

# SERVICE MANUAL

CD STEREO SYSTEM

BASIC TAPE MECHANISM : 2ZM-3MK2 PR7NM  
 BASIC CD MECHANISM : BZG-5 ZD5GNM

SYSTEM	CD CASSEIVER	SPEAKER	SPEAKER
NSX-R90	CX-SNR90	SX-SNR90	SX-SR165

This Service Manual is the "Revision Publishing" and replaces "Simple Manual" NSX-R90(LH)(S/MCode 09-024-458-7T1).

If requiring information about the CD mechanism, see Service Manual of BZG-5 (S/M Code No. 09-023-353-3NC).

# aiwa

S/M Code No. 09-024-458-7R1

REVISION

DATA

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# SPECIFICATIONS

## **MAIN UNIT CX-NR90**

### **TUNER**

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	13.2 dBf
FM antenna terminal	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 $\mu$ V/m
AM antenna	Loop antenna

### **AMPLIFIER**

Power output	Rated: 150 W + 150 W (T.H.D. 1 %, 1 kHz, 6 ohms) Reference: 240 W + 240 W (T.H.D. 10 %, 1 kHz, Front speakers 6 ohms + Surround speakers 8 ohms)
Total harmonic distortion	0.08 % (75 W, 1 kHz, 6 ohms, DIN AUDIO)
Input	VIDEO/AUX: 700 mV MIC: 2.4 mV (10 kohms)
Outputs	SPEAKERS: 6 ohms or more SURROUND SPEAKERS: 8 ohms to 16 ohms PHONES: 32 ohms or more

### **CASSETTE DECK**

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 15 kHz
Recording system	AC bias
Heads	DECK 1: playback x 1 DECK 2: recording/playback x 1, erase x 1

### **CD PLAYER**

Laser	Semiconductor laser ( $\lambda = 780$ nm)
D/A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)

### **GENERAL**

Power requirements	120 V/220 V - 230 V/240 V AC (switchable), 50 Hz/60 Hz
Power consumption	240 W
Power consumption in standby mode	With ECO mode on: 0.6 W With ECO mode off: 33 W
Dimensions (W x H x D)	260 x 324 x 360 mm
Weight	9.6 kg

### **FRONT SPEAKERS SX-NR90**

Speaker system	4 way, Built-in subwoofer (magnetic shielded)
Speaker units	Subwoofer: 180 mm cone Mid range: 100 mm cone Tweeter: 50 mm cone Super tweeter: 20 mm ceramic
Impedance	6 ohms
Dimensions (W x H x D)	285 x 388 x 300 mm
Weight	9.5 kg

### **SURROUND SPEAKERS SX-R165**

Speaker system	1 way, closed
Speaker unit	Full range: 80 mm cone
Impedance	8 ohms
Dimensions (W x H x D)	194 x 117 x 132 mm
Weight	0.8 kg

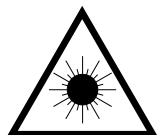
- Design and specifications are subject to change without notice.

## PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

### WARNING!

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



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

### VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

### WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig 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

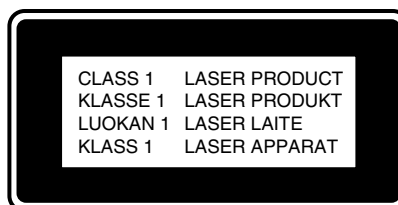
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

### ADVARSEL!

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

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

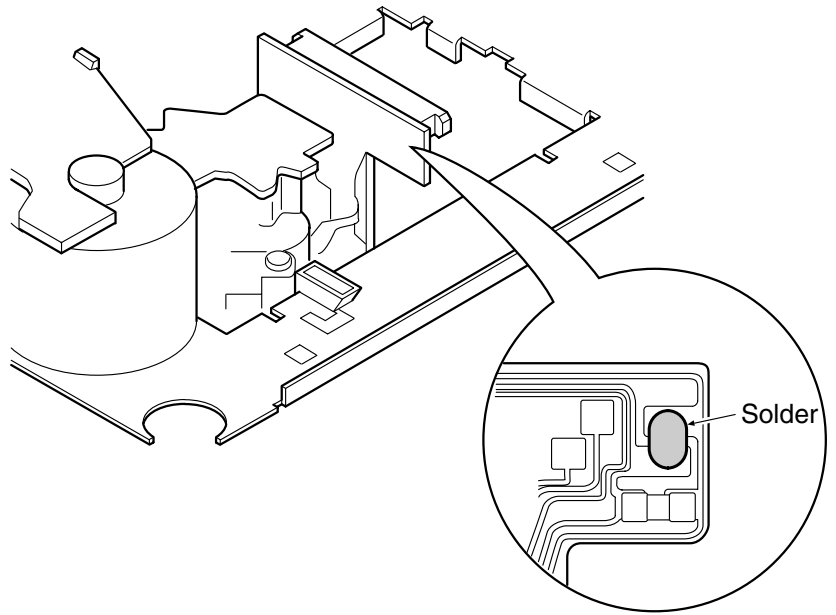
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



## Precaution to replace Optical block (KSS-213R)

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.



PICK-UP Assy PWB

# ACCESSORIES PARTS LIST -1/1

- ! =  $\Delta$  SAFETY PARTS
- C = Components marked

All components used on this model at the production line are shown in this service manual.

However, please note that not all components will be available as spare parts for after-sales service.

Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.

Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90
					LHSM
	O	AS1001	87-006-225-010	ANT, LOOP ANT NC2	a
	O	AS1002	87-A92-345-010	ANT, WIRE FM(SEMI-ST)	a
	X	AS1003	87-B40-098-010	BAG, PV 0.025-650-750 PL	a
	X	AS1004	87-B40-085-010	BAG, PV 0.04-200-350 PL	a
	X	AS1005	8C-NF5-851-110	CUSHION, FRONT LHM	a
	X	AS1006	8C-NF5-852-010	CUSHION, REAR LHM	a
	O	AS1007	8C-NF4-902-010	IB, LH (ESP)M NSX-R90	a
	X	AS1008	8C-NF4-970-010	LBL, POP LH	a
	X	AS1009	87-B50-079-010	LIST, FACILITY (B) -0007	a
	! O	AS1010	87-A92-262-010	PLUG, CONVERSION WT01011	a
	O	AS1011	8B-NF1-701-110	RC UNIT, CAS01	a
	X	AS1012	87-B50-056-010	SH, CAUTION AC VOLTAGE	a
	X	AS1013	93-704-337-010	SH, FOAMED-MAT 0.31-800-500	a

# ELECTRICAL PARTS LIST -1/18

! = SAFETY PARTS  
 C = Components marked

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
FRONT C.B	O C	0108	87-010-785-080	C-CAP,U 0.015-25 K B GRM	a
FRONT C.B	O C	0153	87-010-787-080	C-CAP,U 0.022-25 K B GRM	a
FRONT C.B	O C	0154	87-A12-078-040	CAP,E 47-35 SMG	a
FRONT C.B	O C	0155	87-A12-090-040	CAP,E 4.7-50 SMG	a
FRONT C.B	O C	0156	87-A12-090-040	CAP,E 4.7-50 SMG	a
FRONT C.B	O C	0201	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
FRONT C.B	O C	0202	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0203	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0204	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0301	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
FRONT C.B	O C	0313	87-A12-087-040	CAP,E 1-50 SMG	a
FRONT C.B	O C	0314	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
FRONT C.B	O C	0315	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
FRONT C.B	O C	0351	87-A10-353-080	C-CAP,U 0.22-10 K B	a
FRONT C.B	O C	0361	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
FRONT C.B	O C	0362	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
FRONT C.B	O C	0363	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
FRONT C.B	O C	0364	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
FRONT C.B	O C	0371	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
FRONT C.B	O C	0372	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
					CX-SNR90 LHSM
FRONT C.B	O C	0601	87-A12-069-040	CAP,E 22-25 SMG	a
FRONT C.B	O C	0801	87-A11-969-080	C-CAP,U 0.082U-16 K B	a
FRONT C.B	O C	0803	87-012-280-080	C-CAP,U 3300P-50 K B GRM	a
FRONT C.B	O C	0804	87-A10-592-080	C-CAP,S 0.015-50 J B	a
FRONT C.B	O C	0806	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
FRONT C.B	O C	0808	87-A12-087-040	CAP,E 1-50 SMG	a
FRONT C.B	O C	0809	87-A12-092-040	CAP,E 22-50 SMG	a
FRONT C.B	O C	0810	87-A11-057-080	C-CAP,U 0.1-16 K B	a
FRONT C.B	O C	0811	87-012-280-080	C-CAP,U 3300P-50 K B GRM	a
FRONT C.B	O C	0812	87-012-281-080	C-CAP,U 3900P-50 K B GRM	a
FRONT C.B	O C	0901	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0902	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0903	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0904	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0905	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0906	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0907	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0908	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0909	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0910	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
					CX-SNR90 LHSM
FRONT C.B	O C	0911	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
FRONT C.B	O C	0912	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
FRONT C.B	O C	0913	87-A10-189-040	CAP,E 220-10 M 5L	a
FRONT C.B	O C	0915	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
FRONT C.B	O C	0916	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
FRONT C.B	O C	0917	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
FRONT C.B	O C	0919	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
FRONT C.B	O C	0920	87-010-829-080	C-CAP,U 0.047-16 Z F	a
FRONT C.B	O C	0921	87-012-282-080	C-CAP,U 4700P-50 K B GRM	a
FRONT C.B	O C	0922	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
FRONT C.B	O C	0951	87-012-172-080	C-CAP,U 10P-50 D CH	a
FRONT C.B	O C	0952	87-010-854-080	C-CAP,S 560P-50 J CH	a
FRONT C.B	O C	0953	87-012-349-080	C-CAP,S 1000P-50 J CH GRM	a
FRONT C.B	O C	0961	87-A12-075-040	CAP,E 10-35 SMG	a
FRONT C.B	O C	0962	87-012-336-080	C-CAP,U 330P-50 J SL	a
FRONT C.B	O C	0963	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
FRONT C.B	O CN	0105	87-099-750-010	CONN,15P V 9604SC	a
FRONT C.B	O CN	0202	87-099-209-010	CONN,4P H BLK 6216	a
FRONT C.B	O CN	0701	87-099-720-010	CONN,30P BLK TYK-B(P)	a
FRONT C.B	O CN	0731	87-099-196-010	CONN,8P V BLK 6216	a
					CX-SNR90 LHSM
FRONT C.B	S D	0104	87-A40-291-080	DIODE,1N4148M (CPT)	a
FRONT C.B	S D	0301	87-A40-748-080	ZENER,UZ5.6BSA	a
FRONT C.B	S D	0302	87-A40-291-080	DIODE,1N4148M (CPT)	a
FRONT C.B	S D	0303	87-A40-291-080	DIODE,1N4148M (CPT)	a
FRONT C.B	S D	0601	87-A40-269-080	C-DIODE,MC2836	a
FRONT C.B	S D	0657	87-A40-269-080	C-DIODE,MC2836	a
FRONT C.B	S D	0658	87-A40-269-080	C-DIODE,MC2836	a
FRONT C.B	X D	0702	88-100-000-010	PLATING-JW, 0.58 SN95	a
FRONT C.B	X D	0703	88-100-000-010	PLATING-JW, 0.58 SN95	a
FRONT C.B	S D	0801	87-A40-291-080	DIODE,1N4148M (CPT)	a
FRONT C.B	S D	0987	87-A40-291-080	DIODE,1N4148M (CPT)	a
FRONT C.B	S D	0991	87-A40-291-080	DIODE,1N4148M (CPT)	a
FRONT C.B	O FL	0901	8C-NF5-603-010	FL,HUA-11MM42T	a
FRONT C.B	S IC	0601	87-070-289-040	C-IC,BU2092F	a
FRONT C.B	S IC	0901	8C-NF5-601-130	C-IC,UPD780226GF-034-3BA	a
FRONT C.B	S IC	0961	87-A21-831-010	IC,SPS-442-1-F1	a
FRONT C.B	X JR	0101	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X JR	0602	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X JR	0604	88-108-000-080	C-JUMPER,U	a
FRONT C.B	O JR	0606	88-108-101-080	C-RES,U 100-1/16W J	a

# ELECTRICAL PARTS LIST -2/18

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
FRONT C.B	X	JR 0608	88-108-000-080	C-JUMPER,U	a
FRONT C.B	O	JR 0610	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	X	JR 0612	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	JR 0614	88-108-000-080	C-JUMPER,U	a
FRONT C.B	O	JR 0615	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	X	JR 0620	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	JR 0621	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	JR 0901	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	JR 0902	88-129-000-080	C-JUMPER, 3216	a
FRONT C.B	X	JR 0903	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	JR 0904	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	JR 0962	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	JW 0937	88-121-101-080	RES,100-1/8W J	a
FRONT C.B	O	L 0951	87-A50-655-010	COIL,CLK 4.19MHZ (TOKO) 7KLY	a
FRONT C.B	O	LED0201	87-A41-062-040	LED,LTL-1CHEE-012A RED	a
FRONT C.B	O	LED0205	87-A41-062-040	LED,LTL-1CHEE-012A RED	a
FRONT C.B	O	LED0206	87-A41-062-040	LED,LTL-1CHEE-012A RED	a
FRONT C.B	O	LED0207	87-A41-062-040	LED,LTL-1CHEE-012A RED	a
FRONT C.B	O	LED0208	87-A41-062-040	LED,LTL-1CHEE-012A RED	a
FRONT C.B	S	Q 0102	87-A30-076-080	C-TR,2SC3052F	a
					CX-SNR90 LHSM
FRONT C.B	S	Q 0103	87-A30-538-040	C-TR,SRA2202S	a
FRONT C.B	S	Q 0104	87-A30-538-040	C-TR,SRA2202S	a
FRONT C.B	S	Q 0301	87-A30-494-080	TR,2SA1980G	a
FRONT C.B	S	Q 0302	87-A30-076-080	C-TR,2SC3052F	a
FRONT C.B	S	Q 0303	87-A30-076-080	C-TR,2SC3052F	a
FRONT C.B	S	Q 0601	87-A30-495-080	TR,2SA1981Y	a
FRONT C.B	S	Q 0602	87-A30-495-080	TR,2SA1981Y	a
FRONT C.B	S	Q 0603	89-112-965-080	TR,2SA1296GR	a
FRONT C.B	S	Q 0801	87-A30-076-080	C-TR,2SC3052F	a
FRONT C.B	S	Q 0803	87-A30-288-040	C-TR,DTC114YKA	a
FRONT C.B	S	Q 0804	87-A30-288-040	C-TR,DTC114YKA	a
FRONT C.B	S	Q 0805	87-A30-288-040	C-TR,DTC114YKA	a
FRONT C.B	S	Q 0806	87-A30-076-080	C-TR,2SC3052F	a
FRONT C.B	S	Q 0901	87-A30-538-040	C-TR,SRA2202S	a
FRONT C.B	O	R 0109	88-108-224-080	C-RES,U 220K-1/16W J	a
FRONT C.B	O	R 0110	88-108-153-080	C-RES,U 15K-1/16W J	a
FRONT C.B	X	R 0111	88-108-333-080	C-RES,U 33K-1/16W J	a
FRONT C.B	O	R 0112	88-108-224-080	C-RES,U 220K-1/16W J	a
FRONT C.B	O	R 0114	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	O	R 0115	88-108-153-080	C-RES,U 15K-1/16W J	a
					CX-SNR90 LHSM
FRONT C.B	X	R 0116	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X	R 0151	88-100-000-010	PLATING-JW, 0.58 SN95	a
FRONT C.B	X	R 0152	88-100-000-010	PLATING-JW, 0.58 SN95	a
FRONT C.B	X	R 0153	88-128-821-080	C-RES, 820-1/8W J	a
FRONT C.B	X	R 0154	88-128-821-080	C-RES, 820-1/8W J	a
FRONT C.B	O	R 0155	88-108-332-080	C-RES,U 3.3K-1/16W J	a
FRONT C.B	O	R 0156	88-108-332-080	C-RES,U 3.3K-1/16W J	a
FRONT C.B	X	R 0160	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	R 0161	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	R 0162	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	R 0163	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	R 0164	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	R 0165	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	R 0166	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X	R 0206	88-128-102-080	C-RES, 1K-1/8W J	a
FRONT C.B	X	R 0207	88-128-102-080	C-RES, 1K-1/8W J	a
FRONT C.B	X	R 0208	88-128-102-080	C-RES, 1K-1/8W J	a
FRONT C.B	X	R 0211	88-121-102-080	RES,1K-1/8W J	a
FRONT C.B	X	R 0212	88-121-102-080	RES,1K-1/8W J	a
FRONT C.B	X	R 0213	88-121-103-080	RES,10K-1/8W J	a
					CX-SNR90 LHSM
FRONT C.B	X	R 0215	88-121-103-080	RES,10K-1/8W J	a
FRONT C.B	X	R 0216	88-121-103-080	RES,10K-1/8W J	a
FRONT C.B	X	R 0217	88-108-472-080	C-RES,U 4.7K-1/16W J	a
FRONT C.B	X	R 0218	88-121-101-080	RES,100-1/8W J	a
FRONT C.B	X	R 0301	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X	R 0302	88-108-472-080	C-RES,U 4.7K-1/16W J	a
FRONT C.B	O	R 0303	88-108-153-080	C-RES,U 15K-1/16W J	a
FRONT C.B	O	R 0304	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	X	R 0306	88-108-471-080	C-RES,U 470-1/16W J	a
FRONT C.B	O	R 0321	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	O	R 0322	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	X	R 0323	88-108-821-080	C-RES,U 820-1/16W J	a
FRONT C.B	X	R 0324	88-121-122-080	RES,1.2K-1/8W J	a
FRONT C.B	X	R 0325	88-108-122-080	C-RES,U 1.2K-1/16W J	a
FRONT C.B	X	R 0326	88-108-122-080	C-RES,U 1.2K-1/16W J	a
FRONT C.B	X	R 0327	88-108-182-080	C-RES,U 1.8K-1/16W J	a
FRONT C.B	X	R 0328	88-108-182-080	C-RES,U 1.8K-1/16W J	a
FRONT C.B	X	R 0329	88-121-272-080	RES,2.7K-1/8W J	a
FRONT C.B	O	R 0330	88-108-332-080	C-RES,U 3.3K-1/16W J	a
FRONT C.B	X	R 0331	88-108-472-080	C-RES,U 4.7K-1/16W J	a



