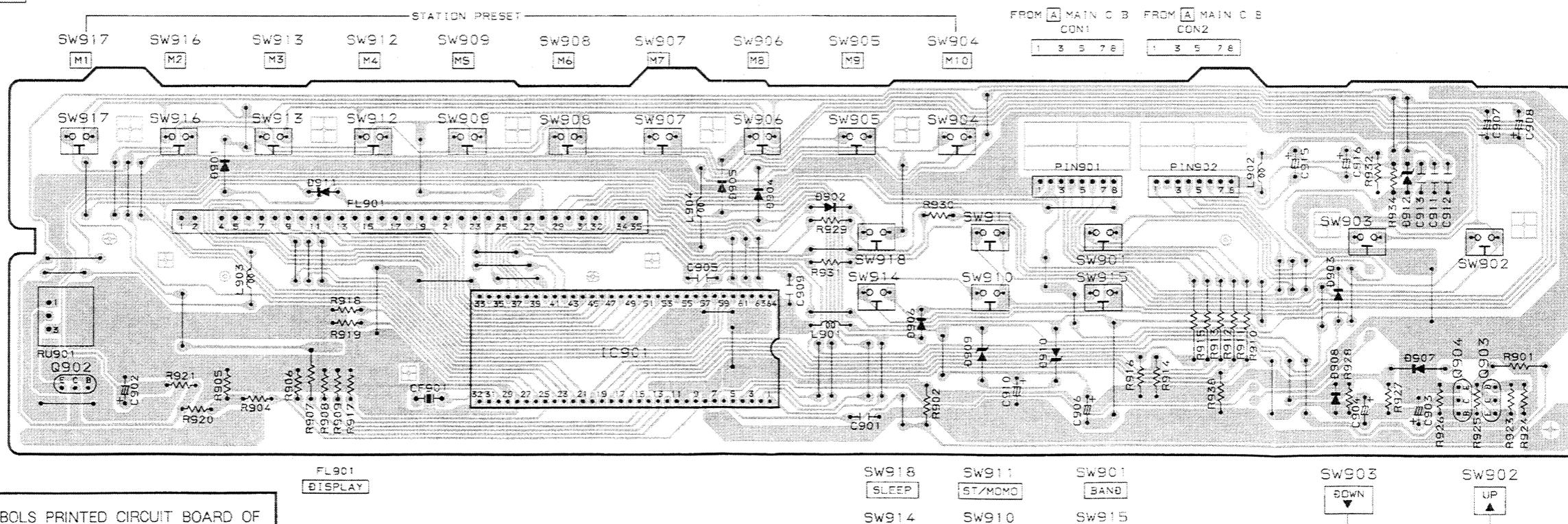


2 3 4 5 6 7 8 9 10 11 12 13 14

A MAIN C.B



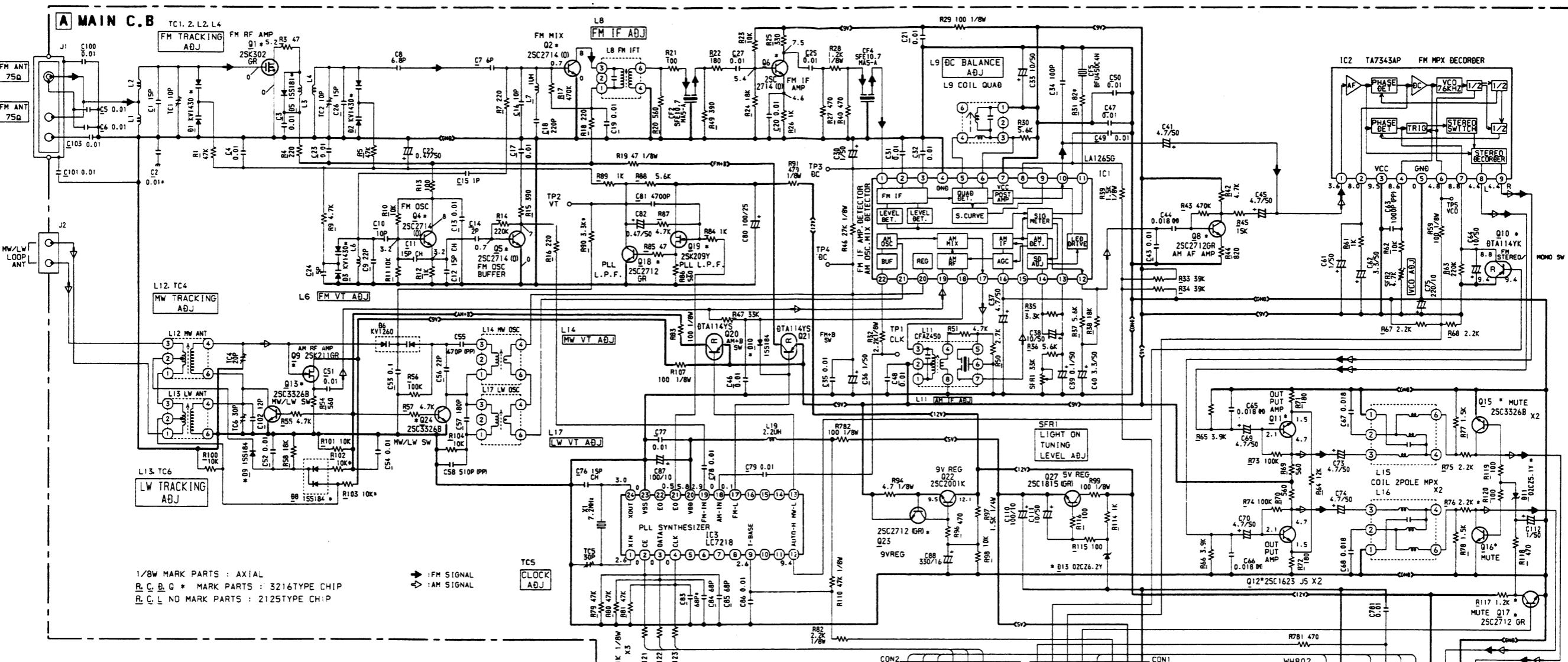
B FRONT C.B



GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF
EFFECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示は印表示です。)