# ELECTRICAL PARTS LIST -3/18

! =  $\Delta$ SAFTY PARTS  
 C = Components marked

All components used on this model at the production line are shown in this service manual.  
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 Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
FRONT C.B	X R	0332	88-108-682-080	C-RES,U 6.8K-1/16W J	a
FRONT C.B	O R	0333	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	O R	0341	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	O R	0342	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	X R	0343	88-108-821-080	C-RES,U 820-1/16W J	a
FRONT C.B	O R	0344	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	X R	0345	88-108-122-080	C-RES,U 1.2K-1/16W J	a
FRONT C.B	X R	0346	88-108-122-080	C-RES,U 1.2K-1/16W J	a
FRONT C.B	X R	0347	88-108-182-080	C-RES,U 1.8K-1/16W J	a
FRONT C.B	O R	0361	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	O R	0362	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	X R	0363	88-108-100-080	C-RES,U 10-1/16W J	a
FRONT C.B	X R	0364	88-108-100-080	C-RES,U 10-1/16W J	a
FRONT C.B	O R	0365	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	O R	0366	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	X R	0367	88-108-100-080	C-RES,U 10-1/16W J	a
FRONT C.B	X R	0368	88-108-100-080	C-RES,U 10-1/16W J	a
FRONT C.B	O R	0371	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	O R	0372	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	X R	0373	88-108-100-080	C-RES,U 10-1/16W J	a
					CX-SNR90 LHSM
FRONT C.B	X R	0374	88-108-100-080	C-RES,U 10-1/16W J	a
FRONT C.B	X R	0375	88-108-274-080	C-RES,U 270K-1/16W J	a
FRONT C.B	O R	0376	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	O R	0377	88-108-153-080	C-RES,U 15K-1/16W J	a
FRONT C.B	X R	0378	88-108-474-080	C-RES,U 470K-1/16W J	a
FRONT C.B	O R	0379	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	X R	0420	88-129-000-080	C-JUMPER, 3216	a
FRONT C.B	O R	0601	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	X R	0602	88-108-222-080	C-RES,U 2.2K-1/16W J	a
FRONT C.B	O R	0603	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	X R	0604	88-108-222-080	C-RES,U 2.2K-1/16W J	a
FRONT C.B	O R	0605	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	O R	0606	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	X R	0607	88-108-000-080	C-JUMPER,U	a
FRONT C.B	O R	0611	88-108-473-080	C-RES,U 47K-1/16W J	a
FRONT C.B	O R	0612	88-108-473-080	C-RES,U 47K-1/16W J	a
FRONT C.B	O R	0613	88-108-473-080	C-RES,U 47K-1/16W J	a
FRONT C.B	O R	0614	88-108-473-080	C-RES,U 47K-1/16W J	a
FRONT C.B	O R	0615	88-108-473-080	C-RES,U 47K-1/16W J	a
FRONT C.B	O R	0616	88-108-473-080	C-RES,U 47K-1/16W J	a
					CX-SNR90 LHSM
FRONT C.B	X R	0657	88-128-152-080	C-RES, 1.5K-1/8W J	a
FRONT C.B	X R	0658	88-108-152-080	C-RES,U 1.5K-1/16W J	a
FRONT C.B	O R	0704	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	O R	0705	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	O R	0706	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	O R	0707	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	O R	0708	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	O R	0709	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	O R	0710	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	O R	0711	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	O R	0712	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	O R	0715	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	X R	0716	88-108-472-080	C-RES,U 4.7K-1/16W J	a
FRONT C.B	X R	0719	88-108-100-080	C-RES,U 10-1/16W J	a
FRONT C.B	O R	0720	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	X R	0721	88-128-101-080	C-RES, 100-1/8W J	a
FRONT C.B	O R	0730	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	O R	0732	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	O R	0733	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	O R	0734	88-108-102-080	C-RES,U 1K-1/16W J	a
					CX-SNR90 LHSM
FRONT C.B	O R	0735	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	O R	0740	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	O R	0741	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	O R	0742	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	X R	0743	88-108-474-080	C-RES,U 470K-1/16W J	a
FRONT C.B	O R	0744	88-108-823-080	C-RES,U 82K-1/16W J	a
FRONT C.B	X R	0745	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0749	88-108-474-080	C-RES,U 470K-1/16W J	a
FRONT C.B	X R	0801	88-108-472-080	C-RES,U 4.7K-1/16W J	a
FRONT C.B	X R	0802	88-108-222-080	C-RES,U 2.2K-1/16W J	a
FRONT C.B	X R	0803	88-108-152-080	C-RES,U 1.5K-1/16W J	a
FRONT C.B	O R	0804	88-108-224-080	C-RES,U 220K-1/16W J	a
FRONT C.B	X R	0805	88-108-393-080	C-RES,U 39K-1/16W J	a
FRONT C.B	X R	0807	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X R	0808	88-121-101-080	RES,100-1/8W J	a
FRONT C.B	O R	0810	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	X R	0811	88-108-334-080	C-RES,U 330K-1/16W J	a
FRONT C.B	O R	0813	87-A11-057-080	C-CAP,U 0.1-16 K B	a
FRONT C.B	X R	0815	88-108-472-080	C-RES,U 4.7K-1/16W J	a
FRONT C.B	X R	0816	88-108-334-080	C-RES,U 330K-1/16W J	a

# ELECTRICAL PARTS LIST -4/18

! = SAFETY PARTS  
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All components used on this model at the production line are shown in this service manual.  
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 Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
FRONT C.B	O R	0818	87-A11-057-080	C-CAP,U 0.1-16 K B	a
FRONT C.B	O R	0819	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	O R	0821	88-108-224-080	C-RES,U 220K-1/16W J	a
FRONT C.B	O R	0822	87-A11-057-080	C-CAP,U 0.1-16 K B	a
FRONT C.B	X R	0823	88-121-101-080	RES,100-1/8W J	a
FRONT C.B	X R	0824	88-121-101-080	RES,100-1/8W J	a
FRONT C.B	X R	0825	88-121-101-080	RES,100-1/8W J	a
FRONT C.B	O R	0826	88-108-101-080	C-RES,U 100-1/16W J	a
FRONT C.B	O R	0827	88-108-473-080	C-RES,U 47K-1/16W J	a
FRONT C.B	O R	0828	88-108-224-080	C-RES,U 220K-1/16W J	a
FRONT C.B	O R	0829	88-108-224-080	C-RES,U 220K-1/16W J	a
FRONT C.B	X R	0830	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0901	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0902	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0903	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0904	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0905	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0906	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0907	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0908	88-108-104-080	C-RES,U 100K-1/16W J	a
					CX-SNR90 LHSM
FRONT C.B	X R	0909	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0910	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0911	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0912	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0913	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0914	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0915	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0916	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0917	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0918	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0919	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0920	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0921	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0922	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0923	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0924	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0925	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0926	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0927	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0928	88-108-104-080	C-RES,U 100K-1/16W J	a
					CX-SNR90 LHSM
FRONT C.B	X R	0929	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0930	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0931	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0932	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0933	88-121-104-080	RES,100K-1/8W J	a
FRONT C.B	X R	0934	88-108-683-080	C-RES,U 68K-1/16W J	a
FRONT C.B	X R	0935	88-128-683-080	C-RES, 68K-1/8W J	a
FRONT C.B	X R	0936	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0937	88-128-472-080	C-RES, 4.7K-1/8W J	a
FRONT C.B	X R	0938	88-108-472-080	C-RES,U 4.7K-1/16W J	a
FRONT C.B	X R	0939	88-108-472-080	C-RES,U 4.7K-1/16W J	a
FRONT C.B	X R	0940	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0941	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	O R	0942	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	X R	0943	88-121-472-080	RES,4.7K-1/8W J	a
FRONT C.B	X R	0946	88-108-000-080	C-JUMPER,U	a
FRONT C.B	X R	0947	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0948	88-121-104-080	RES,100K-1/8W J	a
FRONT C.B	O R	0951	88-108-102-080	C-RES,U 1K-1/16W J	a
FRONT C.B	X R	0955	88-108-104-080	C-RES,U 100K-1/16W J	a
					CX-SNR90 LHSM
FRONT C.B	X R	0956	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0957	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0958	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	O R	0960	88-108-103-080	C-RES,U 10K-1/16W J	a
FRONT C.B	X R	0961	88-121-181-080	RES,180-1/8W J	a
FRONT C.B	O R	0963	88-108-563-080	C-RES,U 56K-1/16W J	a
FRONT C.B	X R	0969	88-121-103-080	RES,10K-1/8W J	a
FRONT C.B	X R	0970	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0971	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0972	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0973	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	X R	0974	88-108-104-080	C-RES,U 100K-1/16W J	a
FRONT C.B	O S	0321	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0322	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0323	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0324	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0325	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0326	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0327	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0328	87-A90-095-080	SW,TACT EVQ11G04M	a

# ELECTRICAL PARTS LIST -5/18

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					CX-SNR90 LHSM
FRONT C.B	O S	0329	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0330	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0331	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0332	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0333	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0341	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0342	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0343	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0344	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0345	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0346	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0347	87-A90-095-080	SW,TACT EVQ11G04M	a
FRONT C.B	O S	0361	87-A92-359-010	SW,RTRY EC12E24604-30MM	a
FRONT C.B	O S	0363	87-A92-273-110	SW,RTRY EC12E12204 30MM	a
FRONT C.B	O S	0371	87-A92-273-110	SW,RTRY EC12E12204 30MM	a
HP C.B	O J	0202	87-A60-420-010	JACK,3.5 ST (MSC)	a
HP C.B	O R	0255	87-A00-878-050	RES,M/F 220-1W J	a
HP C.B	O R	0256	87-A00-878-050	RES,M/F 220-1W J	a
HP C.B	O R	0257	87-A00-878-050	RES,M/F 220-1W J	a
HP C.B	O R	0258	87-A00-878-050	RES,M/F 220-1W J	a
					CX-SNR90 LHSM
HP C.B	X R	0259	88-128-222-080	C-RES, 2.2K-1/8W J	a
HP C.B	X R	0260	88-128-222-080	C-RES, 2.2K-1/8W J	a
HP C.B	O WH	0202	87-A90-459-010	HLD, WIRE 2.5-5P	a
LED C.B	O CN	0201	87-099-211-010	CONN,4P V BLK 6216	a
LED C.B	O LED	0202	87-A41-120-040	LED,SEL6810ATP5 UMB	a
LED C.B	O LED	0203	87-A41-120-040	LED,SEL6810ATP5 UMB	a
LED C.B	O LED	0204	87-A41-120-040	LED,SEL6810ATP5 UMB	a
LED C.B	X R	0201	88-128-681-080	C-RES, 680-1/8W J	a
LED C.B	X R	0202	88-128-681-080	C-RES, 680-1/8W J	a
LED C.B	X R	0203	88-128-681-080	C-RES, 680-1/8W J	a
MAIN C.B	O C	0001	87-A10-231-090	CAP,E 3300-80	a
MAIN C.B	O C	0002	87-A10-231-090	CAP,E 3300-80	a
MAIN C.B	O C	0003	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN C.B	O C	0004	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN C.B	O C	0005	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN C.B	O C	0006	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN C.B	O C	0009	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0010	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0011	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0012	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
					CX-SNR90 LHSM
MAIN C.B	O C	0013	87-012-282-080	C-CAP,U 4700P-50 K B GRM	a
MAIN C.B	O C	0014	87-A12-071-080	CAP,E 47-25 SMG	a
MAIN C.B	O C	0016	87-012-282-080	C-CAP,U 4700P-50 K B GRM	a
MAIN C.B	O C	0021	87-A12-780-090	CAP,E 4700-35 M 85 SKR	a
MAIN C.B	O C	0022	87-A12-780-090	CAP,E 4700-35 M 85 SKR	a
MAIN C.B	O C	0031	87-A12-062-080	CAP,E 100-10 SMG	a
MAIN C.B	O C	0034	87-A12-071-080	CAP,E 47-25 SMG	a
MAIN C.B	O C	0035	87-A12-069-080	CAP,E 22-25 SMG	a
MAIN C.B	O C	0036	87-A12-071-080	CAP,E 47-25 SMG	a
MAIN C.B	O C	0060	87-A12-089-080	CAP,E 3.3-50 SMG	a
MAIN C.B	O C	0061	87-A12-071-080	CAP,E 47-25 SMG	a
MAIN C.B	O C	0083	87-A12-068-080	CAP,E 470-16 SMG	a
MAIN C.B	O C	0097	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0101	87-012-280-080	C-CAP,U 3300P-50 K B GRM	a
MAIN C.B	O C	0102	87-012-280-080	C-CAP,U 3300P-50 K B GRM	a
MAIN C.B	O C	0103	87-A12-084-080	CAP,E 0.22-50 SMG	a
MAIN C.B	O C	0104	87-A12-084-080	CAP,E 0.22-50 SMG	a
MAIN C.B	O C	0105	87-012-280-080	C-CAP,U 3300P-50 K B GRM	a
MAIN C.B	O C	0106	87-012-280-080	C-CAP,U 3300P-50 K B GRM	a
MAIN C.B	O C	0107	87-A12-091-080	CAP,E 10-50 SMG	a
					CX-SNR90 LHSM
MAIN C.B	O C	0108	87-A12-091-080	CAP,E 10-50 SMG	a
MAIN C.B	O C	0111	87-A12-077-080	CAP,E 33-35 SMG	a
MAIN C.B	O C	0112	87-A12-077-080	CAP,E 33-35 SMG	a
MAIN C.B	O C	0113	87-A10-596-080	C-CAP,S 100P-100 J CH	a
MAIN C.B	O C	0114	87-A10-596-080	C-CAP,S 100P-100 J CH	a
MAIN C.B	O C	0117	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN C.B	O C	0118	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN C.B	O C	0119	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0120	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0121	87-A12-087-080	CAP,E 1-50 SMG	a
MAIN C.B	O C	0122	87-A12-087-080	CAP,E 1-50 SMG	a
MAIN C.B	O C	0123	87-010-177-080	C-CAP,S 820P-50 J SL C2012	a
MAIN C.B	O C	0124	87-010-177-080	C-CAP,S 820P-50 J SL C2012	a
MAIN C.B	O C	0125	87-A10-596-080	C-CAP,S 100P-100 J CH	a
MAIN C.B	O C	0126	87-A10-596-080	C-CAP,S 100P-100 J CH	a
MAIN C.B	O C	0133	87-012-282-080	C-CAP,U 4700P-50 K B GRM	a
MAIN C.B	O C	0140	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN C.B	O C	0186	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0187	87-A12-890-080	CAP,E 10-63 VR	a
MAIN C.B	O C	0188	87-A12-890-080	CAP,E 10-63 VR	a