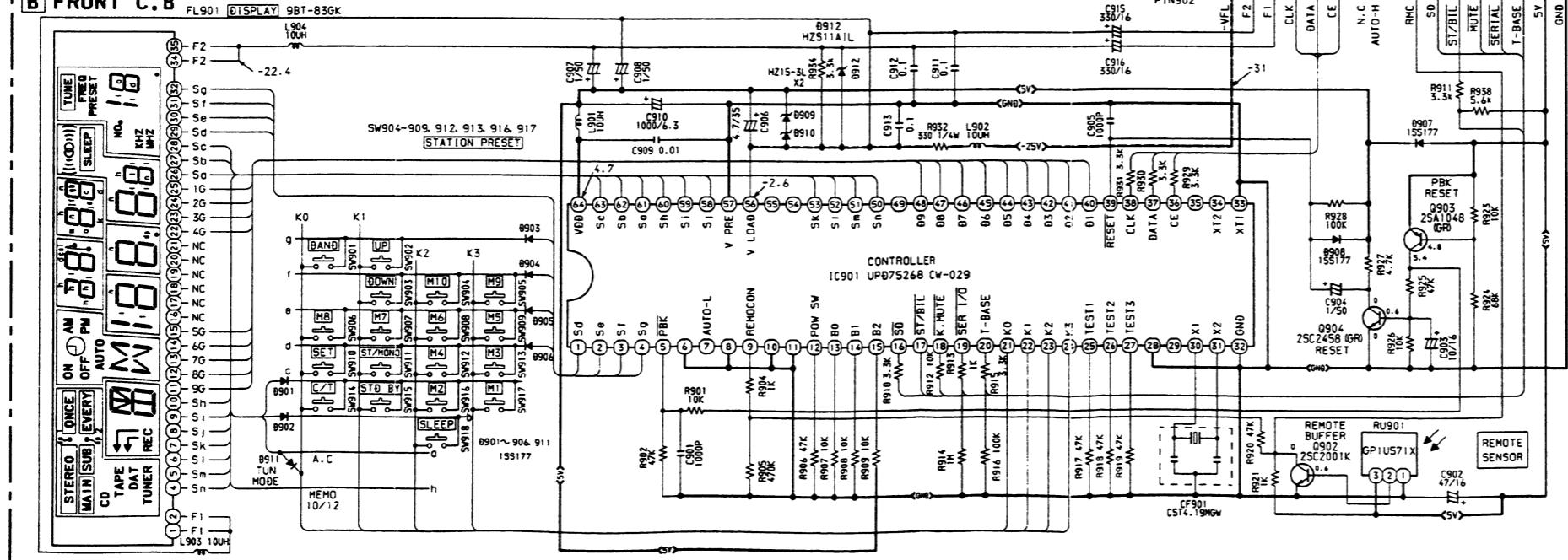
SCHEMATIC DIAGRAM — 2 (TX-Z7000E)



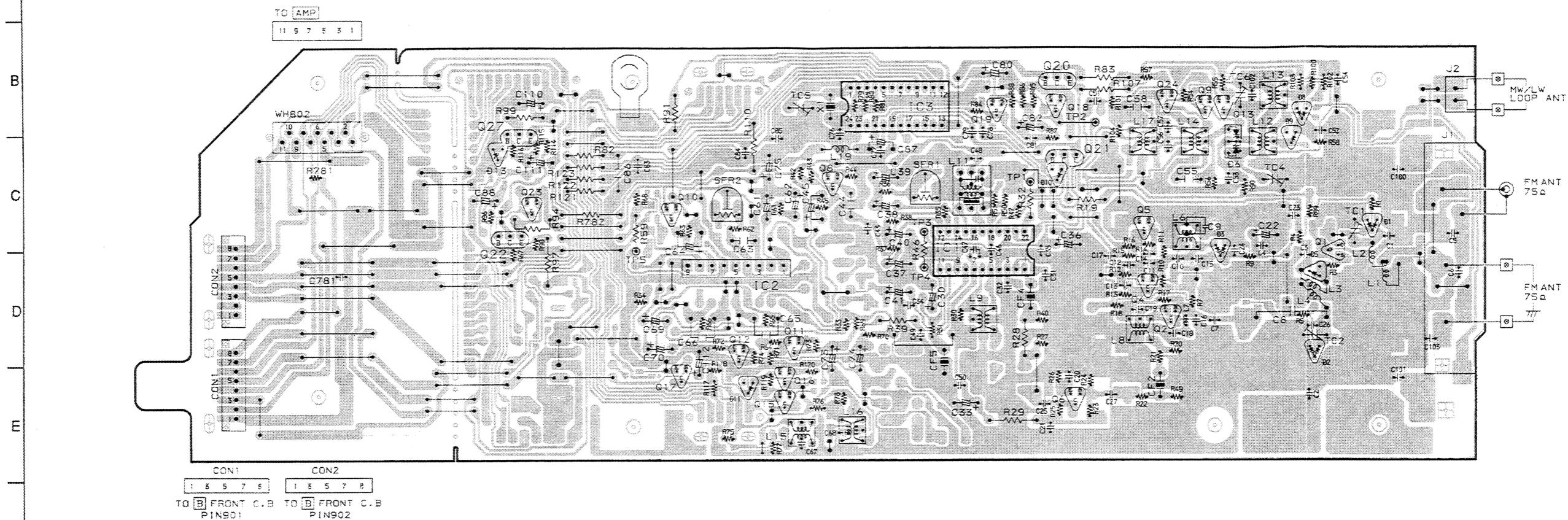
1/8W MARK PARTS : AXIAL
R.C.B.G * MARK PARTS : 3216TYPE CHIP
R.C.I NO MARK PARTS : 2125TYPE CHIP