# ELECTRICAL PARTS LIST -6/18

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
MAIN C.B	O C	0193	87-012-273-080	C-CAP,U 820P-50 K B GRM	a
MAIN C.B	O C	0194	87-012-273-080	C-CAP,U 820P-50 K B GRM	a
MAIN C.B	O C	0225	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN C.B	O C	0226	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN C.B	O C	0227	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN C.B	O C	0228	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN C.B	O C	0235	87-A12-102-080	CAP,E 47-100 SMG	a
MAIN C.B	O C	0236	87-A12-102-080	CAP,E 47-100 SMG	a
MAIN C.B	O C	0301	87-012-275-080	C-CAP,U 1200P-50 K B GRM	a
MAIN C.B	O C	0302	87-012-275-080	C-CAP,U 1200P-50 K B GRM	a
MAIN C.B	O C	0303	87-012-275-080	C-CAP,U 1200P-50 K B GRM	a
MAIN C.B	O C	0304	87-012-275-080	C-CAP,U 1200P-50 K B GRM	a
MAIN C.B	O C	0305	87-012-270-080	C-CAP,U 470P-50 K B GRM	a
MAIN C.B	O C	0306	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
MAIN C.B	O C	0363	87-010-831-080	C-CAP,U 0.1-16 Z F	a
MAIN C.B	O C	0451	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0452	87-A12-092-080	CAP,E 22-50 SMG	a
MAIN C.B	O C	0453	87-012-279-080	C-CAP,U 2700P-50 K B GRM	a
MAIN C.B	O C	0454	87-012-279-080	C-CAP,U 2700P-50 K B GRM	a
MAIN C.B	O C	0455	87-012-279-080	C-CAP,U 2700P-50 K B GRM	a
					CX-SNR90 LHSM
MAIN C.B	O C	0456	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0457	87-A12-361-080	CAP,M 5600P-100 J CP	a
MAIN C.B	O C	0458	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN C.B	O C	0459	87-012-271-080	C-CAP,U 560P-50 K B	a
MAIN C.B	O C	0460	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0461	87-012-158-080	C-CAP,S 390P-50 J CH GRM	a
MAIN C.B	O C	0462	87-012-158-080	C-CAP,S 390P-50 J CH GRM	a
MAIN C.B	O C	0463	87-010-831-080	C-CAP,U 0.1-16 Z F	a
MAIN C.B	O C	0464	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN C.B	O C	0501	87-A12-087-080	CAP,E 1-50 SMG	a
MAIN C.B	O C	0502	87-A12-071-080	CAP,E 47-25 SMG	a
MAIN C.B	O C	0503	87-A12-071-080	CAP,E 47-25 SMG	a
MAIN C.B	O C	0601	87-012-188-080	C-CAP,U 47P-50 J CH GRM	a
MAIN C.B	O C	0602	87-012-188-080	C-CAP,U 47P-50 J CH GRM	a
MAIN C.B	O C	0603	87-A12-062-080	CAP,E 100-10 SMG	a
MAIN C.B	O C	0604	87-A12-062-080	CAP,E 100-10 SMG	a
MAIN C.B	X C	0605	88-700-740-810	CAP,M 6800P-50 J AMZV	a
MAIN C.B	X C	0606	88-700-740-810	CAP,M 6800P-50 J AMZV	a
MAIN C.B	O C	0607	87-012-270-080	C-CAP,U 470P-50 K B GRM	a
MAIN C.B	O C	0608	87-012-270-080	C-CAP,U 470P-50 K B GRM	a
					CX-SNR90 LHSM
MAIN C.B	O C	0609	87-A12-087-080	CAP,E 1-50 SMG	a
MAIN C.B	O C	0610	87-A12-087-080	CAP,E 1-50 SMG	a
MAIN C.B	O C	0611	87-012-273-080	C-CAP,U 820P-50 K B GRM	a
MAIN C.B	O C	0612	87-012-273-080	C-CAP,U 820P-50 K B GRM	a
MAIN C.B	X C	0613	88-700-610-810	CAP,M 1000P-50 J	a
MAIN C.B	X C	0614	88-700-610-810	CAP,M 1000P-50 J	a
MAIN C.B	X C	0615	88-700-610-810	CAP,M 1000P-50 J	a
MAIN C.B	X C	0616	88-700-610-810	CAP,M 1000P-50 J	a
MAIN C.B	O C	0617	87-A10-295-080	CAP,M 0.01-50 J	a
MAIN C.B	O C	0618	87-A10-295-080	CAP,M 0.01-50 J	a
MAIN C.B	O C	0619	87-A10-295-080	CAP,M 0.01-50 J	a
MAIN C.B	O C	0620	87-A10-295-080	CAP,M 0.01-50 J	a
MAIN C.B	O C	0621	87-A12-086-080	CAP,E 0.47-50 SMG	a
MAIN C.B	O C	0622	87-A12-086-080	CAP,E 0.47-50 SMG	a
MAIN C.B	O C	0623	87-A12-086-080	CAP,E 0.47-50 SMG	a
MAIN C.B	O C	0624	87-A12-086-080	CAP,E 0.47-50 SMG	a
MAIN C.B	O C	0631	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
MAIN C.B	O C	0632	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
MAIN C.B	O C	0633	87-012-284-080	C-CAP,U 6800P-50 K B GRM	a
MAIN C.B	O C	0634	87-012-284-080	C-CAP,U 6800P-50 K B GRM	a
					CX-SNR90 LHSM
MAIN C.B	O C	0635	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0636	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0637	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN C.B	O C	0638	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN C.B	O C	0641	87-A12-087-080	CAP,E 1-50 SMG	a
MAIN C.B	O C	0642	87-A12-087-080	CAP,E 1-50 SMG	a
MAIN C.B	O C	0651	87-A12-063-080	CAP,E 220-10 SMG	a
MAIN C.B	O C	0652	87-A12-071-080	CAP,E 47-25 SMG	a
MAIN C.B	O C	0655	87-A12-090-080	CAP,E 4.7-50 SMG	a
MAIN C.B	O C	0656	87-010-784-080	C-CAP,U 0.012-25 K B	a
MAIN C.B	O C	0663	87-010-831-080	C-CAP,U 0.1-16 Z F	a
MAIN C.B	O C	0664	87-010-831-080	C-CAP,U 0.1-16 Z F	a
MAIN C.B	O C	0665	87-A10-504-080	C-CAP,U 0.047-16 K B	a
MAIN C.B	O C	0666	87-A10-504-080	C-CAP,U 0.047-16 K B	a
MAIN C.B	O C	0677	87-015-819-080	C-CAP, 0.01-50 K B C3216	a
MAIN C.B	O C	0681	87-A10-504-080	C-CAP,U 0.047-16 K B	a
MAIN C.B	O C	0682	87-010-787-080	C-CAP,U 0.022-25 K B GRM	a
MAIN C.B	O C	0683	87-010-831-080	C-CAP,U 0.1-16 Z F	a
MAIN C.B	O C	0685	87-010-831-080	C-CAP,U 0.1-16 Z F	a
MAIN C.B	O C	0687	87-A11-058-080	C-CAP,U 0.22-10 K B	a

# ELECTRICAL PARTS LIST -7/18

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
MAIN C.B	O C	0688	87-A11-058-080	C-CAP,U 0.22-10 K B	a
MAIN C.B	O C	0689	87-010-831-080	C-CAP,U 0.1-16 Z F	a
MAIN C.B	O C	0690	87-010-831-080	C-CAP,U 0.1-16 Z F	a
MAIN C.B	O C	0771	87-A12-062-080	CAP,E 100-10 SMG	a
MAIN C.B	O C	0772	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	X C	0781	88-108-000-080	C-JUMPER,U	a
MAIN C.B	O C	0782	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0783	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0784	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0785	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0786	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0788	87-012-167-080	C-CAP,U 5P-50 C CH	a
MAIN C.B	O C	0789	87-A13-065-080	C-CAP,U 0.027-25 J B	a
MAIN C.B	O C	0790	87-A13-065-080	C-CAP,U 0.027-25 J B	a
MAIN C.B	O C	0791	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0792	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0793	87-A12-090-080	CAP,E 4.7-50 SMG	a
MAIN C.B	O C	0795	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0796	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0797	87-A12-091-080	CAP,E 10-50 SMG	a
					CX-SNR90 LHSM
MAIN C.B	O C	0798	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0799	87-A12-065-080	CAP,E 33-16 SMG	a
MAIN C.B	O C	0800	87-010-829-080	C-CAP,U 0.047-16 Z F	a
MAIN C.B	O C	0801	87-A12-089-080	CAP,E 3.3-50 SMG	a
MAIN C.B	O C	0802	87-010-829-080	C-CAP,U 0.047-16 Z F	a
MAIN C.B	O C	0803	87-010-787-080	C-CAP,U 0.022-25 K B GRM	a
MAIN C.B	O C	0804	87-A12-062-080	CAP,E 100-10 SMG	a
MAIN C.B	O C	0807	87-A12-086-080	CAP,E 0.47-50 SMG	a
MAIN C.B	O C	0808	87-A12-087-080	CAP,E 1-50 SMG	a
MAIN C.B	O C	0809	87-A12-087-080	CAP,E 1-50 SMG	a
MAIN C.B	O C	0810	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0814	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0815	87-A12-086-080	CAP,E 0.47-50 SMG	a
MAIN C.B	O C	0816	87-A12-086-080	CAP,E 0.47-50 SMG	a
MAIN C.B	O C	0821	87-A12-091-080	CAP,E 10-50 SMG	a
MAIN C.B	X C	0822	88-108-000-080	C-JUMPER,U	a
MAIN C.B	O C	0823	87-010-177-080	C-CAP,S 820P-50 J SL C2012	a
MAIN C.B	O C	0824	87-A12-090-080	CAP,E 4.7-50 SMG	a
MAIN C.B	O C	0825	87-010-596-080	C-CAP,S 0.047-16 K R C2012	a
MAIN C.B	O C	0842	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
					CX-SNR90 LHSM
MAIN C.B	X C	0843	88-108-000-080	C-JUMPER,U	a
MAIN C.B	O C	0844	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	X C	0845	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X C	0846	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X C	0847	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X C	0848	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X C	0849	88-108-000-080	C-JUMPER,U	a
MAIN C.B	O C	0850	87-A12-071-080	CAP,E 47-25 SMG	a
MAIN C.B	O C	0851	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0852	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0853	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0860	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0901	87-012-169-080	C-CAP,U 7P-50 D CH	a
MAIN C.B	X C	0906	88-108-000-080	C-JUMPER,U	a
MAIN C.B	O C	0909	87-A10-915-080	C-CAP,U 1000P-25 J CH	a
MAIN C.B	O C	0911	87-012-167-080	C-CAP,U 5P-50 C CH	a
MAIN C.B	O C	0912	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
MAIN C.B	O C	0914	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0915	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0917	87-012-164-080	C-CAP,U 2P-50 C CH	a
					CX-SNR90 LHSM
MAIN C.B	O C	0920	87-012-180-080	C-CAP,U 22P-50 J CH	a
MAIN C.B	O C	0921	87-012-186-080	C-CAP,U 39P-50 J CH	a
MAIN C.B	O C	0922	87-012-174-080	C-CAP,U 12P-50 J CH	a
MAIN C.B	O C	0923	87-A10-039-080	C-CAP,U 470P-50 J CH	a
MAIN C.B	O C	0924	87-012-162-080	C-CAP,U 1P-50 C CH GRM	a
MAIN C.B	O C	0926	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
MAIN C.B	O C	0931	87-A12-319-080	C-CAP,U 0.1-25 K B	a
MAIN C.B	X C	0940	88-108-000-080	C-JUMPER,U	a
MAIN C.B	O C	0959	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0960	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0961	87-012-169-080	C-CAP,U 7P-50 D CH	a
MAIN C.B	O C	0962	87-A12-087-080	CAP,E 1-50 SMG	a
MAIN C.B	O C	0963	87-A12-319-080	C-CAP,U 0.1-25 K B	a
MAIN C.B	O C	0971	87-A12-067-080	CAP,E 330-16 SMG	a
MAIN C.B	O C	0972	87-A12-090-080	CAP,E 4.7-50 SMG	a
MAIN C.B	O C	0973	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0974	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0979	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
MAIN C.B	O C	0981	87-A12-071-080	CAP,E 47-25 SMG	a
MAIN C.B	O C	0982	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a

# ELECTRICAL PARTS LIST -8/18

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
MAIN C.B	O C	0983	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0984	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0987	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O C	0991	87-012-176-080	C-CAP,U 15P-50 J CH	a
MAIN C.B	O C	0992	87-012-176-080	C-CAP,U 15P-50 J CH	a
MAIN C.B	O C	0993	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
MAIN C.B	O C	0995	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
MAIN C.B	O C	0997	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN C.B	O C	0998	87-A12-071-080	CAP,E 47-25 SMG	a
MAIN C.B	O C	0999	87-A11-155-080	CAP,TC U 0.01-16 Z F	a
MAIN C.B	O CF	0831	87-008-261-010	FLTR,CF SFE10.7MA5	a
MAIN C.B	O CF	0832	87-008-261-010	FLTR,CF SFE10.7MA5	a
MAIN C.B	X CLP0001	87-033-220-010	PIN,DIA1 COATING	a	
MAIN C.B	X CLP0301	87-A60-884-010	PIN,DIA1 COATING-SHS	a	
MAIN C.B	O CN	0301	87-A60-620-010	CONN,3P V 2MM JMT	a
MAIN C.B	O CN	0302	87-A60-625-010	CONN,8P V 2MM JMT	a
MAIN C.B	O CN	0504	87-A60-619-010	CONN,2P V 2MM JMT	a
MAIN C.B	O CN	0601	87-099-719-010	CONN,30P H BLK TYK-B(X)	a
MAIN C.B	O CN	0602	87-A60-131-010	CONN,6P V FE	a
MAIN C.B	O CNA0001	8A-NF8-653-010	CONN ASSY,9P TID-A(480)	a	
					CX-SNR90 LHSM
MAIN C.B	O CNA0002	8C-NF4-603-010	CONN ASSY,3P V CNF-4	a	
MAIN C.B	S D	0009	87-A40-839-090	DIODE,G5SBA60L-6088	a
MAIN C.B	S D	0010	87-A40-673-090	DIODE,D10XB20	a
MAIN C.B	S D	0011	87-A40-270-080	C-DIODE,MC2838	a
MAIN C.B	S D	0012	87-A40-291-080	DIODE,1N4148M (CPT)	a
MAIN C.B	S D	0013	87-A40-764-080	ZENER,UZ10BSC	a
MAIN C.B	S D	0029	87-A40-776-080	ZENER,UZ27BSD	a
MAIN C.B	S D	0033	87-A40-291-080	DIODE,1N4148M (CPT)	a
MAIN C.B	S D	0041	87-A40-270-080	C-DIODE,MC2838	a
MAIN C.B	S D	0042	87-A40-269-080	C-DIODE,MC2836	a
MAIN C.B	S D	0060	87-A40-291-080	DIODE,1N4148M (CPT)	a
MAIN C.B	S D	0063	87-A40-270-080	C-DIODE,MC2838	a
MAIN C.B	S D	0064	87-A40-269-080	C-DIODE,MC2836	a
MAIN C.B	S D	0076	87-A40-269-080	C-DIODE,MC2836	a
MAIN C.B	S D	0077	87-A40-270-080	C-DIODE,MC2838	a
MAIN C.B	S D	0101	87-A40-269-080	C-DIODE,MC2836	a
MAIN C.B	S D	0103	87-020-465-080	DIODE,1SS133	a
MAIN C.B	S D	0104	87-020-465-080	DIODE,1SS133	a
MAIN C.B	S D	0105	87-A40-269-080	C-DIODE,MC2836	a
MAIN C.B	S D	0106	87-A40-269-080	C-DIODE,MC2836	a
					CX-SNR90 LHSM
MAIN C.B	S D	0107	87-A40-270-080	C-DIODE,MC2838	a
MAIN C.B	S D	0108	87-A40-270-080	C-DIODE,MC2838	a
MAIN C.B	S D	0109	87-A40-488-080	DIODE,1SS244	a
MAIN C.B	S D	0110	87-A40-488-080	DIODE,1SS244	a
MAIN C.B	S D	0150	87-A40-270-080	C-DIODE,MC2838	a
MAIN C.B	S D	0160	87-A40-270-080	C-DIODE,MC2838	a
MAIN C.B	S D	0161	87-A40-646-010	DIODE,FMB-G16L	a
MAIN C.B	S D	0162	87-A40-646-010	DIODE,FMB-G16L	a
MAIN C.B	S D	0187	87-A40-747-080	ZENER,UZ5.1BSB	a
MAIN C.B	S D	0188	87-A40-749-080	ZENER,UZ5.6BSB	a
MAIN C.B	S D	0189	87-A40-270-080	C-DIODE,MC2838	a
MAIN C.B	S D	0190	87-A40-269-080	C-DIODE,MC2836	a
MAIN C.B	X D	0193	88-100-000-010	PLATING-JW, 0.58 SN95	a
MAIN C.B	S D	0194	87-A40-291-080	DIODE,1N4148M (CPT)	a
MAIN C.B	S D	0195	87-A40-291-080	DIODE,1N4148M (CPT)	a
MAIN C.B	S D	0201	87-A40-291-080	DIODE,1N4148M (CPT)	a
MAIN C.B	S D	0280	87-A40-269-080	C-DIODE,MC2836	a
MAIN C.B	S D	0281	87-A40-270-080	C-DIODE,MC2838	a
MAIN C.B	S D	0301	87-A40-269-080	C-DIODE,MC2836	a
MAIN C.B	S D	0501	87-A40-270-080	C-DIODE,MC2838	a
					CX-SNR90 LHSM
MAIN C.B	S D	0661	87-A40-745-080	ZENER,UZ4.7BSA	a
MAIN C.B	S D	0662	87-A40-745-080	ZENER,UZ4.7BSA	a
MAIN C.B	X D	0801	88-100-000-010	PLATING-JW, 0.58 SN95	a
MAIN C.B	S D	0803	87-A40-291-080	DIODE,1N4148M (CPT)	a
MAIN C.B	O D	0902	87-A40-916-040	C-VARI-CAP,HVC202A	a
MAIN C.B	O D	0903	87-A40-916-040	C-VARI-CAP,HVC202A	a
MAIN C.B	X D	0944	88-100-000-010	PLATING-JW, 0.58 SN95	a
MAIN C.B	O D	0951	87-A40-799-040	C-VARI-CAP,KV1610S	a
MAIN C.B	S D	0991	87-017-149-080	ZENER,HZS6A2L	a
MAIN C.B	S D	0994	87-A40-291-080	DIODE,1N4148M (CPT)	a
MAIN C.B	X FB	0601	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X FB	0602	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X FB	0603	88-100-000-010	PLATING-JW, 0.58 SN95	a
MAIN C.B	S IC	0001	87-A21-364-010	IC,NJM7806FA(A)	a
MAIN C.B	S IC	0601	87-A22-235-040	C-IC,M61518FP	a
MAIN C.B	S IC	0681	87-A21-419-040	C-IC,NJM14558MD-TE2	a
MAIN C.B	S IC	0682	87-017-726-040	C-IC,BU4052BCF	a
MAIN C.B	S IC	0801	87-A21-695-010	IC,LA1845L	a
MAIN C.B	S IC	0991	87-A21-928-010	IC,LC72131D-N	a
MAIN C.B	O J	0203	87-A60-238-010	TERMINAL,SP 4P (MSC)	a