→ :FM SIGNAL
← :AM SIGNAL

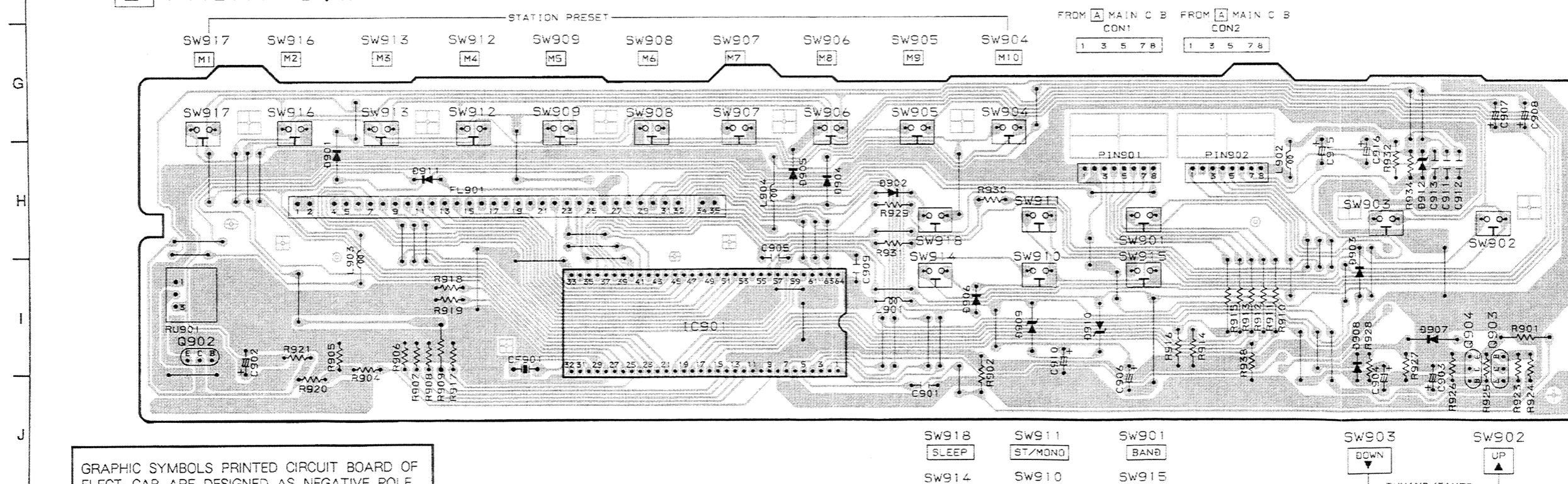
10



A MAIN C.E.



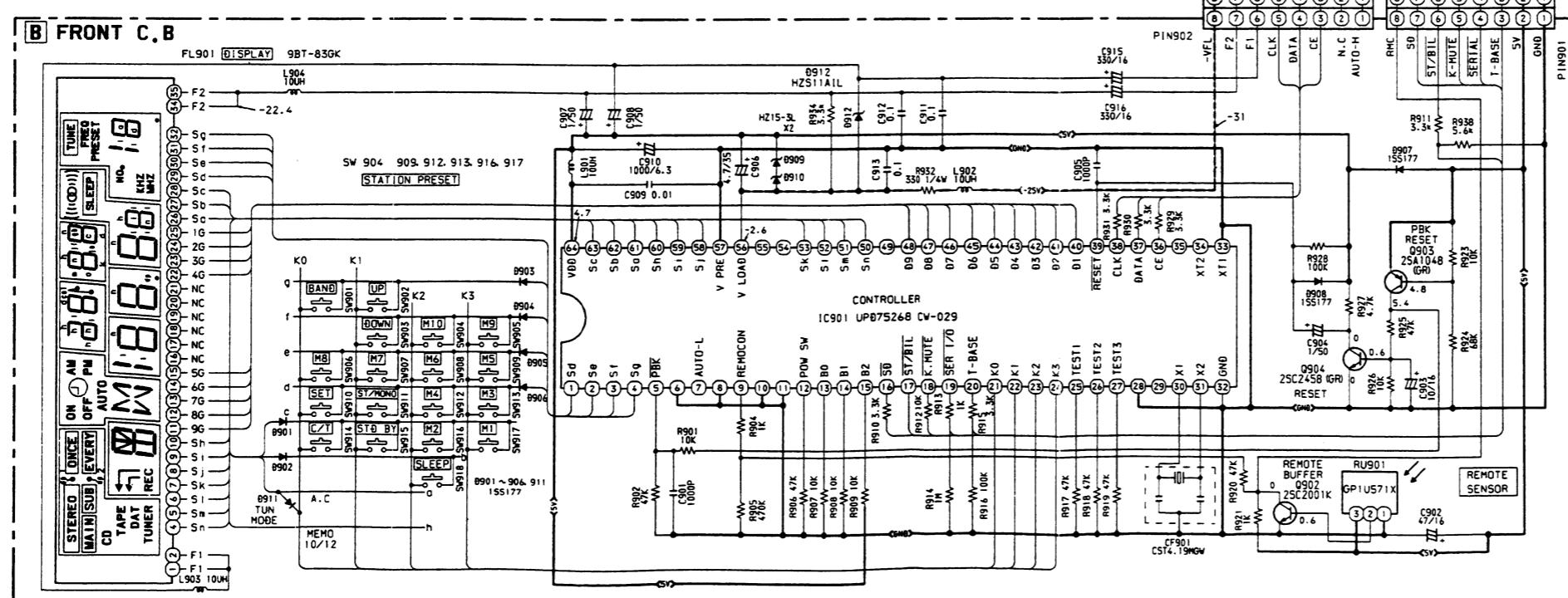
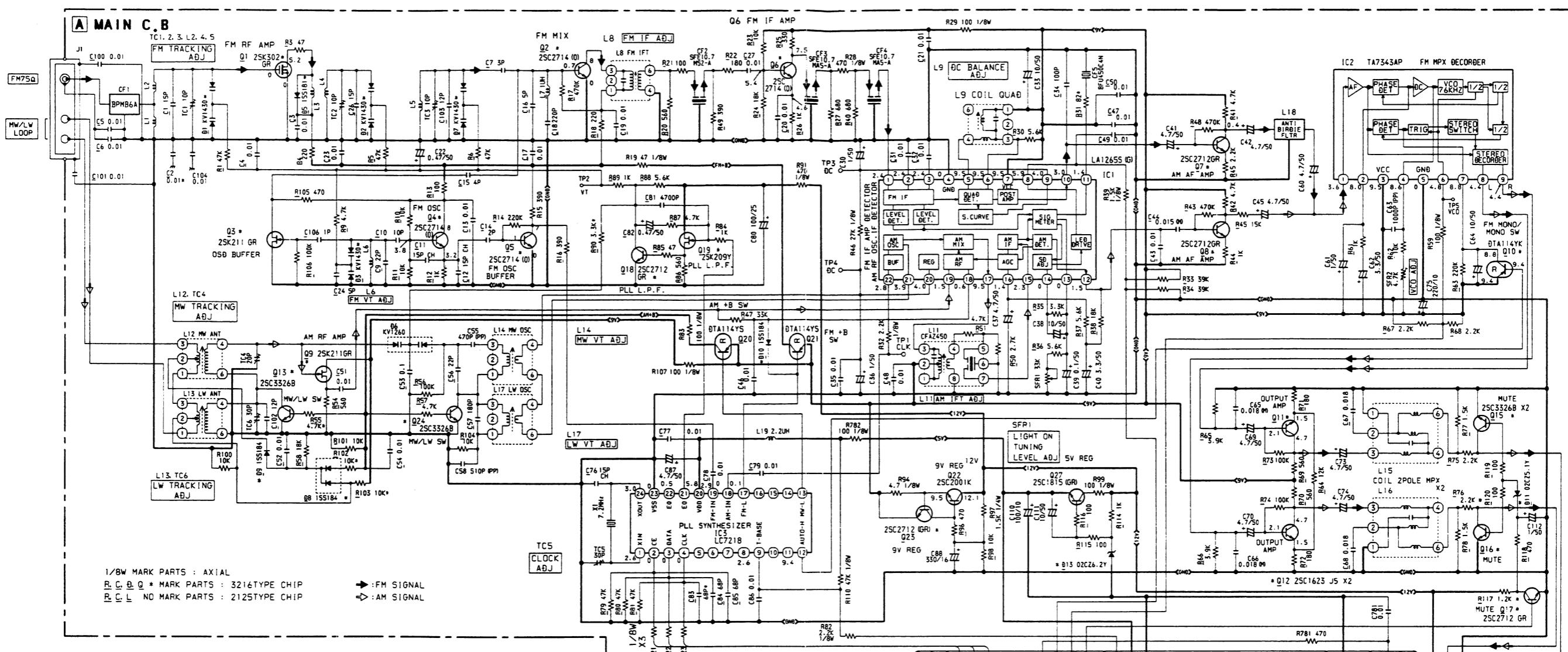
B FRONT C.B



GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF
EFFECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示は印表示です。)

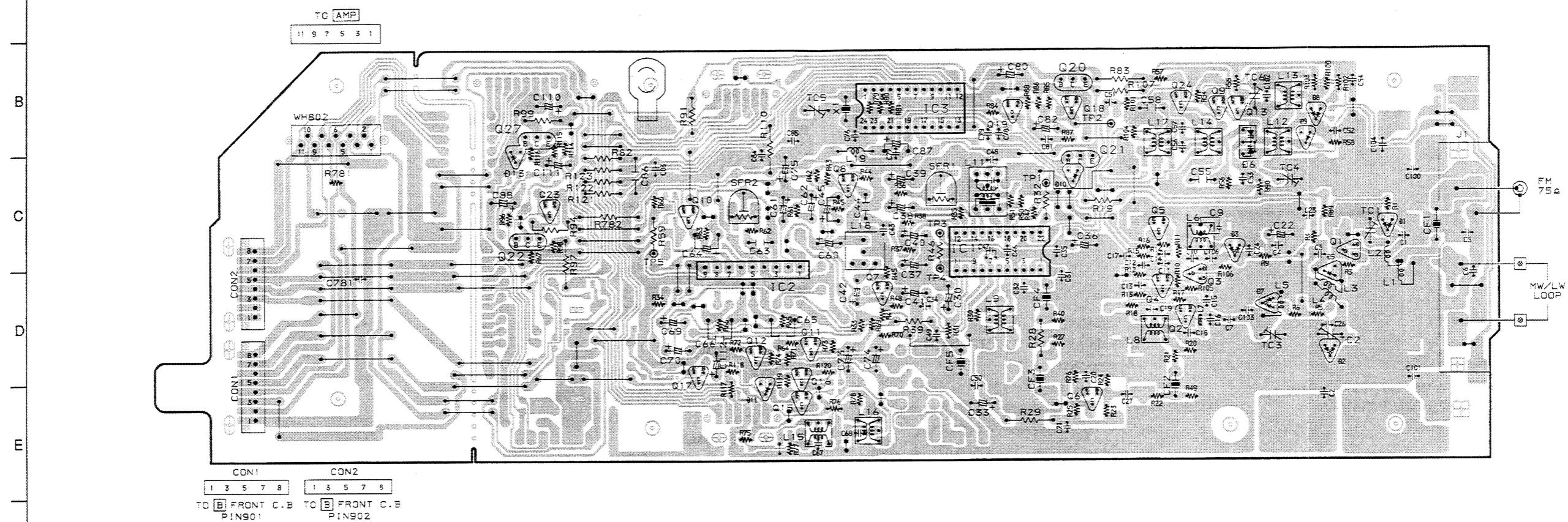
SCHEMATIC DIAGRAM — 3 (TX-Z7000Z)



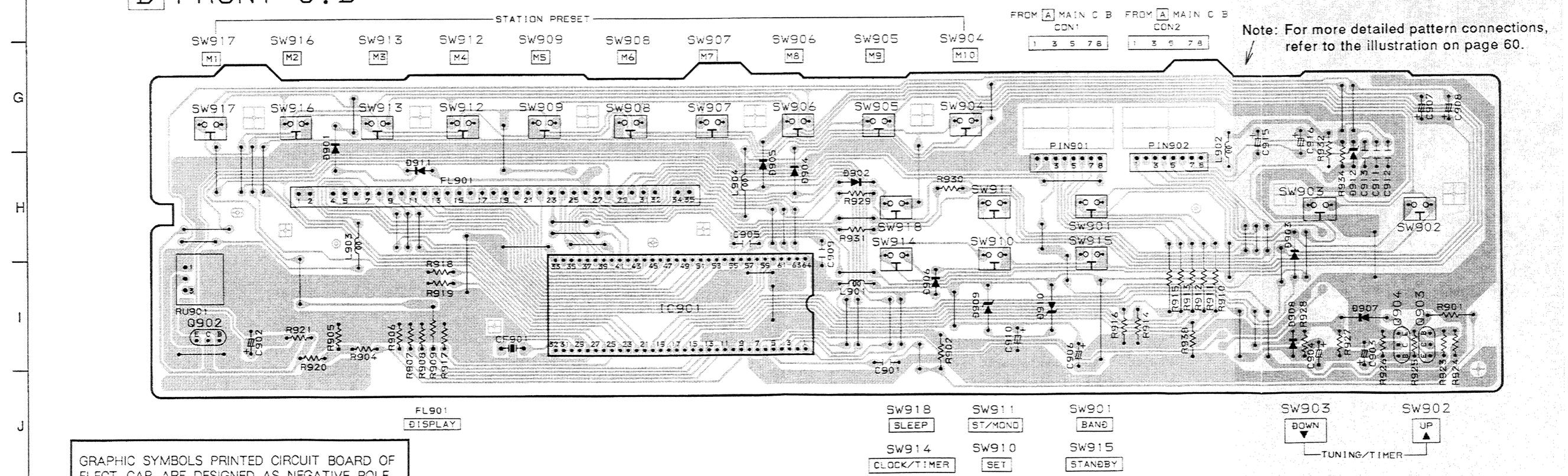
WIRING — 3 (TX-Z7000Z)

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14

A MAIN C.B



B FRONT C.B

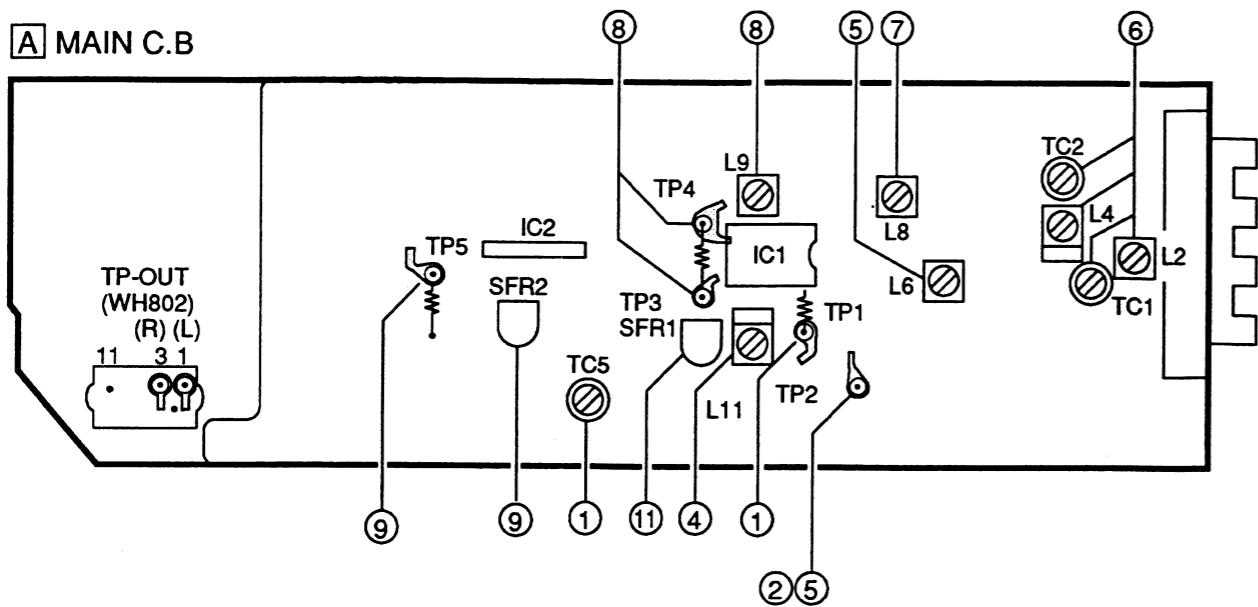


GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF
ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示は②表示です。)

ADJUSTMENT-1(TX-Z7000H)

A MAIN C.B



1. Clock Frequency Adjustment

- Settings: · Test point: TP1
- Adjustment location: TC5

Method: Set to AM 1602kHz and adjust so that the test point becomes $2052\text{kHz} \pm 0.01\text{kHz}$.

2. AM VT Check

- Settings: · Test point: TP2 (VT)
- Method: Set to AM 531kHz and check so that the test point becomes $1.1\text{V} \pm 0.20\text{V}$.

3. AM Tracking Check

- Settings: · Test point: TP-OUT (WH802)
- Method: Set to AM 999kHz and check so that the sensitivity becomes less than 56dB.

4. AM IF Adjustment

- Settings: · Test point: TP-OUT (WH802)
- L11 450kHz

5. FM VT Adjustment

- Settings: · Test point: TP2 (VT)
- Adjustment location: L6
- Method: Set to FM 108.0MHz and adjust L6 so that the test point becomes $9.0\text{V} \pm 0.05\text{V}$.

6. FM Tracking Adjustment

- Settings: · Test point: TP-OUT (WH802)
- TC1, 2 108.0MHz
- L2, 4 87.5MHz

7. FM IF Adjustment

- Settings: · Test point: TP-OUT (WH802)
- L8 10.7MHz

PRACTICAL SERVICE FIGURE -1

(TX-Z7000 H)

<FM SECTION>

- IHF Sensitivity: $4 \pm 4\text{dB}$ (at 87.5MHz)
 (THD 3%) $2 \pm 3\text{dB}$ (at 98.0/108.0MHz)
 S/N 50dB Quieting Sensitivity:
 Less than 34dB
 (at 87.5/98.0/108.0MHz)

- Signal to Noise Ratio: (MONO)
 More than 72dB (at 98.0MHz)
 (STEREO)

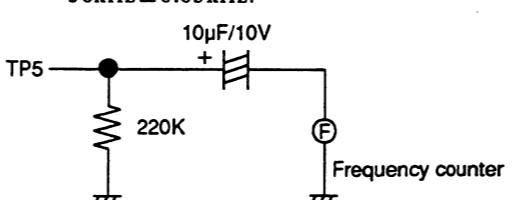
- Distortion:
 (MONO) Less than 0.6% (at 98.0MHz)
 (STEREO) Less than 1.5% (at 98.0MHz)

- Stereo Separation: More than 27dB

- Intermediate Frequency:
 10.7MHz

<AM SECTION>

- Sensitivity: $56 \pm 4\text{dB}$ (at 603kHz)
 (S/N 20dB) $52 \pm 4\text{dB}$ (at 999/1404kHz)
 Distortion: Less than 1.5% (at 999kHz)
 Intermediate Frequency:
 450kHz