# ELECTRICAL PARTS LIST -9/18

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
MAIN C.B		O J	0205 87-A60-881-010	JACK, PIN 2P MSP 242V05 PBSN	a
MAIN C.B		O J	0602 87-A60-881-010	JACK, PIN 2P MSP 242V05 PBSN	a
MAIN C.B		O J	0831 87-A60-202-010	TERMINAL, ANT 4P MSP-154V-02	a
MAIN C.B		X JR	0101 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0111 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0113 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0114 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0115 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0116 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0117 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0118 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0119 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0120 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0121 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0122 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0123 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0310 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0410 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0411 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0412 88-108-000-080	C-JUMPER, U	a
					CX-SNR90 LHSM
MAIN C.B		X JR	0510 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0602 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0603 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0680 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0681 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0682 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0683 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0684 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0781 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0785 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0786 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0801 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0802 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0803 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0804 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0823 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0824 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0834 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0835 88-108-561-080	C-RES, U 560-1/16W J	a
MAIN C.B		X JR	0902 88-108-000-080	C-JUMPER, U	a
					CX-SNR90 LHSM
MAIN C.B		X JR	0904 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0906 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0907 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0943 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0946 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0950 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0951 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0952 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0954 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0955 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0964 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0971 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0972 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0973 88-129-000-080	C-JUMPER, 3216	a
MAIN C.B		X JR	0974 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0976 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0977 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JR	0991 88-108-000-080	C-JUMPER, U	a
MAIN C.B		X JW	0054 88-140-391-080	RES, 390-1/2W J	a
MAIN C.B		O L	0201 87-A50-610-010	COIL, 1UH K (MDEC)	a
					CX-SNR90 LHSM
MAIN C.B		O L	0202 87-A50-610-010	COIL, 1UH K (MDEC)	a
MAIN C.B		O L	0451 87-007-342-010	COIL, OSC 85KHZ BIAS	a
MAIN C.B		O L	0801 87-A50-608-010	COIL, FM DET-N (TOK)	a
MAIN C.B		O L	0802 87-A91-551-010	FLTR, PCFJZH-450 L (TOK)	a
MAIN C.B		O L	0811 87-005-847-080	COIL, 2.2UH K CECS	a
MAIN C.B		O L	0832 87-005-847-080	COIL, 2.2UH K CECS	a
MAIN C.B		O L	0901 87-A50-110-010	COIL, FM BPF EX	a
MAIN C.B		O L	0903 86-ZA1-624-010	COIL, FM RF-1	a
MAIN C.B		O L	0904 86-ZA1-622-010	COIL, FM ANT/RF-U	a
MAIN C.B		O L	0906 87-005-847-080	COIL, 2.2UH K CECS	a
MAIN C.B		O L	0907 86-ZA1-627-010	COIL, FM OSC-U	a
MAIN C.B		O L	0908 88-ZA1-624-010	COIL, FM IFT 7-6.2 (COILS)	a
MAIN C.B		O L	0952 87-A50-752-010	COIL, MW ANT (2B)	a
MAIN C.B		O L	0953 87-A50-753-010	COIL, MW OSC (2B)	a
MAIN C.B		S Q	0001 87-A30-494-080	TR, 2SA1980G	a
MAIN C.B		S Q	0002 87-A30-494-080	TR, 2SA1980G	a
MAIN C.B		S Q	0003 87-A30-076-080	C-TR, 2SC3052F	a
MAIN C.B		S Q	0004 87-A30-494-080	TR, 2SA1980G	a
MAIN C.B		S Q	0009 87-A30-494-080	TR, 2SA1980G	a
MAIN C.B		S Q	0010 87-A30-076-080	C-TR, 2SC3052F	a

# ELECTRICAL PARTS LIST -10/18

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
MAIN C.B	S Q	0012	87-A30-630-080	TR,2SC5343GL	a
MAIN C.B	S Q	0013	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0014	87-A30-075-080	C-TR,2SA1235F	a
MAIN C.B	S Q	0060	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0061	87-A30-075-080	C-TR,2SA1235F	a
MAIN C.B	S Q	0062	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0063	87-A30-075-080	C-TR,2SA1235F	a
MAIN C.B	S Q	0064	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0101	87-A30-257-080	C-TR,2SD1306E	a
MAIN C.B	S Q	0102	87-A30-257-080	C-TR,2SD1306E	a
MAIN C.B	S Q	0103	87-A30-669-040	C-TR,SBT5401	a
MAIN C.B	S Q	0104	87-A30-669-040	C-TR,SBT5401	a
MAIN C.B	S Q	0105	87-A30-669-040	C-TR,SBT5401	a
MAIN C.B	S Q	0106	87-A30-669-040	C-TR,SBT5401	a
MAIN C.B	S Q	0107	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0108	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0109	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0110	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0111	87-A30-672-080	TR,2N5551C	a
MAIN C.B	S Q	0112	87-A30-672-080	TR,2N5551C	a
					CX-SNR90 LHSM
MAIN C.B	S Q	0113	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0114	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0115	87-A30-670-040	C-TR,SBT5551	a
MAIN C.B	S Q	0116	87-A30-670-040	C-TR,SBT5551	a
MAIN C.B	S Q	0121	87-A30-672-080	TR,2N5551C	a
MAIN C.B	S Q	0122	87-A30-672-080	TR,2N5551C	a
MAIN C.B	S Q	0123	87-A30-669-040	C-TR,SBT5401	a
MAIN C.B	S Q	0124	87-A30-669-040	C-TR,SBT5401	a
MAIN C.B	S Q	0126	87-A30-669-040	C-TR,SBT5401	a
MAIN C.B	S Q	0127	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0128	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0130	87-A30-670-040	C-TR,SBT5551	a
MAIN C.B	S Q	0131	87-A30-522-010	TR,2SB1649	a
MAIN C.B	S Q	0132	87-A30-522-010	TR,2SB1649	a
MAIN C.B	S Q	0133	87-A30-523-010	TR,2SD2562	a
MAIN C.B	S Q	0134	87-A30-523-010	TR,2SD2562	a
MAIN C.B	S Q	0183	87-A30-186-010	FET,2SK3053	a
MAIN C.B	S Q	0184	87-A30-186-010	FET,2SK3053	a
MAIN C.B	S Q	0185	87-A30-662-040	C-TR,2SD814A (RS)	a
MAIN C.B	S Q	0186	87-A30-663-040	C-TR,2SB792A (RS)	a
					CX-SNR90 LHSM
MAIN C.B	S Q	0187	87-A30-075-080	C-TR,2SA1235F	a
MAIN C.B	S Q	0188	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0235	87-A30-075-080	C-TR,2SA1235F	a
MAIN C.B	S Q	0280	87-A30-538-040	C-TR,SRA2202S	a
MAIN C.B	S Q	0281	87-A30-669-040	C-TR,SBT5401	a
MAIN C.B	S Q	0301	87-A30-091-080	FET,2SJ460	a
MAIN C.B	S Q	0302	87-A30-091-080	FET,2SJ460	a
MAIN C.B	S Q	0303	87-A30-090-080	FET,2SK2541	a
MAIN C.B	S Q	0304	87-A30-090-080	FET,2SK2541	a
MAIN C.B	S Q	0305	87-A30-091-080	FET,2SJ460	a
MAIN C.B	S Q	0306	87-A30-091-080	FET,2SJ460	a
MAIN C.B	S Q	0307	87-A30-090-080	FET,2SK2541	a
MAIN C.B	S Q	0308	87-A30-090-080	FET,2SK2541	a
MAIN C.B	S Q	0309	87-A30-090-080	FET,2SK2541	a
MAIN C.B	S Q	0451	87-A30-630-080	TR,2SC5343GL	a
MAIN C.B	S Q	0452	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0453	89-333-317-880	TR,2SC3331 (T/U)	a
MAIN C.B	S Q	0454	89-333-317-880	TR,2SC3331 (T/U)	a
MAIN C.B	S Q	0501	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0502	87-A30-075-080	C-TR,2SA1235F	a
					CX-SNR90 LHSM
MAIN C.B	S Q	0503	87-A30-494-080	TR,2SA1980G	a
MAIN C.B	S Q	0601	87-A30-538-040	C-TR,SRA2202S	a
MAIN C.B	S Q	0651	87-A30-087-080	C-FET,2SK2158	a
MAIN C.B	S Q	0652	87-A30-087-080	C-FET,2SK2158	a
MAIN C.B	S Q	0653	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0835	87-A30-521-080	C-TR,2SC5345SF/S (O)	a
MAIN C.B	S Q	0836	87-A30-677-040	C-TR,SRA2207S	a
MAIN C.B	S Q	0901	89-503-602-080	C-FET,2SK360E	a
MAIN C.B	S Q	0902	87-A30-664-080	C-TR,2SC2620B	a
MAIN C.B	S Q	0904	87-A30-664-080	C-TR,2SC2620B	a
MAIN C.B	S Q	0981	87-A30-494-080	TR,2SA1980G	a
MAIN C.B	S Q	0982	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	S Q	0983	87-A30-076-080	C-TR,2SC3052F	a
MAIN C.B	X R	0003	88-128-229-080	C-RES, 2.2-1/8W J	a
MAIN C.B	X R	0004	88-128-229-080	C-RES, 2.2-1/8W J	a
MAIN C.B	X R	0007	88-128-229-080	C-RES, 2.2-1/8W J	a
MAIN C.B	X R	0008	88-128-229-080	C-RES, 2.2-1/8W J	a
MAIN C.B	X R	0009	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN C.B	X R	0010	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN C.B	X R	0011	88-118-472-080	C-RES,S 4.7K-1/10W J	a



# ELECTRICAL PARTS LIST -11/18

! = SAFETY PARTS  
 C = Components marked

All components used on this model at the production line are shown in this service manual.  
 However, please note that not all components will be available as spare parts for after-sales service.  
 Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.  
 Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
MAIN C.B	X R	0012	88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN C.B	X R	0013	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	X R	0014	88-118-100-080	C-RES,S 10-1/10W J	a
MAIN C.B	X R	0015	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN C.B	O R	0024	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0026	88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN C.B	X R	0027	88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN C.B	X R	0028	88-108-000-080	C-JUMPER,U	a
MAIN C.B	O R	0029	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	X R	0030	88-128-151-080	C-RES, 150-1/8W J	a
MAIN C.B	X R	0031	88-108-154-080	C-RES,U 150K-1/16W J	a
MAIN C.B	X R	0032	88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN C.B	O R	0033	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0035	88-108-123-080	C-RES,U 12K-1/16W J	a
MAIN C.B	X R	0037	88-118-272-080	C-RES,S 2.7K-1/10W J	a
MAIN C.B	X R	0038	88-118-272-080	C-RES,S 2.7K-1/10W J	a
MAIN C.B	X R	0041	88-100-000-010	PLATING-JW, 0.58 SN95	a
MAIN C.B	X R	0042	88-129-000-080	C-JUMPER, 3216	a
MAIN C.B	X R	0043	88-129-000-080	C-JUMPER, 3216	a
MAIN C.B	X R	0044	88-128-271-080	C-RES, 270-1/8W J	a
					CX-SNR90 LHSM
MAIN C.B	X R	0045	88-128-331-080	C-RES, 330-1/8W J	a
MAIN C.B	X R	0046	88-121-271-080	RES,270-1/8W J	a
MAIN C.B	X R	0047	88-128-331-080	C-RES, 330-1/8W J	a
MAIN C.B	X R	0048	88-128-221-080	C-RES, 220-1/8W J	a
MAIN C.B	X R	0049	88-121-221-080	RES,220-1/8W J	a
MAIN C.B	O R	0050	88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN C.B	O R	0051	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	O R	0052	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	X R	0053	88-108-683-080	C-RES,U 68K-1/16W J	a
MAIN C.B	X R	0054	88-118-562-080	C-RES,S 5.6K-1/10W J	a
MAIN C.B	X R	0055	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	X R	0056	88-118-680-080	C-RES,S 68-1/10W J	a
MAIN C.B	X R	0057	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	O R	0058	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0059	88-108-221-080	C-RES,U 220-1/16W J	a
MAIN C.B	X R	0060	88-108-471-080	C-RES,U 470-1/16W J	a
MAIN C.B	O R	0061	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0062	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN C.B	X R	0063	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN C.B	O R	0064	88-108-103-080	C-RES,U 10K-1/16W J	a
					CX-SNR90 LHSM
MAIN C.B	O R	0065	88-108-123-080	C-RES,U 12K-1/16W J	a
MAIN C.B	X R	0066	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN C.B	O R	0067	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0068	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0069	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN C.B	X R	0071	88-128-473-080	C-RES, 47K-1/8W J	a
MAIN C.B	X R	0072	88-128-473-080	C-RES, 47K-1/8W J	a
MAIN C.B	X R	0073	88-128-473-080	C-RES, 47K-1/8W J	a
MAIN C.B	X R	0074	88-128-473-080	C-RES, 47K-1/8W J	a
MAIN C.B	X R	0075	88-128-473-080	C-RES, 47K-1/8W J	a
MAIN C.B	X R	0076	88-128-473-080	C-RES, 47K-1/8W J	a
MAIN C.B	X R	0077	88-128-473-080	C-RES, 47K-1/8W J	a
MAIN C.B	X R	0082	88-128-682-080	C-RES, 6.8K-1/8W J	a
MAIN C.B	X R	0083	88-128-682-080	C-RES, 6.8K-1/8W J	a
MAIN C.B	X R	0084	88-128-682-080	C-RES, 6.8K-1/8W J	a
MAIN C.B	X R	0085	88-128-682-080	C-RES, 6.8K-1/8W J	a
MAIN C.B	O R	0091	88-108-823-080	C-RES,U 82K-1/16W J	a
MAIN C.B	X R	0092	88-108-393-080	C-RES,U 39K-1/16W J	a
MAIN C.B	O R	0093	88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN C.B	O R	0094	88-108-823-080	C-RES,U 82K-1/16W J	a
					CX-SNR90 LHSM
MAIN C.B	X R	0095	88-108-393-080	C-RES,U 39K-1/16W J	a
MAIN C.B	O R	0096	88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN C.B	X R	0103	88-108-683-080	C-RES,U 68K-1/16W J	a
MAIN C.B	X R	0104	88-108-683-080	C-RES,U 68K-1/16W J	a
MAIN C.B	X R	0105	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN C.B	X R	0106	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN C.B	O R	0107	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN C.B	O R	0108	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN C.B	X R	0109	88-118-332-080	C-RES,S 3.3K-1/10W J	a
MAIN C.B	X R	0110	88-118-332-080	C-RES,S 3.3K-1/10W J	a
MAIN C.B	X R	0111	88-118-102-080	C-RES,S 1K-1/10W J	a
MAIN C.B	X R	0112	88-118-102-080	C-RES,S 1K-1/10W J	a
MAIN C.B	X R	0113	88-118-273-080	C-RES,S 27K-1/10W J	a
MAIN C.B	X R	0114	88-118-273-080	C-RES,S 27K-1/10W J	a
MAIN C.B	X R	0115	88-128-222-080	C-RES, 2.2K-1/8W J	a
MAIN C.B	X R	0116	88-128-222-080	C-RES, 2.2K-1/8W J	a
MAIN C.B	O R	0117	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0118	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0119	88-118-101-080	C-RES,S 100-1/10W J	a
MAIN C.B	X R	0120	88-118-101-080	C-RES,S 100-1/10W J	a

# ELECTRICAL PARTS LIST -12/18

! = SAFETY PARTS  
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All components used on this model at the production line are shown in this service manual.  
 However, please note that not all components will be available as spare parts for after-sales service.  
 Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.  
 Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
MAIN C.B	X R	0121	88-118-101-080	C-RES,S 100-1/10W J	a
MAIN C.B	X R	0122	88-118-101-080	C-RES,S 100-1/10W J	a
MAIN C.B	X R	0123	88-128-222-080	C-RES, 2.2K-1/8W J	a
MAIN C.B	X R	0124	88-128-222-080	C-RES, 2.2K-1/8W J	a
MAIN C.B	X R	0125	88-128-102-080	C-RES, 1K-1/8W J	a
MAIN C.B	X R	0126	88-128-102-080	C-RES, 1K-1/8W J	a
MAIN C.B	X R	0127	88-118-390-080	C-RES,S 39-1/10W J	a
MAIN C.B	X R	0128	88-118-390-080	C-RES,S 39-1/10W J	a
MAIN C.B	X R	0133	88-108-152-080	C-RES,U 1.5K-1/16W J	a
MAIN C.B	X R	0134	88-108-152-080	C-RES,U 1.5K-1/16W J	a
MAIN C.B	O R	0135	88-108-272-080	C-RES,U 2.7K-1/16W J	a
MAIN C.B	O R	0136	88-108-272-080	C-RES,U 2.7K-1/16W J	a
MAIN C.B	O R	0137	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN C.B	O R	0138	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN C.B	X R	0141	88-118-102-080	C-RES,S 1K-1/10W J	a
MAIN C.B	X R	0142	88-118-102-080	C-RES,S 1K-1/10W J	a
MAIN C.B	X R	0143	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	X R	0144	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	O R	0147	87-A00-418-010	RES,M/F 0.15-3W J	a
MAIN C.B	O R	0148	87-A00-418-010	RES,M/F 0.15-3W J	a
					CX-SNR90 LHSM
MAIN C.B	O R	0149	87-A00-418-010	RES,M/F 0.15-3W J	a
MAIN C.B	O R	0150	87-A00-418-010	RES,M/F 0.15-3W J	a
MAIN C.B	O R	0151	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	O R	0152	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	X R	0153	88-118-390-080	C-RES,S 39-1/10W J	a
MAIN C.B	X R	0154	88-118-390-080	C-RES,S 39-1/10W J	a
MAIN C.B	X R	0155	88-118-682-080	C-RES,S 6.8K-1/10W J	a
MAIN C.B	X R	0156	88-118-682-080	C-RES,S 6.8K-1/10W J	a
MAIN C.B	X R	0157	88-121-472-080	RES,4.7K-1/8W J	a
MAIN C.B	X R	0158	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	O R	0159	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0160	88-118-103-080	C-RES,S 10K-1/10W J	a
MAIN C.B	X R	0161	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	X R	0162	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	X R	0163	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	X R	0164	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	X R	0165	88-108-152-080	C-RES,U 1.5K-1/16W J	a
MAIN C.B	X R	0166	88-108-152-080	C-RES,U 1.5K-1/16W J	a
MAIN C.B	O R	0167	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0168	88-118-473-080	C-RES,S 47K-1/10W J	a
					CX-SNR90 LHSM
MAIN C.B	X R	0171	88-118-222-080	C-RES,S 2.2K-1/10W J	a
MAIN C.B	X R	0172	88-118-222-080	C-RES,S 2.2K-1/10W J	a
MAIN C.B	X R	0173	88-118-182-080	C-RES,S 1.8K-1/10W J	a
MAIN C.B	X R	0174	88-118-182-080	C-RES,S 1.8K-1/10W J	a
MAIN C.B	X R	0175	88-118-331-080	C-RES,S 330-1/10W J	a
MAIN C.B	X R	0176	88-118-331-080	C-RES,S 330-1/10W J	a
MAIN C.B	X R	0177	88-128-822-080	C-RES, 8.2K-1/8W J	a
MAIN C.B	X R	0178	88-118-103-080	C-RES,S 10K-1/10W J	a
MAIN C.B	O R	0179	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	O R	0180	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	X R	0181	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	X R	0182	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	X R	0183	88-128-682-080	C-RES, 6.8K-1/8W J	a
MAIN C.B	X R	0184	88-121-471-080	RES,470-1/8W J	a
MAIN C.B	O R	0185	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0186	88-118-122-080	C-RES,S 1.2K-1/10W J	a
MAIN C.B	X R	0187	88-118-101-080	C-RES,S 100-1/10W J	a
MAIN C.B	X R	0188	88-118-222-080	C-RES,S 2.2K-1/10W J	a
MAIN C.B	X R	0190	88-128-682-080	C-RES, 6.8K-1/8W J	a
MAIN C.B	O R	0193	88-108-103-080	C-RES,U 10K-1/16W J	a
					CX-SNR90 LHSM
MAIN C.B	O R	0194	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0195	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	O R	0196	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	O R	0197	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	O R	0198	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	X R	0202	88-128-473-080	C-RES, 47K-1/8W J	a
MAIN C.B	X R	0203	88-128-273-080	C-RES, 27K-1/8W J	a
MAIN C.B	X R	0204	88-128-822-080	C-RES, 8.2K-1/8W J	a
MAIN C.B	X R	0205	88-128-822-080	C-RES, 8.2K-1/8W J	a
MAIN C.B	X R	0206	88-128-822-080	C-RES, 8.2K-1/8W J	a
MAIN C.B	X R	0207	88-128-822-080	C-RES, 8.2K-1/8W J	a
MAIN C.B	X R	0208	88-128-682-080	C-RES, 6.8K-1/8W J	a
MAIN C.B	X R	0209	88-128-472-080	C-RES, 4.7K-1/8W J	a
MAIN C.B	X R	0210	88-128-472-080	C-RES, 4.7K-1/8W J	a
MAIN C.B	X R	0217	88-108-683-080	C-RES,U 68K-1/16W J	a
MAIN C.B	X R	0218	88-108-105-080	C-RES,U 1M-1/16W J	a
MAIN C.B	O R	0219	88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN C.B	X R	0220	88-118-154-080	C-RES,S 150K-1/10W J	a
MAIN C.B	X R	0221	88-128-180-080	C-RES, 18-1/8W J	a
MAIN C.B	X R	0222	88-128-180-080	C-RES, 18-1/8W J	a

# ELECTRICAL PARTS LIST -13/18

! = SAFETY PARTS  
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 Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
MAIN C.B	X R	0223	88-128-180-080	C-RES, 18-1/8W J	a
MAIN C.B	X R	0226	88-118-104-080	C-RES,S 100K-1/10W J	a
MAIN C.B	X R	0227	88-108-471-080	C-RES,U 470-1/16W J	a
MAIN C.B	X R	0228	88-108-471-080	C-RES,U 470-1/16W J	a
MAIN C.B	X R	0247	88-130-100-080	RES,10-1/4W J	a
MAIN C.B	X R	0248	88-130-100-080	RES,10-1/4W J	a
MAIN C.B	X R	0249	88-128-100-080	C-RES, 10-1/8W J	a
MAIN C.B	X R	0250	88-128-100-080	C-RES, 10-1/8W J	a
MAIN C.B	X R	0280	88-128-473-080	C-RES, 47K-1/8W J	a
MAIN C.B	X R	0281	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	O R	0282	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0283	88-108-224-080	C-RES,U 220K-1/16W J	a
MAIN C.B	O R	0284	88-108-224-080	C-RES,U 220K-1/16W J	a
MAIN C.B	X R	0285	88-108-333-080	C-RES,U 33K-1/16W J	a
MAIN C.B	O R	0286	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	O R	0287	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	X R	0301	88-108-393-080	C-RES,U 39K-1/16W J	a
MAIN C.B	X R	0302	88-108-393-080	C-RES,U 39K-1/16W J	a
MAIN C.B	O R	0303	88-108-823-080	C-RES,U 82K-1/16W J	a
MAIN C.B	O R	0304	88-108-823-080	C-RES,U 82K-1/16W J	a
					CX-SNR90 LHSM
MAIN C.B	O R	0305	88-108-224-080	C-RES,U 220K-1/16W J	a
MAIN C.B	X R	0451	88-121-222-080	RES,2.2K-1/8W J	a
MAIN C.B	X R	0453	88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN C.B	X R	0454	88-121-829-080	RES,8.2-1/8W J	a
MAIN C.B	X R	0455	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN C.B	X R	0456	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN C.B	X R	0457	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN C.B	O R	0458	88-108-563-080	C-RES,U 56K-1/16W J	a
MAIN C.B	X R	0459	88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN C.B	X R	0460	88-108-229-080	C-RES,U 2.2-1/16W J	a
MAIN C.B	O R	0463	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	O R	0464	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	O R	0501	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	X R	0502	88-108-474-080	C-RES,U 470K-1/16W J	a
MAIN C.B	O R	0503	88-108-332-080	C-RES,U 3.3K-1/16W J	a
MAIN C.B	X R	0504	88-108-221-080	C-RES,U 220-1/16W J	a
MAIN C.B	O R	0505	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0506	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0507	88-118-399-080	C-RES,S 3.9-1/10W J	a
MAIN C.B	X R	0511	88-108-472-080	C-RES,U 4.7K-1/16W J	a
					CX-SNR90 LHSM
MAIN C.B	X R	0512	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	X R	0601	88-108-680-080	C-RES,U 68-1/16W J	a
MAIN C.B	X R	0602	88-108-680-080	C-RES,U 68-1/16W J	a
MAIN C.B	X R	0603	88-108-394-080	C-RES,U 390K-1/16W J	a
MAIN C.B	X R	0604	88-108-394-080	C-RES,U 390K-1/16W J	a
MAIN C.B	X R	0605	88-108-122-080	C-RES,U 1.2K-1/16W J	a
MAIN C.B	X R	0606	88-108-122-080	C-RES,U 1.2K-1/16W J	a
MAIN C.B	X R	0607	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN C.B	X R	0608	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN C.B	X R	0611	88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN C.B	X R	0612	88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN C.B	X R	0613	88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN C.B	X R	0614	88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN C.B	X R	0615	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN C.B	X R	0616	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN C.B	X R	0617	88-121-822-080	RES,8.2K-1/8W J	a
MAIN C.B	X R	0618	88-121-822-080	RES,8.2K-1/8W J	a
MAIN C.B	O R	0619	88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN C.B	O R	0620	88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN C.B	O R	0621	88-108-332-080	C-RES,U 3.3K-1/16W J	a
					CX-SNR90 LHSM
MAIN C.B	O R	0622	88-108-332-080	C-RES,U 3.3K-1/16W J	a
MAIN C.B	X R	0623	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	X R	0624	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	O R	0625	88-108-332-080	C-RES,U 3.3K-1/16W J	a
MAIN C.B	O R	0626	88-108-332-080	C-RES,U 3.3K-1/16W J	a
MAIN C.B	X R	0627	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	X R	0628	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	O R	0629	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0630	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0631	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	X R	0632	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	O R	0633	88-108-272-080	C-RES,U 2.7K-1/16W J	a
MAIN C.B	O R	0634	88-108-272-080	C-RES,U 2.7K-1/16W J	a
MAIN C.B	O R	0635	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	O R	0636	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	X R	0637	88-108-331-080	C-RES,U 330-1/16W J	a
MAIN C.B	X R	0638	88-108-331-080	C-RES,U 330-1/16W J	a
MAIN C.B	X R	0639	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN C.B	X R	0640	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN C.B	X R	0641	88-121-223-080	RES,22K-1/8W J	a

# ELECTRICAL PARTS LIST -14/18

! = SAFETY PARTS  
 C = Components marked

All components used on this model at the production line are shown in this service manual.  
 However, please note that not all components will be available as spare parts for after-sales service.  
 Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.  
 Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
MAIN C.B	X R	0642	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	X R	0643	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN C.B	X R	0644	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN C.B	X R	0649	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	X R	0650	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN C.B	O R	0651	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN C.B	O R	0652	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN C.B	X R	0656	88-108-474-080	C-RES,U 470K-1/16W J	a
MAIN C.B	X R	0657	88-128-684-080	C-RES, 680K-1/8W J	a
MAIN C.B	X R	0658	88-108-684-080	C-RES,U 680K-1/16W J	a
MAIN C.B	X R	0659	88-108-394-080	C-RES,U 390K-1/16W J	a
MAIN C.B	X R	0660	88-108-274-080	C-RES,U 270K-1/16W J	a
MAIN C.B	X R	0661	88-108-392-080	C-RES,U 3.9K-1/16W J	a
MAIN C.B	X R	0662	88-108-392-080	C-RES,U 3.9K-1/16W J	a
MAIN C.B	X R	0669	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN C.B	X R	0670	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN C.B	O R	0672	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0673	88-108-182-080	C-RES,U 1.8K-1/16W J	a
MAIN C.B	O R	0674	88-108-123-080	C-RES,U 12K-1/16W J	a
MAIN C.B	X R	0676	88-108-124-080	C-RES,U 120K-1/16W J	a
					CX-SNR90 LHSM
MAIN C.B	O R	0677	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN C.B	X R	0678	88-128-223-080	C-RES, 22K-1/8W J	a
MAIN C.B	O R	0681	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	X R	0682	88-121-473-080	RES,47K-1/8W J	a
MAIN C.B	O R	0683	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN C.B	O R	0684	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN C.B	X R	0685	88-108-683-080	C-RES,U 68K-1/16W J	a
MAIN C.B	O R	0686	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN C.B	X R	0687	88-121-223-080	RES,22K-1/8W J	a
MAIN C.B	O R	0688	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN C.B	O R	0689	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN C.B	X R	0691	88-108-105-080	C-RES,U 1M-1/16W J	a
MAIN C.B	X R	0692	88-108-105-080	C-RES,U 1M-1/16W J	a
MAIN C.B	X R	0693	88-121-472-080	RES,4.7K-1/8W J	a
MAIN C.B	X R	0694	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	X R	0789	88-108-333-080	C-RES,U 33K-1/16W J	a
MAIN C.B	O R	0790	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN C.B	O R	0791	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	X R	0793	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X R	0795	88-108-000-080	C-JUMPER,U	a
					CX-SNR90 LHSM
MAIN C.B	O R	0801	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0802	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN C.B	X R	0803	88-128-183-080	C-RES, 18K-1/8W J	a
MAIN C.B	X R	0804	88-108-000-080	C-JUMPER,U	a
MAIN C.B	O R	0805	88-108-332-080	C-RES,U 3.3K-1/16W J	a
MAIN C.B	X R	0806	88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN C.B	O R	0809	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	O R	0810	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	X R	0811	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X R	0812	88-108-000-080	C-JUMPER,U	a
MAIN C.B	O R	0813	88-108-224-080	C-RES,U 220K-1/16W J	a
MAIN C.B	X R	0814	88-108-105-080	C-RES,U 1M-1/16W J	a
MAIN C.B	X R	0815	88-121-682-080	RES,6.8K-1/8W J	a
MAIN C.B	O R	0818	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0821	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X R	0823	88-108-333-080	C-RES,U 33K-1/16W J	a
MAIN C.B	O R	0826	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN C.B	X R	0832	88-108-391-080	C-RES,U 390-1/16W J	a
MAIN C.B	X R	0840	88-108-221-080	C-RES,U 220-1/16W J	a
MAIN C.B	O R	0850	88-108-103-080	C-RES,U 10K-1/16W J	a
					CX-SNR90 LHSM
MAIN C.B	X R	0851	88-108-000-080	C-JUMPER,U	a
MAIN C.B	O R	0852	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0853	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	X R	0854	88-108-331-080	C-RES,U 330-1/16W J	a
MAIN C.B	X R	0855	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN C.B	O R	0856	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0857	88-108-181-080	C-RES,U 180-1/16W J	a
MAIN C.B	O R	0858	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN C.B	O R	0860	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN C.B	X R	0903	88-108-221-080	C-RES,U 220-1/16W J	a
MAIN C.B	O R	0904	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	O R	0905	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	X R	0906	88-108-564-080	C-RES,U 560K-1/16W J	a
MAIN C.B	X R	0908	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X R	0911	88-108-121-080	C-RES,U 120-1/16W J	a
MAIN C.B	O R	0912	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN C.B	X R	0913	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	X R	0914	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN C.B	X R	0918	88-108-000-080	C-JUMPER,U	a
MAIN C.B	X R	0945	88-108-104-080	C-RES,U 100K-1/16W J	a

# ELECTRICAL PARTS LIST -15/18

! = SAFETY PARTS  
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 Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
MAIN C.B	X R	0962	88-121-102-080	RES,1K-1/8W J	a
MAIN C.B	X R	0963	88-108-330-080	C-RES,U 33-1/16W J	a
MAIN C.B	O R	0968	88-108-822-080	C-RES,U 8.2K-1/16W J	a
MAIN C.B	O R	0975	88-108-562-080	C-RES,U 5.6K-1/16W J	a
MAIN C.B	O R	0976	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	O R	0977	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	X R	0978	88-108-681-080	C-RES,U 680-1/16W J	a
MAIN C.B	O R	0979	88-108-123-080	C-RES,U 12K-1/16W J	a
MAIN C.B	X R	0980	88-108-684-080	C-RES,U 680K-1/16W J	a
MAIN C.B	X R	0981	88-121-471-080	RES,470-1/8W J	a
MAIN C.B	X R	0982	88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN C.B	X R	0983	88-108-392-080	C-RES,U 3.9K-1/16W J	a
MAIN C.B	O R	0984	88-108-562-080	C-RES,U 5.6K-1/16W J	a
MAIN C.B	X R	0985	88-121-471-080	RES,470-1/8W J	a
MAIN C.B	X R	0986	88-121-221-080	RES,220-1/8W J	a
MAIN C.B	X R	0987	88-121-472-080	RES,4.7K-1/8W J	a
MAIN C.B	O R	0988	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0989	88-121-102-080	RES,1K-1/8W J	a
MAIN C.B	O R	0990	88-108-563-080	C-RES,U 56K-1/16W J	a
MAIN C.B	O R	0991	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
					CX-SNR90 LHSM
MAIN C.B	O R	0992	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0993	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
MAIN C.B	O R	0994	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O R	0995	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
MAIN C.B	O R	0996	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	X R	0997	88-108-154-080	C-RES,U 150K-1/16W J	a
MAIN C.B	O R	0998	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN C.B	O R	0999	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN C.B	O RY	0202	87-A91-686-010	RELAY, G5PA-28 (OMRON)	a
MAIN C.B	O SFR	0451	87-A90-432-080	SFR,30K H NVZ6TLTA	a
MAIN C.B	O SFR	0452	87-A90-432-080	SFR,30K H NVZ6TLTA	a
MAIN C.B	X SH	0301	8C-NF5-221-010	PLATE,SHLD DECK M	a
MAIN C.B	X SH	0901	8B-ZA3-619-010	SHLD-CASE,BZA-3 EZ	a
MAIN C.B	O TH	0101	87-A91-042-080	C-THMS,100K 55001	a
MAIN C.B	O TH	0102	87-A91-042-080	C-THMS,100K 55001	a
MAIN C.B	O W	0101	8B-NF1-640-010	F-CABLE,5P 2.5 250MM	a
MAIN C.B	O WH	0001	87-A90-510-010	HLDL,WIRE 2.5-9P	a
MAIN C.B	O WH	0101	87-A90-459-010	HLDL,WIRE 2.5-5P	a
MAIN C.B	O X	0992	87-A70-306-010	VIB,XTAL 4.500MHZ CSA-309ST	a
MIC C.B	O C	0401	87-012-282-080	C-CAP,U 4700P-50 K B GRM	a
					CX-SNR90 LHSM
MIC C.B	O C	0402	87-A10-918-040	CAP,E 100-16 SMG	a
MIC C.B	O C	0403	87-A12-084-040	CAP,E 0.22-50 SMG	a
MIC C.B	O C	0404	87-012-191-080	C-CAP,U 68P-50 J CH	a
MIC C.B	O C	0405	87-A12-084-040	CAP,E 0.22-50 SMG	a
MIC C.B	O C	0406	87-A12-084-040	CAP,E 0.22-50 SMG	a
MIC C.B	O C	0407	87-A12-091-040	CAP,E 10-50 SMG	a
MIC C.B	O C	0408	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
MIC C.B	O C	0409	87-A12-065-040	CAP,E 33-16 SMG	a
MIC C.B	O C	0410	87-010-829-080	C-CAP,U 0.047-16 Z F	a
MIC C.B	O C	0413	87-010-177-080	C-CAP,S 820P-50 J SL C2012	a
MIC C.B	O FB	0402	87-A50-581-080	C-COIL,S FCM2012H 252705	a
MIC C.B	O J	0401	87-A61-243-010	JACK,6.3 BLK MONO W/SW V MSC	a
MIC C.B	X JR	0402	88-108-000-080	C-JUMPER,U	a
MIC C.B	X JR	0403	88-108-000-080	C-JUMPER,U	a
MIC C.B	X JR	0404	88-108-000-080	C-JUMPER,U	a
MIC C.B	X JR	0405	88-108-000-080	C-JUMPER,U	a
MIC C.B	S Q	0401	87-A30-076-080	C-TR,2SC3052F	a
MIC C.B	S Q	0402	87-A30-075-080	C-TR,2SA1235F	a
MIC C.B	S Q	0403	87-A30-076-080	C-TR,2SC3052F	a
MIC C.B	S Q	0404	87-A30-075-080	C-TR,2SA1235F	a
					CX-SNR90 LHSM
MIC C.B	S Q	0405	87-A30-087-080	C-FET,2SK2158	a
MIC C.B	S Q	0406	87-A30-076-080	C-TR,2SC3052F	a
MIC C.B	X R	0401	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MIC C.B	X R	0402	88-108-104-080	C-RES,U 100K-1/16W J	a
MIC C.B	X R	0403	88-128-101-080	C-RES, 100-1/8W J	a
MIC C.B	X R	0404	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MIC C.B	O R	0405	88-108-102-080	C-RES,U 1K-1/16W J	a
MIC C.B	X R	0406	88-108-334-080	C-RES,U 330K-1/16W J	a
MIC C.B	X R	0407	88-108-393-080	C-RES,U 39K-1/16W J	a
MIC C.B	O R	0408	88-108-562-080	C-RES,U 5.6K-1/16W J	a
MIC C.B	O R	0409	88-108-101-080	C-RES,U 100-1/16W J	a
MIC C.B	O R	0410	88-108-223-080	C-RES,U 22K-1/16W J	a
MIC C.B	X R	0411	88-108-561-080	C-RES,U 560-1/16W J	a
MIC C.B	X R	0412	88-108-274-080	C-RES,U 270K-1/16W J	a
MIC C.B	O R	0413	88-108-153-080	C-RES,U 15K-1/16W J	a
MIC C.B	O R	0414	88-108-102-080	C-RES,U 1K-1/16W J	a
MIC C.B	X R	0415	88-108-000-080	C-JUMPER,U	a
MIC C.B	O R	0416	88-108-224-080	C-RES,U 220K-1/16W J	a
MIC C.B	X R	0417	88-108-274-080	C-RES,U 270K-1/16W J	a
MIC C.B	X R	0418	88-108-334-080	C-RES,U 330K-1/16W J	a