10. Separation Check

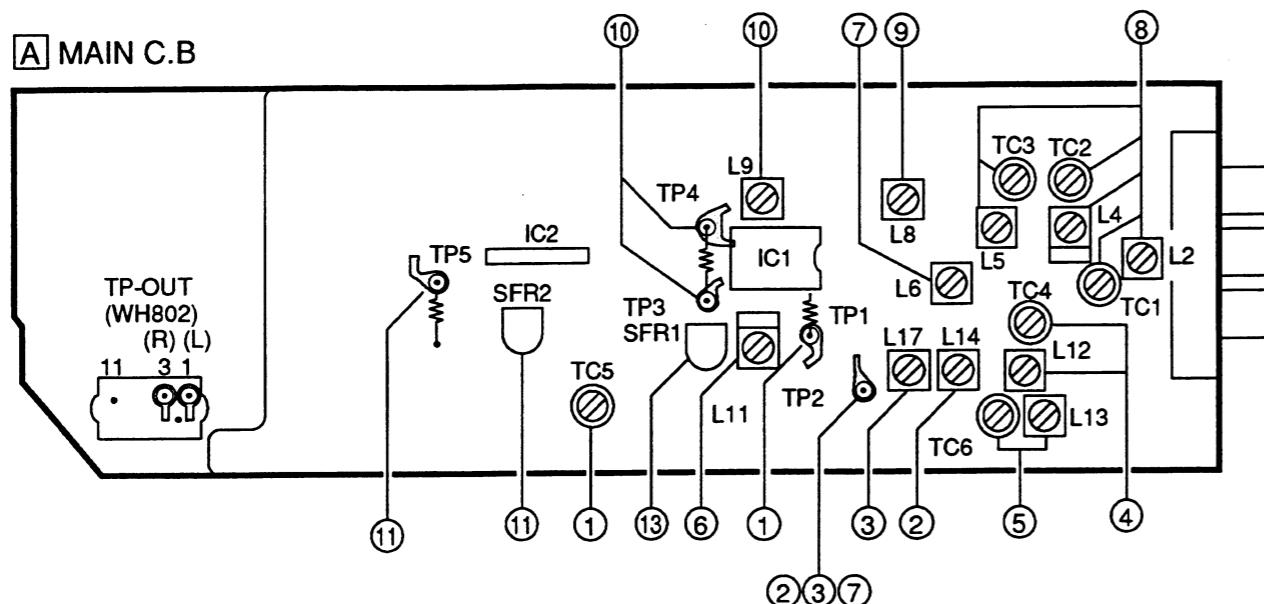
- Settings: · Test point: TP-OUT (WH802)
- Method: Set to FM 98.0MHz and check the separation at TP-OUT becomes more than 27dB.

11. Light on tuning LED Adjustment

- Settings: · Adjustment location: SFR1
- Input level: 18dB
- Method: Set to FM 98.0MHz and adjust TUNNING LED to light on by SFR1. After that, LED goes out by 2dB down.

ADJUSTMENT-2 (TX-Z7000E, Z)

A MAIN C.B



1. Clock Frequency Adjustment

Settings: · Test point: TP1
· Adjustment location: TC5
Method: Set to MW 1611kHz and adjust so that the test point becomes $2061\text{kHz} \pm 0.01\text{kHz}$.

2. MW VT Adjustment

Settings: · Test point: TP2 (VT)
· Adjustment location: L14
Method: Set to MW 522kHz and adjust L14 so that the test point becomes $1.0\text{V} \pm 0.05\text{V}$.

3. LW VT Adjustment

Settings: · Test point: TP2 (VT)
· Adjustment location: L17
Method: Set to LW 144kHz and adjust L17 so that the test point becomes $1.3\text{V} \pm 0.05\text{V}$.

4. MW Tracking Adjustment

Settings: · Test point: TP-OUT (WH802)
L12 603kHz
TC4 1,404kHz

5. LW Tracking Adjustment

Settings: · Test point: TP-OUT (WH802)
L13 144kHz
TC6 290kHz

6. AM IF Adjustment

Settings: · Test point: TP-OUT (WH802)
L11 450kHz

7. FM VT Adjustment

Settings: · Test point: TP2 (VT)
· Adjustment location: L6
Method: Set to FM 108.0MHz and adjust L6 so that the test point becomes $9.0\text{V} \pm 0.05\text{V}$.

8. FM Tracking Adjustment

Settings: · Test point: TP-OUT (WH802)
L2, 4 87.5MHz (E)
L2, 4, 5 87.5MHz (Z)
TC1, 2 108.0MHz (E)
TC1, 2, 3 108.0MHz (Z)

9. FM IF Adjustment

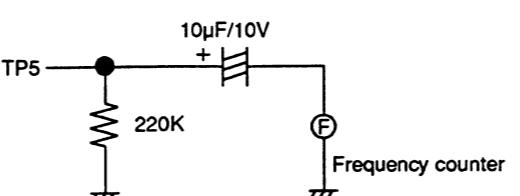
Settings: · Test point: TP-OUT (WH802)
L8 10.7MHz

10. DC Balance Adjustment

Settings: · Test point: TP3, 4 TP-OUT (WH802)
(Distortion)
· Adjustment location: L9
Method: Set to FM 98.0MHz and adjust L9 so that TP3 and TP4 output becomes $0\text{V} \pm 0.02\text{V}$. Next, check so that the distortion becomes less than 0.6%.

11. MPX VCO Adjustment

Settings: · Test point: TP5
· MODE SW: STEREO
· Adjustment location: SFR2
Method: Connect a capacitor and resistor as below. Set to FM 98.0MHz non modulation and adjust so that the frequency at test point becomes $38\text{kHz} \pm 0.05\text{kHz}$.



12. Separation Check

Settings: · Test point: TP-OUT (WH802)
Method: Set to FM 98.0MHz and check the separation at TP-OUT becomes more than 27dB.

13. Light on tuning LED Adjustment

Settings: · Adjustment location: SFR1
· Input level: 18dB
Method: Set to FM 98.0MHz and adjust TUNNING LED to light on by SFR1. After that, LED goes out by 2dB down.

PRACTICAL SERVICE FIGURE-2

(TX-Z7000E, Z)

<FM SECTION>

Usable Sensitivity: $4 \pm 4\text{dB}$ (at 87.5MHz) (E)
 $8 \pm 4\text{dB}$ (at 87.5MHz) (Z)
 $2 \pm 4\text{dB}$ (at 98.0/108.0MHz) (E)
 $6 \pm 4\text{dB}$ (at 98.0/108.0MHz) (Z)

S/N 50dB Quieting Sensitivity:

Less than 34dB
(at 87.5/98.0/108.0MHz) (E)
Less than 38dB
(at 87.5/98.0/108.0MHz) (Z)

Signal to Noise Ratio: (MONO)

More than 72dB (at 98.0MHz) (E)
More than 68dB (at 98.0MHz) (Z)
(STEREO)
More than 65dB (at 98.0MHz) (E)
More than 60dB (at 98.0MHz) (Z)

Total Harmonic Distortion:

(MONO)
Less than 0.6% (at 98.0MHz)
(STEREO)

Less than 1.5% (at 98.0MHz)

Stereo Separation: More than 27dB

Intermediate Frequency:

10.7MHz

<MW SECTION>

Sensitivity: $56 \pm 4\text{dB}$ (at 603kHz)
(S/N 20dB) $52 \pm 4\text{dB}$ (at 999/1404kHz)

Total Harmonic Distortion:

Less than 1.5% (at 999kHz)

Intermediate Frequency:

450kHz

<LW SECTION>

Sensitivity: $63 \pm 5\text{dB}$ (at 144kHz)
(S/N 20dB) $60 \pm 5\text{dB}$ (at 198/290kHz)

Total Harmonic Distortion:

Less than 1.2% (at 198 kHz)

Intermediate Frequency:

450kHz

IC DESCRIPTION (TX-Z7000)

IC, μ PD75268CW – 029

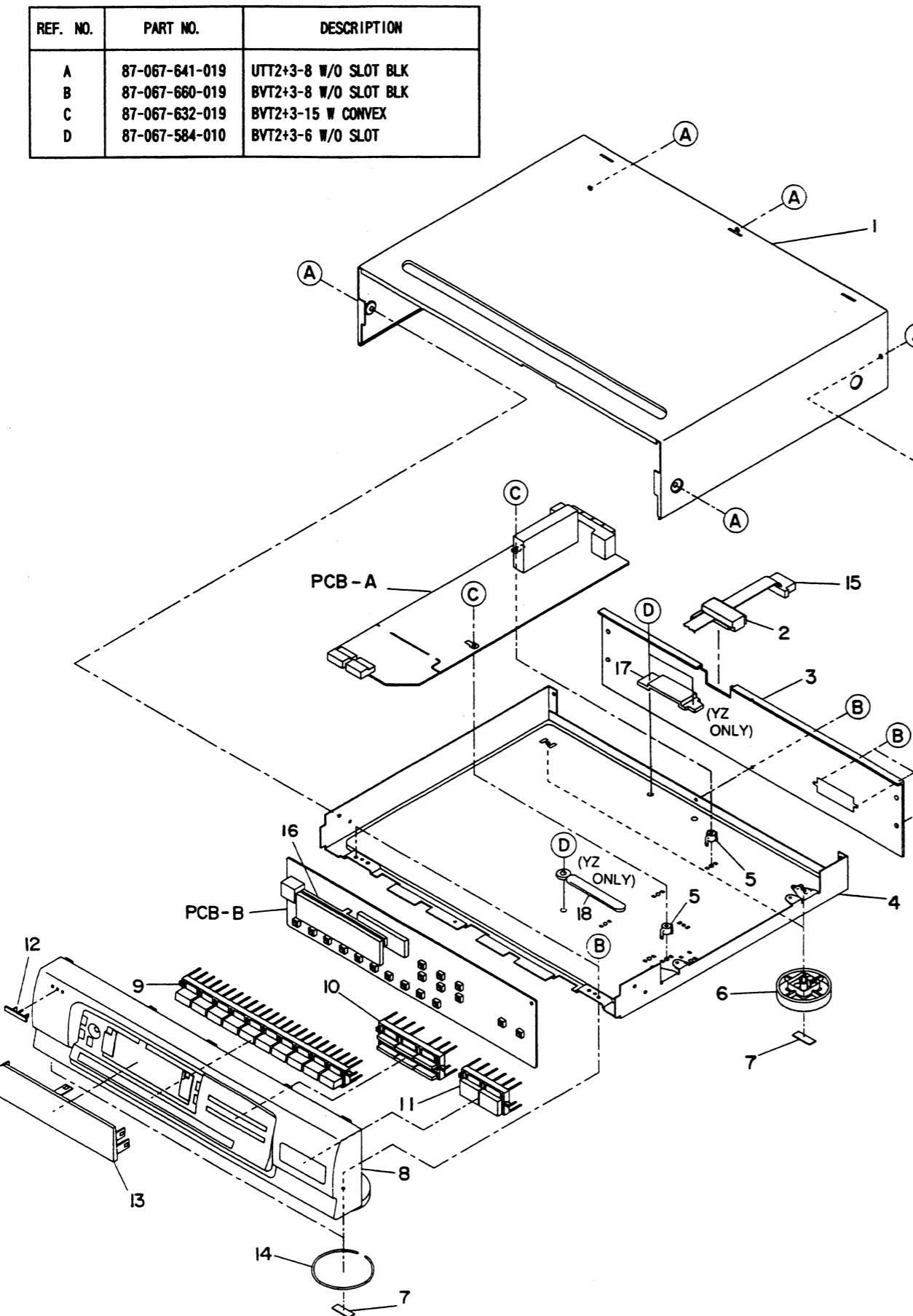
Pin No.	Pin Name	I/O	Description
1~4	Sd~Sg	O	FL display segment signal outputs, key scan signal outputs. Active "H"
5	PBK	I	Power failure detection input. When "L" level continues for 30 ms or more, a power failure is detected (the unit enters the backup mode). Diagram showing a voltage waveform over time: - The waveform starts at 5V. - It drops to a lower level labeled "L" level. - The duration of this low level is indicated by a double-headed arrow labeled "30ms". - After 30ms, the waveform returns to 0V. - The waveform then continues at 0V.
6	—	-	Not used (connected to ground).
7	AUTO - L	O	When an FM broadcast is received, this pin outputs a signal depending on the AUTO condition selected by the MODE key. Active "L" when the AUTO indicator lights. • Even if the AUTO indicator changes when the frequency is being set during timer programming, the output follows the condition currently received.
8	—	-	Not used (connected to ground).
9	REMOCON	I	Serial data input for remote control. Active "H" (the rise is detected).
10	—	-	Not used (connected to ground).
11	—	-	Not used (connected to ground).
12	POW SW	I/O	Power control input port. The power is turned on and off alternately each time the power switch of the amplifier is pressed.
13	B0	I	These input pins select the frequency range, etc. with the 3 bits depending on the destination of the units.
14	B2	I	Input to stop auto scanning. Active "L". • The input is not accepted during power off. • The input causes "TUNE" to light. • Searches for SD signals every 5 ms during auto scanning. When 4 "L" pulses are counted, scanning will stop. • SD is not detected during manual tuning.
15	B1	I	Input which causes the STEREO indicator to light. Active "L". • This input is not accepted during power off.
16	SD	I	Outputs a muting signal when a key is operated.
17	STEREO	I	8-bit serial data input/output.
18	K·MUTE	O	Outputs 8Hz pulses from the PLL (LC7218) as a clock signal timing.
19	SER I/O	I/O	Receives 8Hz pulses from the PLL (LC7218) as a clock signal timing.
20	T - BASE	I	Key matrix inputs (K2 and K3 are not used and connected to ground).
21~24	K0~K3	I	TEST1
25	TEST2	I	TEST mode setting inputs.
26	TEST3	I	AC CLK
27	—	I	Receives the commercial power frequency (the AC level is 5V) as a reference signal for the clock. Not used (connected to ground).
28	—	-	Not used (not connected).
29	—	-	Not used (not connected).
30	X1	-	A ceramic oscillator which generates the main system clock signal (4.19MHz) is connected.
31	X2	-	Ground pin.
32	GND	-	Not used (connected to ground).
33	XT1	-	Not used (not connected).
34	XT2	-	Not used (not connected).
35	POW ON	-	Not used (not connected). Goes "H" during power on and "L" during power off.
36	CE	O	Output ports which transmit serial data to the PLL (LC7218). Active "H".
37	DATA	O	RESET
38	CLK	I	System reset input. When the TUNER MODE and BAND switches are pressed and held for 1 second, the clock and preset stations are reset.