# ELECTRICAL PARTS LIST -16/18

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UNIT-NAME	! C REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
				CX-SNR90 LHSM
MIC C.B	O VR	0401 86-NFA-607-010	VR,RTRY 10K15AX1 1 V XV0121PVN	a
PT C.B	O C	0003 87-A11-132-080	CAP,TC U 0.01-50 K B	a
PT C.B	O CN	0001 87-A61-110-010	CONN,9P V TID-A	a
PT C.B	S D	0002 87-A40-291-080	DIODE,1N4148M (CPT)	a
PT C.B	S D	0003 87-A40-291-080	DIODE,1N4148M (CPT)	a
PT C.B	S D	0004 87-A40-291-080	DIODE,1N4148M (CPT)	a
PT C.B	S D	0005 87-A40-291-080	DIODE,1N4148M (CPT)	a
PT C.B	! O PT	0001 8C-NF4-609-010	PT,CNF-4 LH	a
PT C.B	! O PT	0002 8B-MA6-673-010	PT,SUB BMA H (VRK)	a
PT C.B	! O RY	0001 87-A91-339-010	RELAY,AC DC12V G5PA-2	a
PT C.B	! O S	0001 87-A90-165-010	SW,SL 1-2-3 SWS2301	a
PT C.B	! O T	0001 87-A60-317-010	TERMINAL, 1P MSC	a
PT C.B	! O T	0002 87-A60-317-010	TERMINAL, 1P MSC	a
PT C.B	! O W	0001 87-A80-188-010	AC CORD ASSY,BRAZ BLK SUN FAI	a
VM C.B	O CNA	0003 87-099-416-010	CONN,3P H WHT EH	a
VM C.B	S Q	0016 87-A30-686-010	TR,2SA2057Q	a
VM C.B	S Q	0017 87-A30-686-010	TR,2SA2057Q	a
VM C.B	X R	0039 88-108-471-080	C-RES,U 470-1/16W J	a
VM C.B	X R	0040 88-108-471-080	C-RES,U 470-1/16W J	a

# ELECTRICAL PARTS LIST -17/18 (2ZM-3MK2)

! = SAFETY PARTS  
 C = Components marked

All components used on this model at the production line are shown in this service manual.  
 However, please note that not all components will be available as spare parts for after-sales service.  
 Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.  
 Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
				2ZM-3MK2 PR7NM
DECK	O CON1	87-099-756-010	CONN, 15P H 9604	a
DECK	X CRD1	82-ZM3-601-010	REN-CORD, 4P-75	a
DECK	S IC 1	87-A21-269-010	IC, EW732	a
DECK	S IC 2	87-A21-269-010	IC, EW732	a
DECK	O M 1	87-A92-321-010	MOT, SHU2L 60	a
DECK	X R 1	88-121-104-080	RES, 100K-1/8W J	a
DECK	X R 2	88-121-392-080	RES, 3.9K-1/8W J	a
DECK	X R 3	88-121-822-080	RES, 8.2K-1/8W J	a
DECK	O SFR1	87-024-581-010	SFR, 3.3K H KVSP637A	a
DECK	O SOL1	82-ZM3-627-010	SOL ASSY, 27 SO	a
DECK	O SOL2	82-ZM3-627-010	SOL ASSY, 27 SO	a
DECK	O SW 1	87-A90-248-010	SW, MICRO ESE11SH2CXQ	a
DECK	O SW 2	87-A90-248-010	SW, MICRO ESE11SH2CXQ	a
DECK	O SW 3	87-A90-248-010	SW, MICRO ESE11SH2CXQ	a
DECK	O SW 4	87-036-110-010	SW, MICRO SPPB62	a
DECK	O SW 5	87-036-110-010	SW, MICRO SPPB62	a
DECK	O SW 6	87-036-110-010	SW, MICRO SPPB62	a
DECK	O SW 8	87-A90-248-010	SW, MICRO ESE11SH2CXQ	a
DECK	O SW 9	87-A90-248-010	SW, MICRO ESE11SH2CXQ	a
DECK	S TR 1	87-A30-216-080	TR, 2SA933AS (R)	a

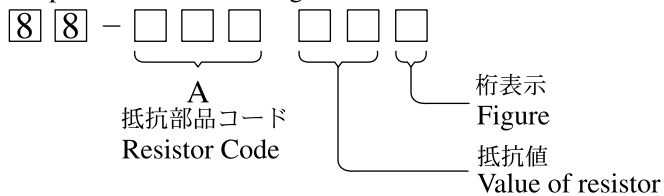
# ELECTRICAL PARTS LIST -18/18

- 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)			抵抗コード : A Resistor Code : A	
				外形/Form	L	W		t
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



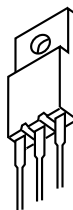
E C B

2SA1296GR  
2SA1980G  
2SA1981Y  
2SC3331  
2SC5343GL  
2N5551C



B C E

2SA2057Q



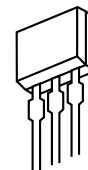
B C E

2SB1649  
2SD2562



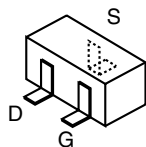
G D S

2SK3053

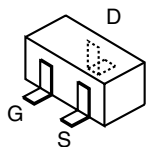


S D G

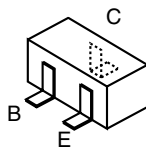
2SJ460  
2SK2541



2SK360E

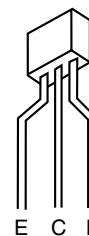


2SK2158

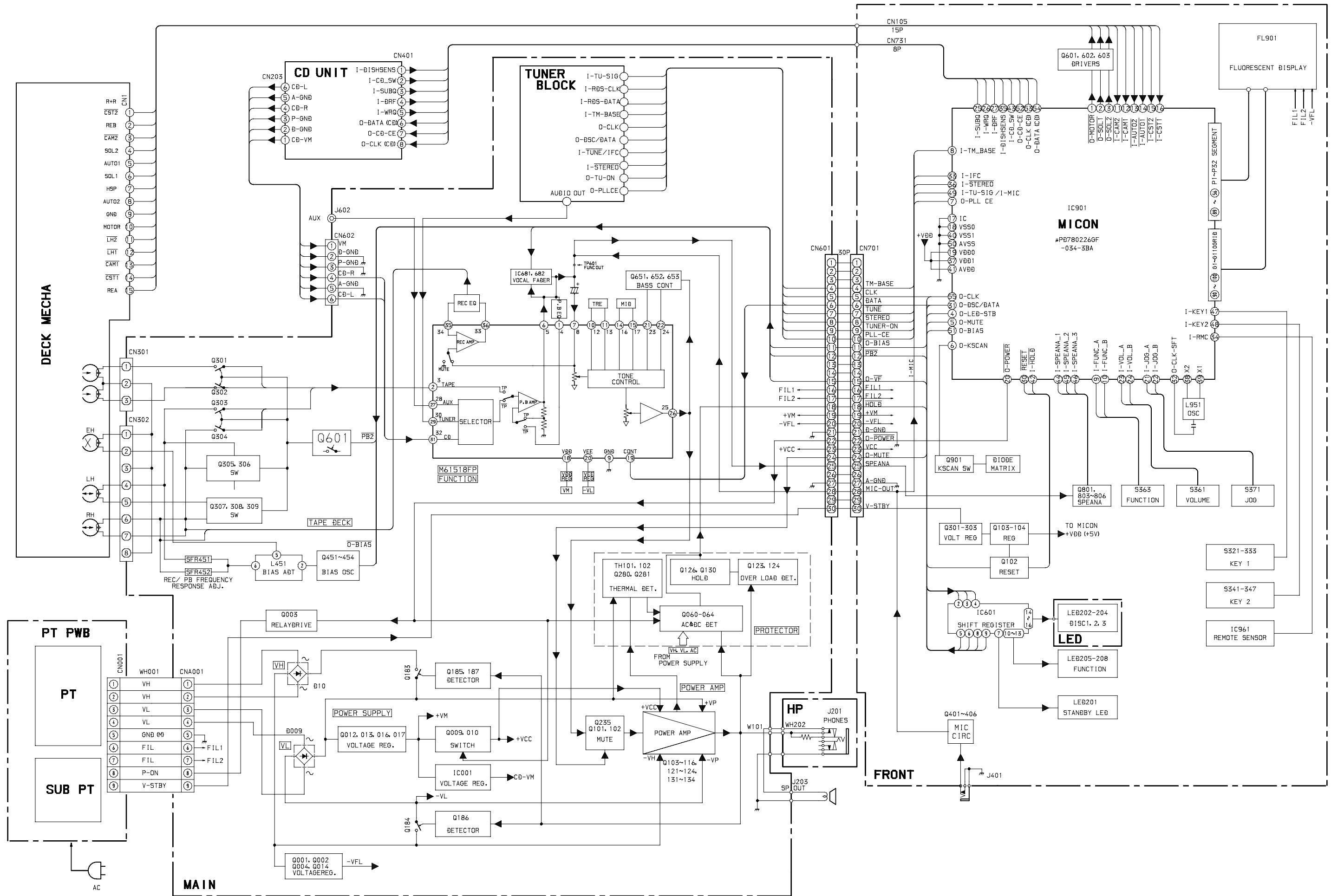


2SA1235F  
2SB792A  
2SC2620B  
2SC3052F  
2SC5345SF/S  
2SC3052F  
SRA2202S

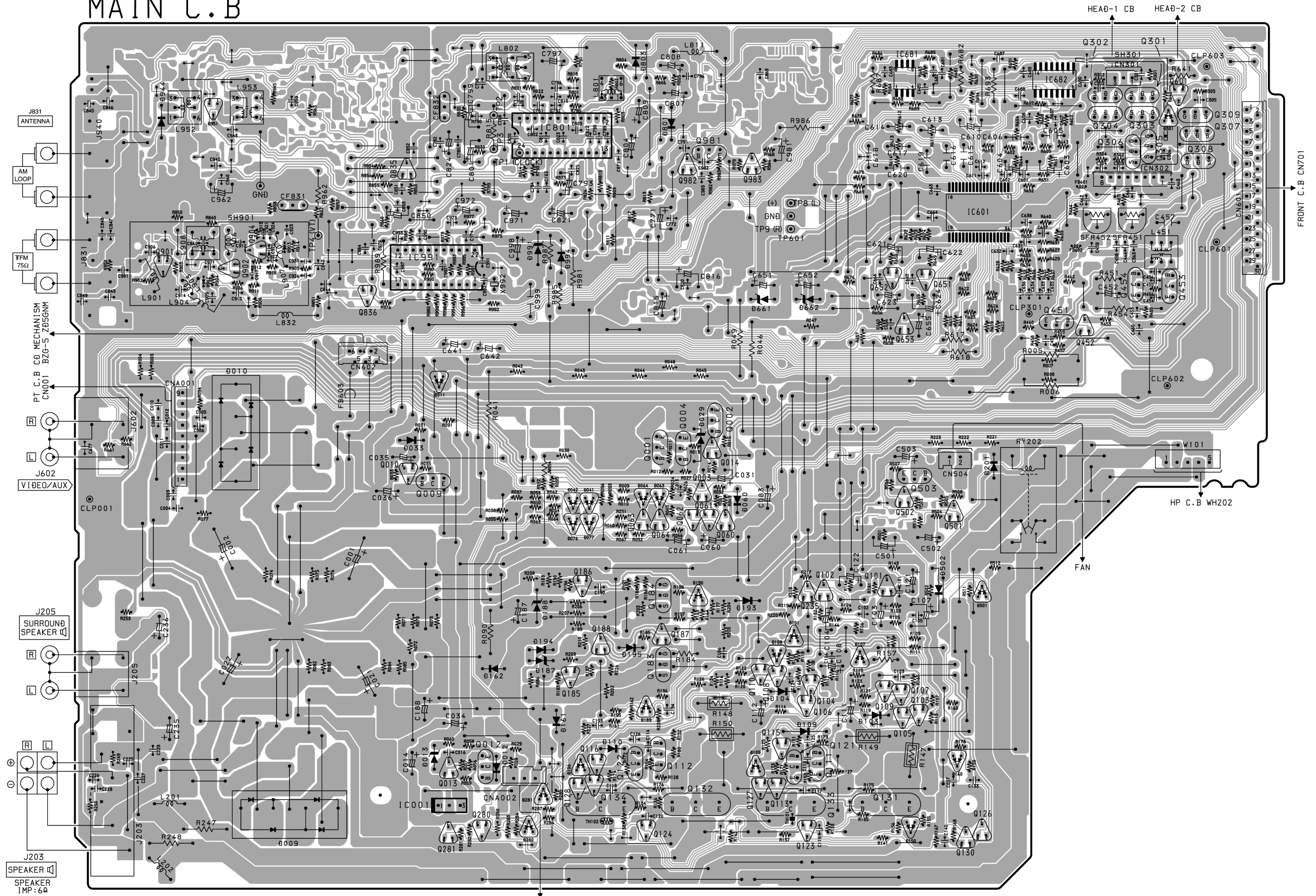
2SD1306E  
2SD814A  
2SK2158  
DTC114YKA  
SBT5401  
SBT5551



2SA933AS



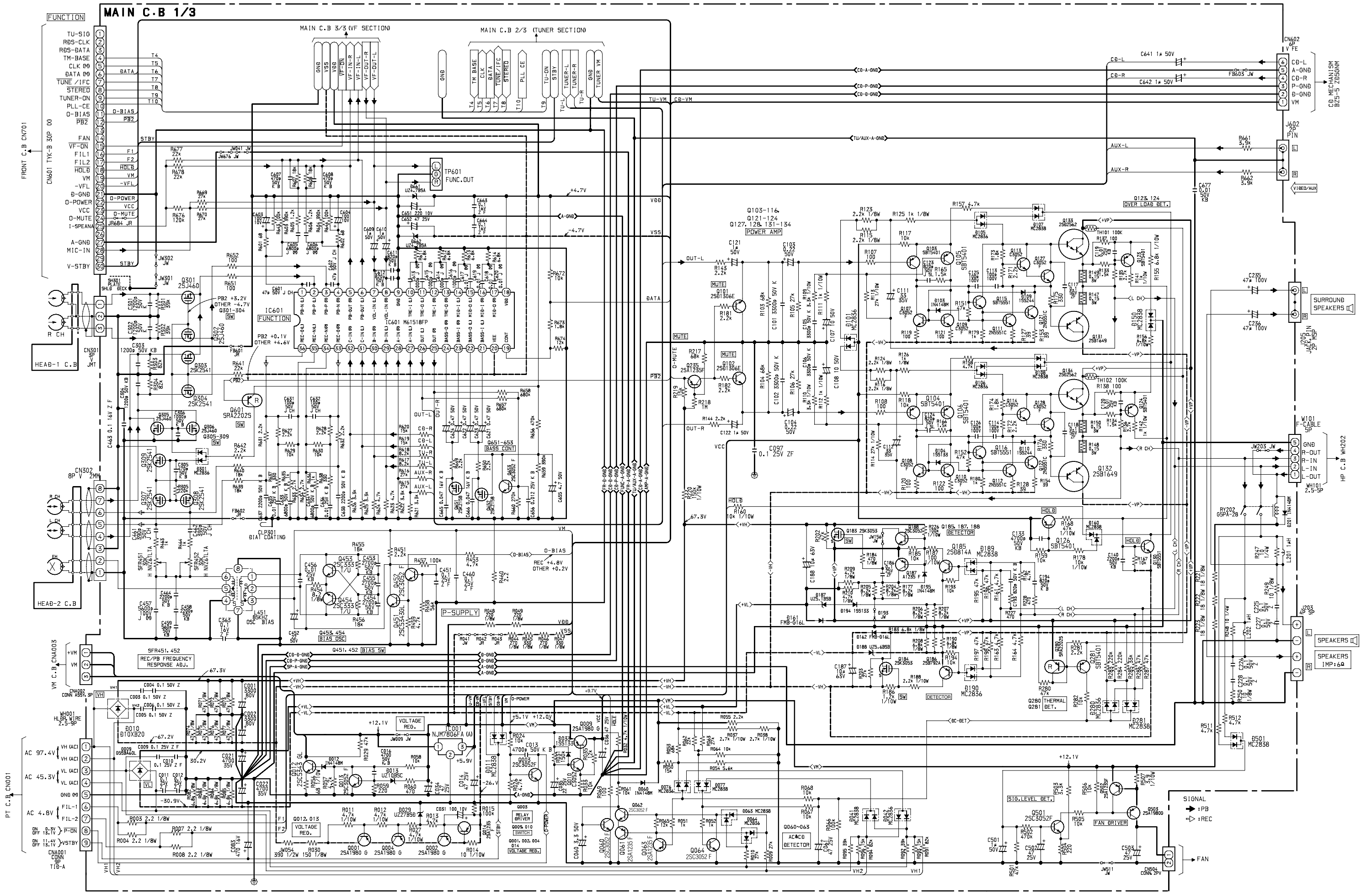
# MAIN C.B



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

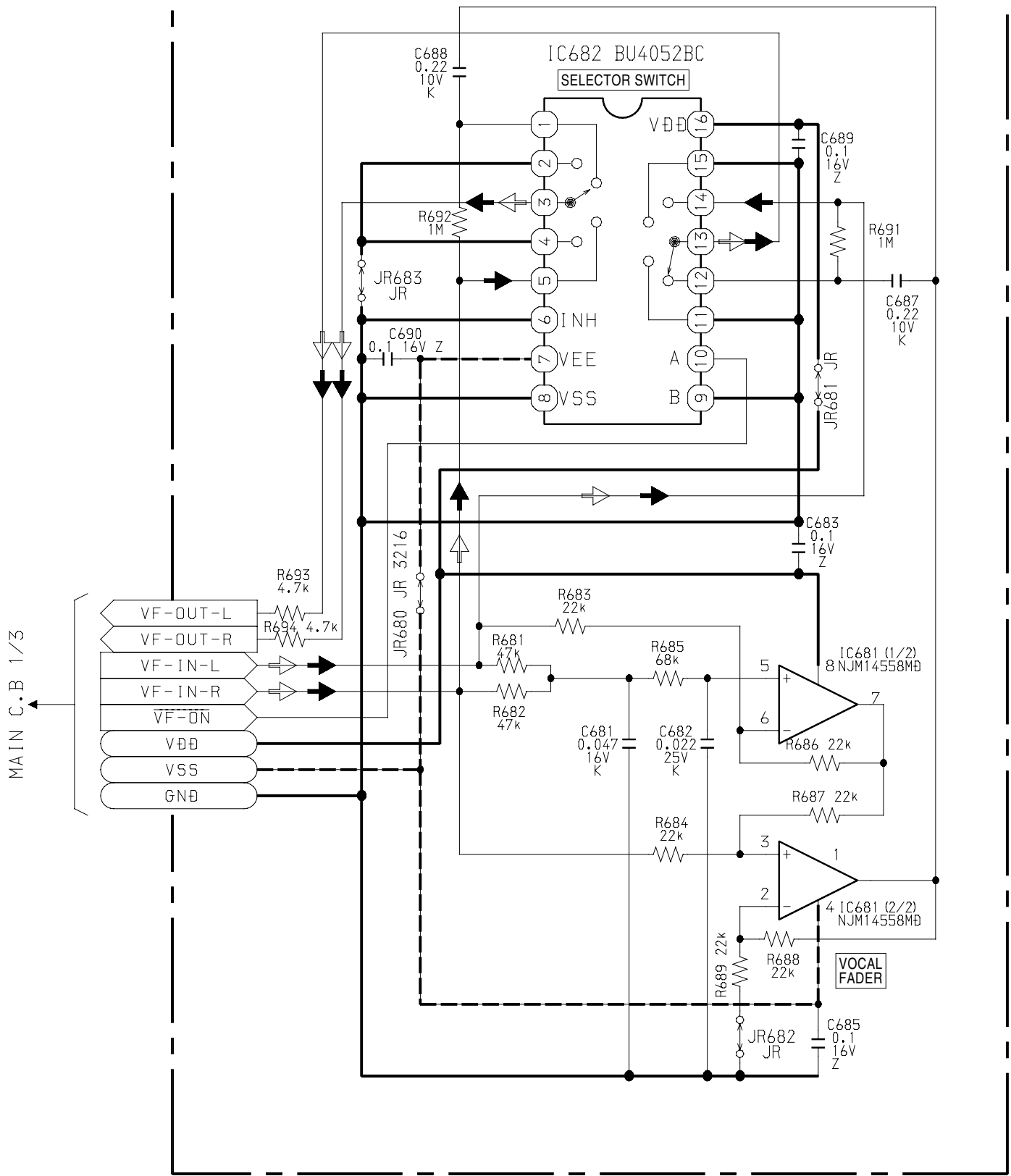
VM C.B CNA003

SCHEMATIC DIAGRAM-1/6 (MAIN)-1/3





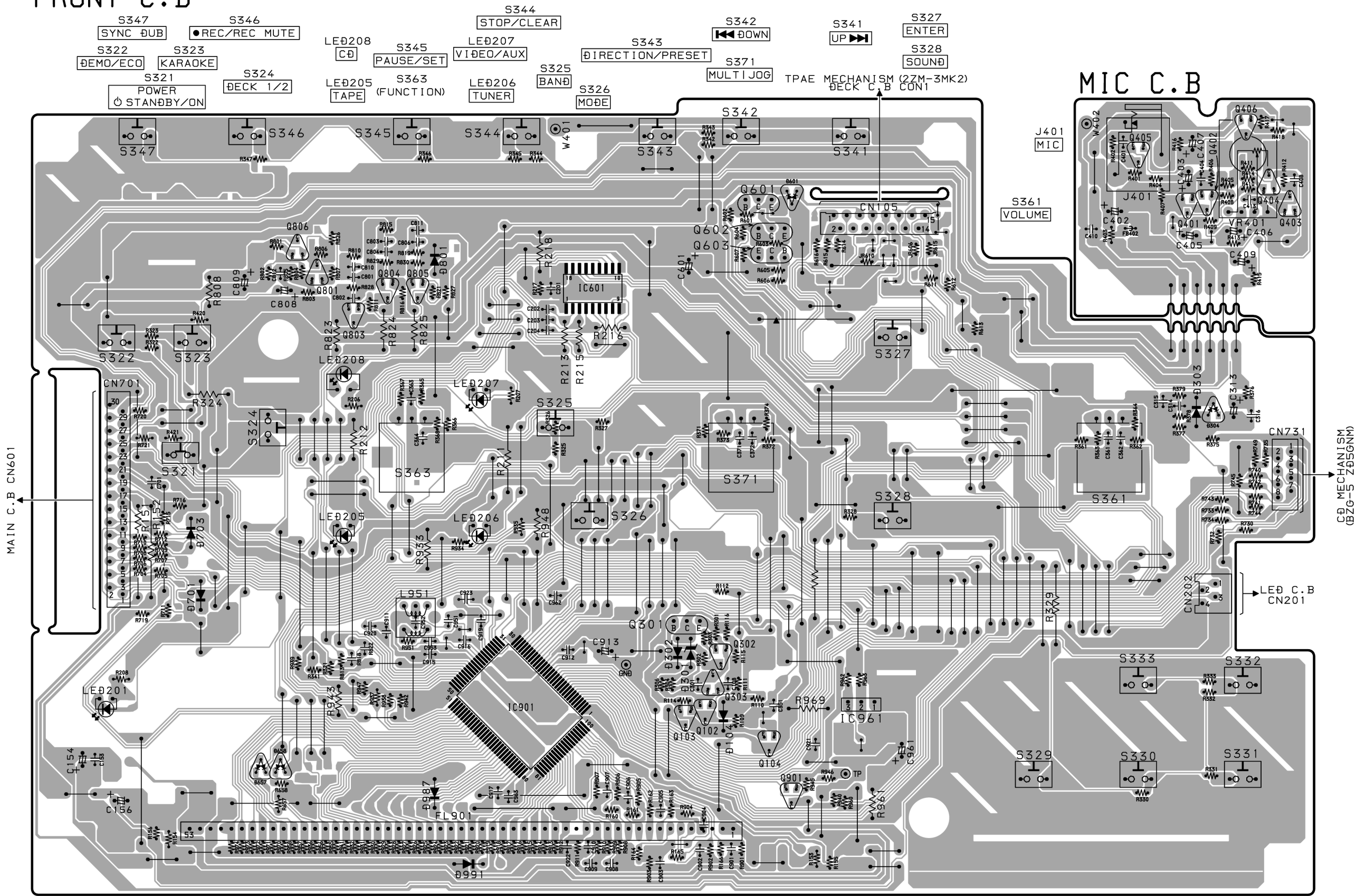
# MAIN C.B 3/3 (VF SECTION)



SIGNAL  
 ➔ VF ON  
 ⇨ VF OFF

FRONT C.B

MIC C.B



MAIN C.B CN601

CD MECHANISM (BZG-T-5 ZB55GNM)

LED201  
STANDBY/ON

FL901  
(DISPLAY)

S333 DISC CHANGE    S332 CD OPEN/CLOSE

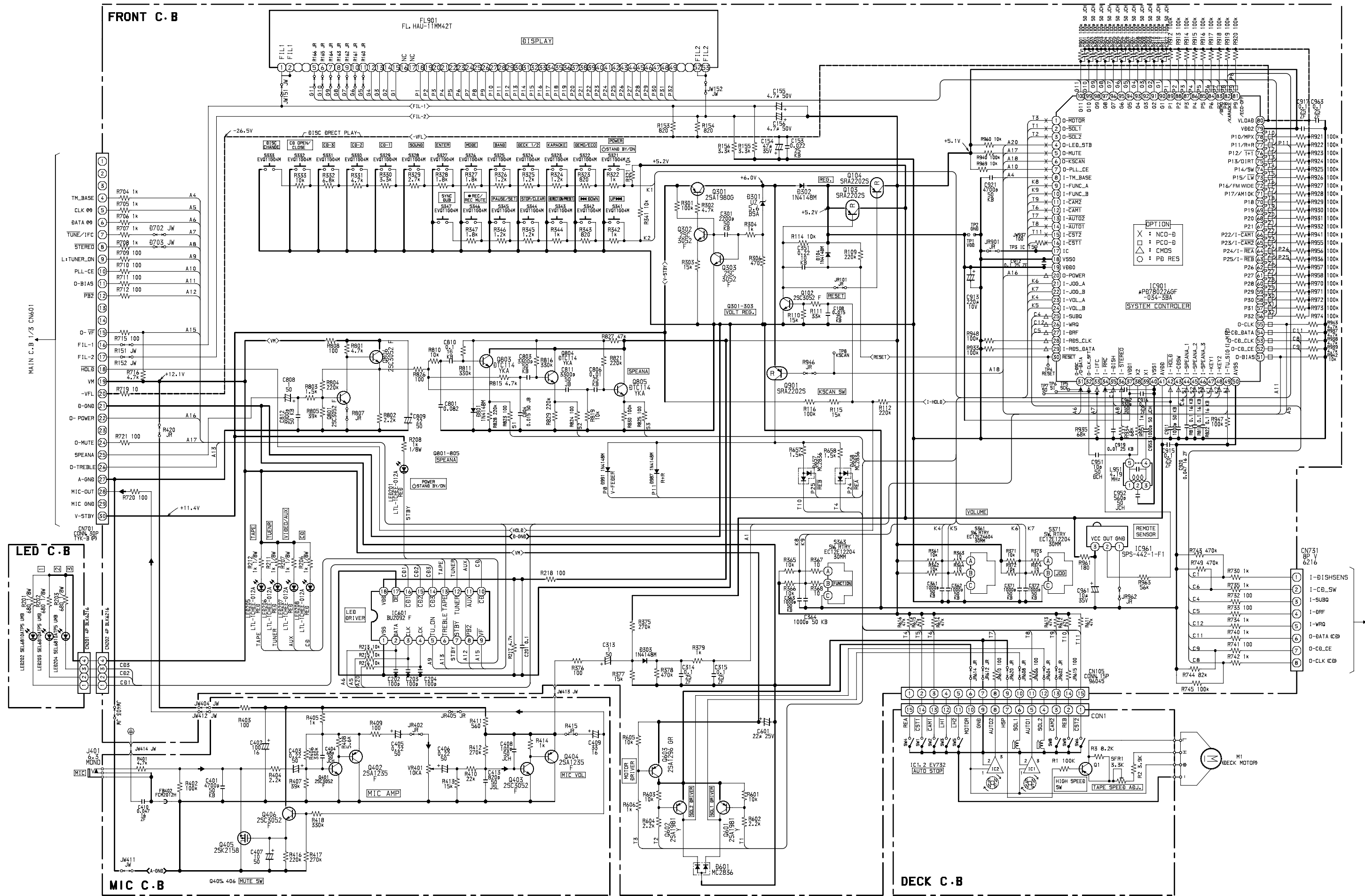
S329 1    S330 2    S331 3

DISC DIRECT PLAY

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



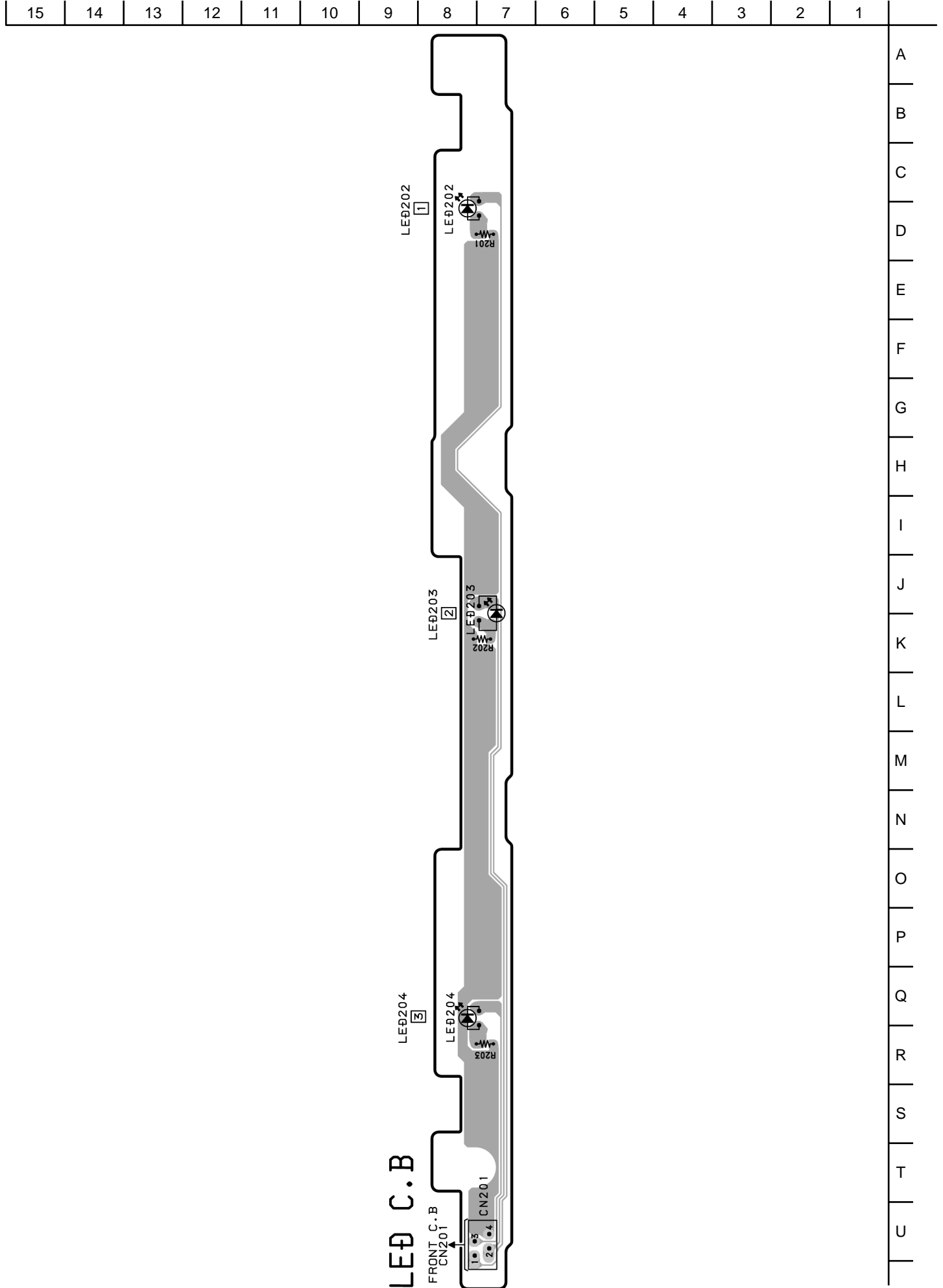
SCHEMATIC DIAGRAM-4/6 (FRONT)