Pin No.	Pin Name	I/O	Description
40~48	D1~D9	O	FL display digit outputs.
49	—	-	Not used (not connected).
50	Sn	O	FL display segment outputs.
51	Sm	O	—
52	S2	O	—
53	Sk	O	—
54	—	-	Not used (not connected).
55	—	-	—
56	V LOAD	I	Supplies power (-25V) to the output buffer of the FL display driver.
57	V PRE	I	Connected to ground.
58	Sj	O	FL display segment outputs.
59	Si	O	—
60	Sh	O	—
61	Sa	O	—
62	Sb	O	—
63	Sc	O	—
64	VDD	-	+5V power terminal.

IC, LC7218

Pin No.	Pin Name	I/O	Description
1 24	X IN X OUT	-	Clock oscillator connection pins. A 7.2MHz crystal oscillator is connected.
2	CE	I	When a key is operated, signals are transferred from the CPU. Active "H".
3	DATA	I	—
4	CLK	I	—
5 7 8	—	-	Unused (Not connected).
9	T - BASE	O	Outputs an 8Hz signal. Transfers it to the CPU as a time base clock signal.
10	—	-	Unused (Not connected).
11	—	O	Unused (Not connected).
12	AUTO - H	-	Outputs "H" when FM stereo switching is set to AUTO.
13	MW (AM) - L	O	Outputs "L" when an MW (AM) broadcast is received.
14 15 16	—	-	Unused (Not connected).
17	FM - L	O	Outputs "L" when an FM broadcast is received.
18	AM - IN	I	AM local oscillation input.
19	FM - IN	I	FM local oscillation input.
20	VDD	-	Power supply pin. 5V ± 10 %
21	EO ₁	O	PLL error output.
22	EO ₂	-	Unused (Not connected).
23	VSS	-	Ground pin.

EXPLODED VIEW (TX-Z7000)



MECHANICAL PARTS LIST (TX-Z7000)

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".

PART NO.	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
CHANGED TO	NO.				
	1 ★82-VT1-009-119	CAB, STEEL		*	1
	2 ★89-VT5-202-010	BUSHING, CORD		1	
	3 ★82-VT1-010-019	PANEL, REAR YHJBN (YH)		*	1
	3 ★82-VT1-016-019	PANEL, REAR YLHJBN (YLH)		*	1
	3 ★82-VT1-012-019	PANEL, REAR YEBNE (YE)		*	1
	3 ★82-VT1-013-019	PANEL, REAR YZBNE (YZ)		*	1
	4 ---	CHASSIS, MAIN		1	
	5 ---	HOLDER, PCB		2	
	6 ★81-VX1-012-019	FOOT, REAR		2	
	7 ★82-VW2-211-019	FELT, 20 - 7.5 - 2		4	
	8 ★82-VT1-007-119	CAB, FR EX		*	1
	9 ★82-VT1-002-119	KEY, 10		*	1
	10 ★82-VT1-003-019	KEY, BAND		*	1
	11 ★82-VT1-004-019	KEY, UP/DOWN		*	1
	12 ★81-DS1-011-019	BADGE, AIWA N		1	
	13 ★82-VT1-005-019	WINDOW, TU		*	1
	14 ★81-VW1-015-019	RING FOOT		2	
	15 ★82-VT1-605-010	CORD, FG 11P		*	1
	16 ★81-690-201-110	GUIDE, FL		1	
	17 ★81-VX1-210-110	HLDR, WIRE G (YZ)		1	
	18 ★87-038-039-010	WIRE, BINDER (YZ)		1	

MODEL NO.

SX — Z3000**■ SPEAKER LIST (SX — Z3000)**

REF. NO.	PART NO.	DESCRIPTION
1	82-VS2-002-010	PANEL WOOFER (H,HE)
2	82-VS2-023-010	PANEL W E (E,K,Z)
3	82-VS2-012-010	PANEL TW ASSY (H,HE)
4	82-VS2-021-010	PANEL T ASSY E (E,K,Z)
5	82-VS3-008-010	GRILL FRAME ASSY (H,HE)
6	82-VS3-006-010	GRILL FRAME ASSY (E,K,Z)
7	82-VS3-601-010	SPEAKER WOOFER (H,HE)
8	82-VS2-604-010	SPEAKER WOOFER (E,K,Z)
9	89-VS5-609-010	SPEAKER TWEETER (H,HE)
10	82-MS1-603-010	SPEAKER TWEETER (E,K,Z)
11	81-NSC-602-010	SPEAKER CERAMIC (H,HE)
12	82-VS2-016-010	PANEL M ASSY (H,HE)
13	82-VS2-022-010	PANEL M ASSY E (E,K,Z)
14	81-672-612-010	SPEAKER CORD (H,HE)
15	82-VS2-025-010	SPEAKER CORD (E,K,Z)

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, N/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
サージブレッタ	SERGE SUPPRESSOR
セラコン	CAP, CERA

SPR-PC-PUSH	P-SPRING, C-PUSH
SW	SWITCH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER

TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESIVE	Sheet Adhesive
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BAT, CONTACT ASSY	BATTERY CONTACT ASSY

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	