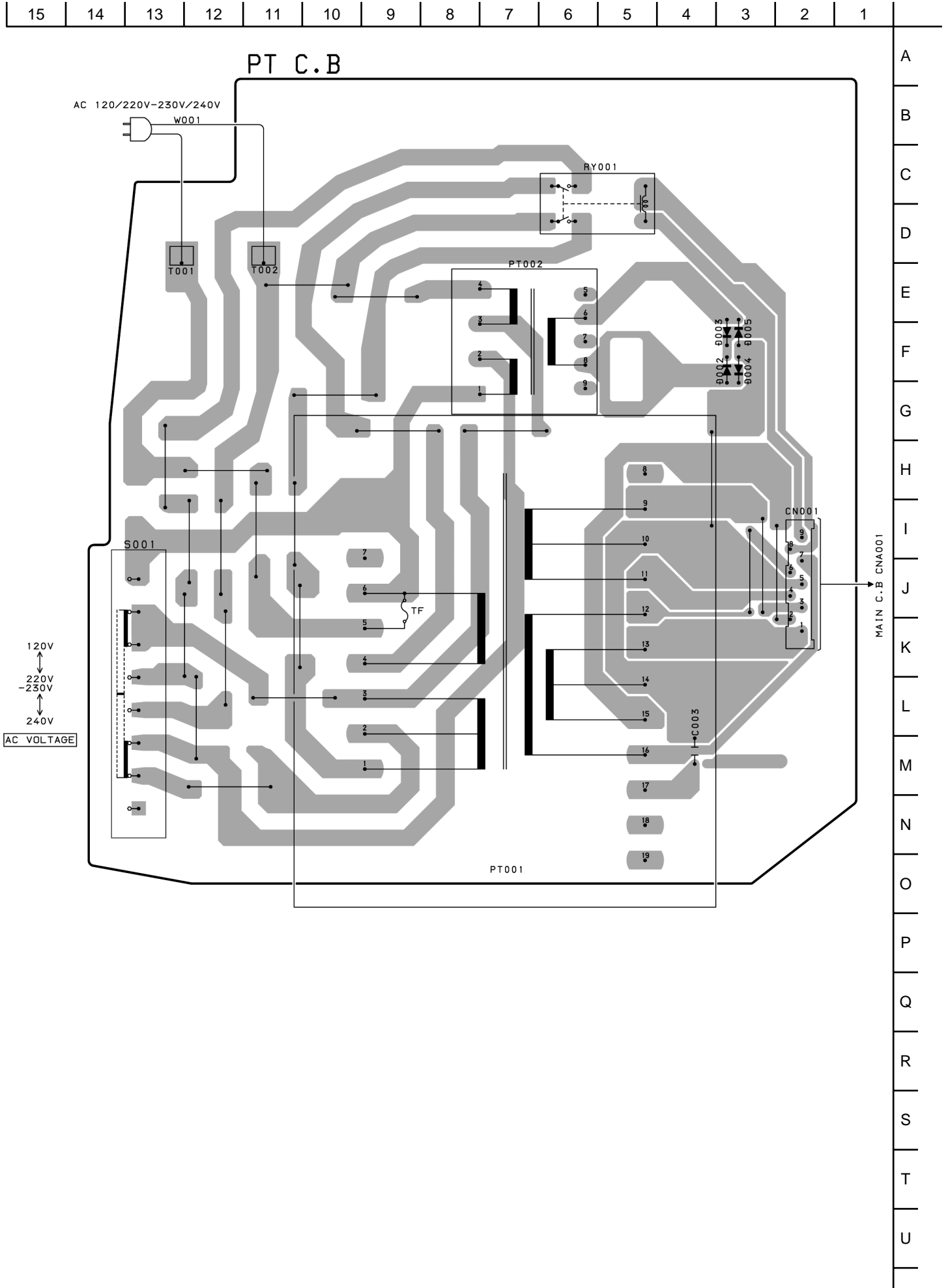
SIGNAL  
→ : PB



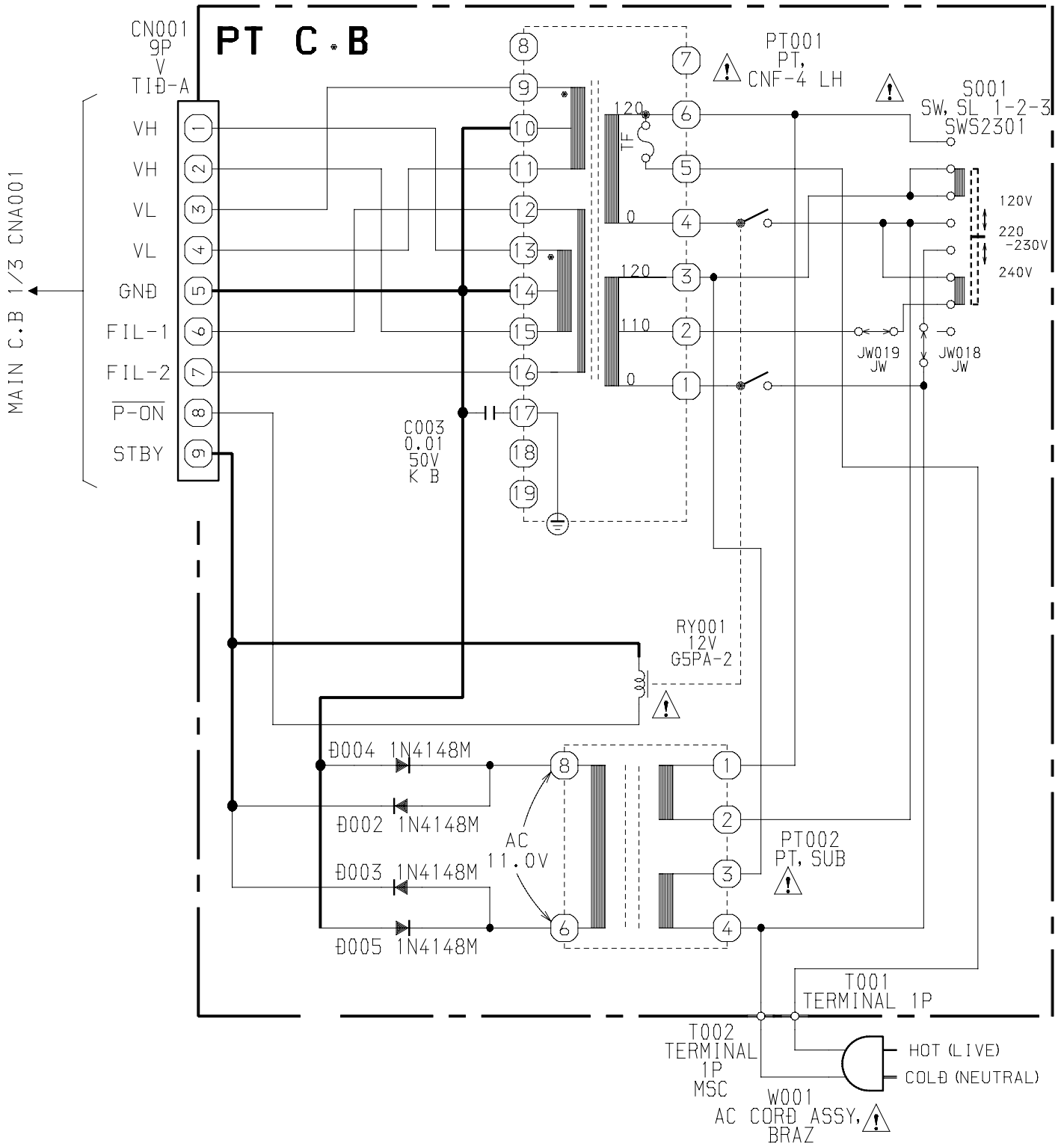
WIRING-3/6 (LED)



WIRING-4/6 (PT)



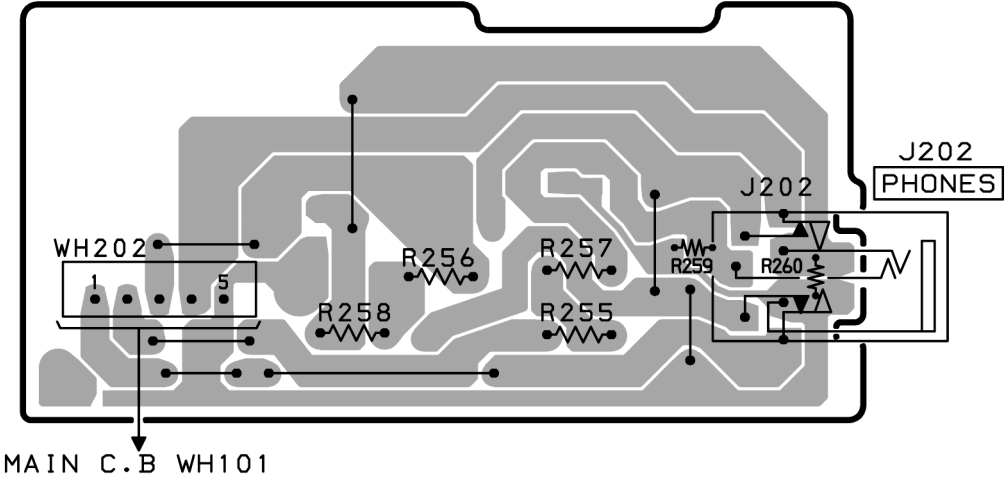
SCHEMATIC DIAGRAM-5/6 (PT)



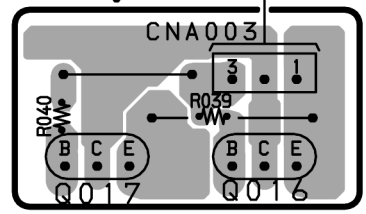
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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A
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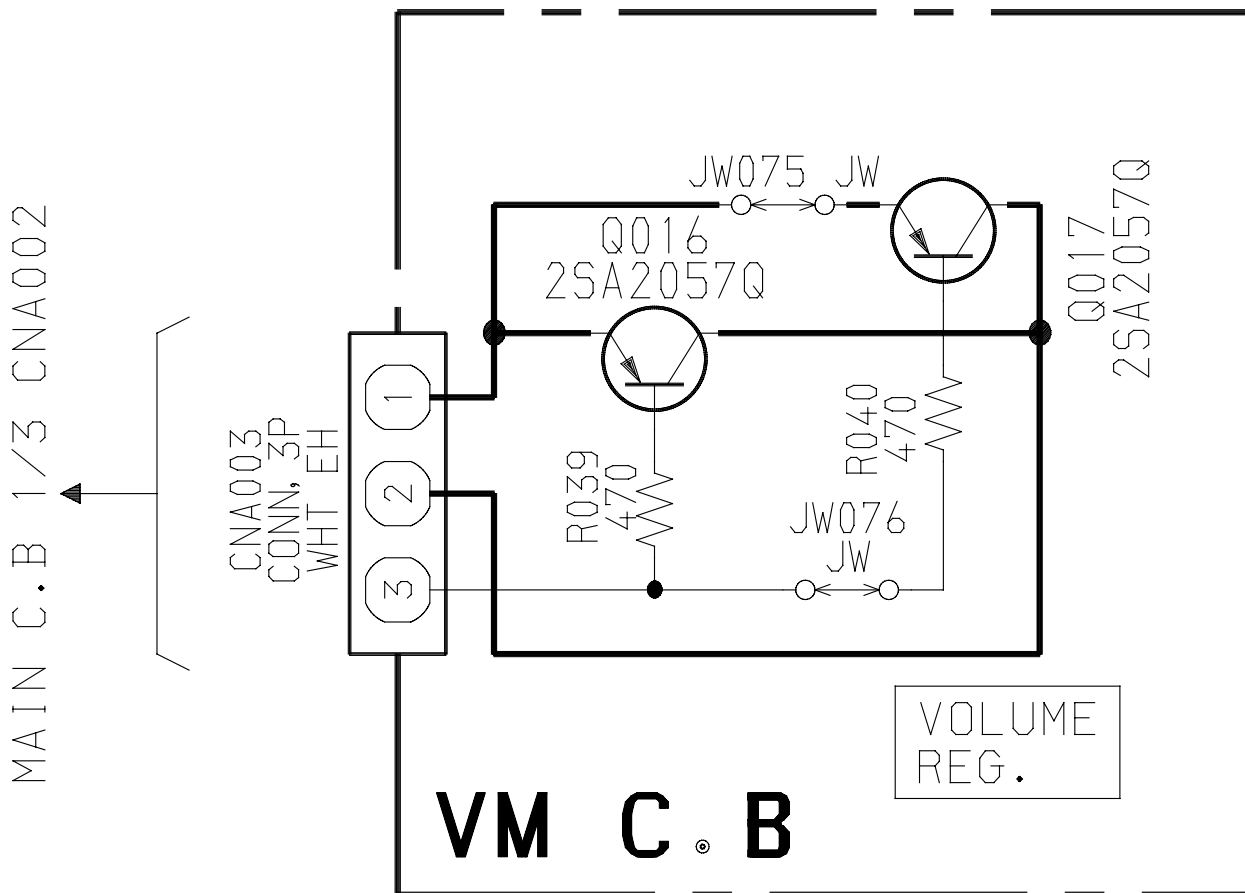
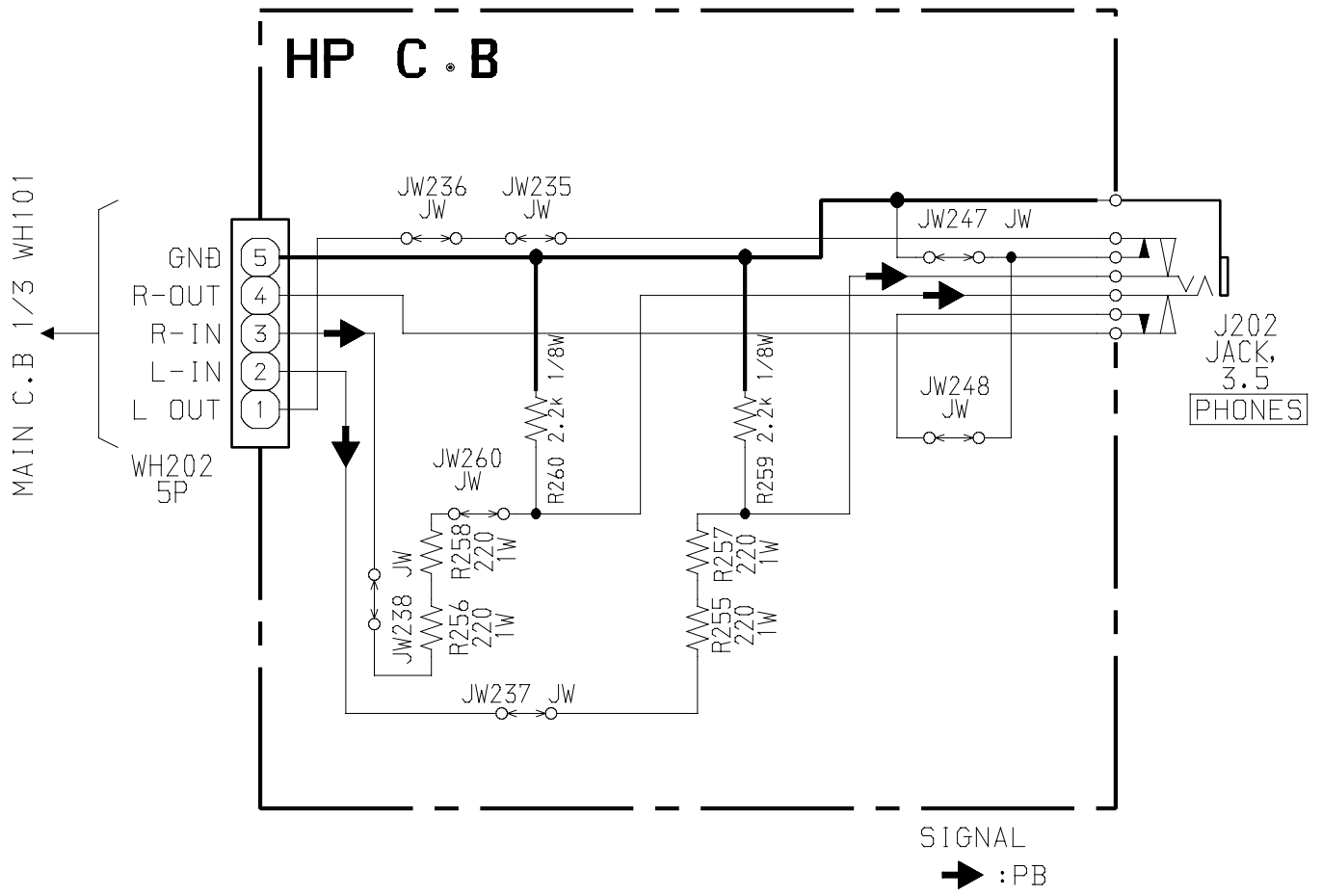
# HP C.B



# VM C.B MAIN C.B CNA002

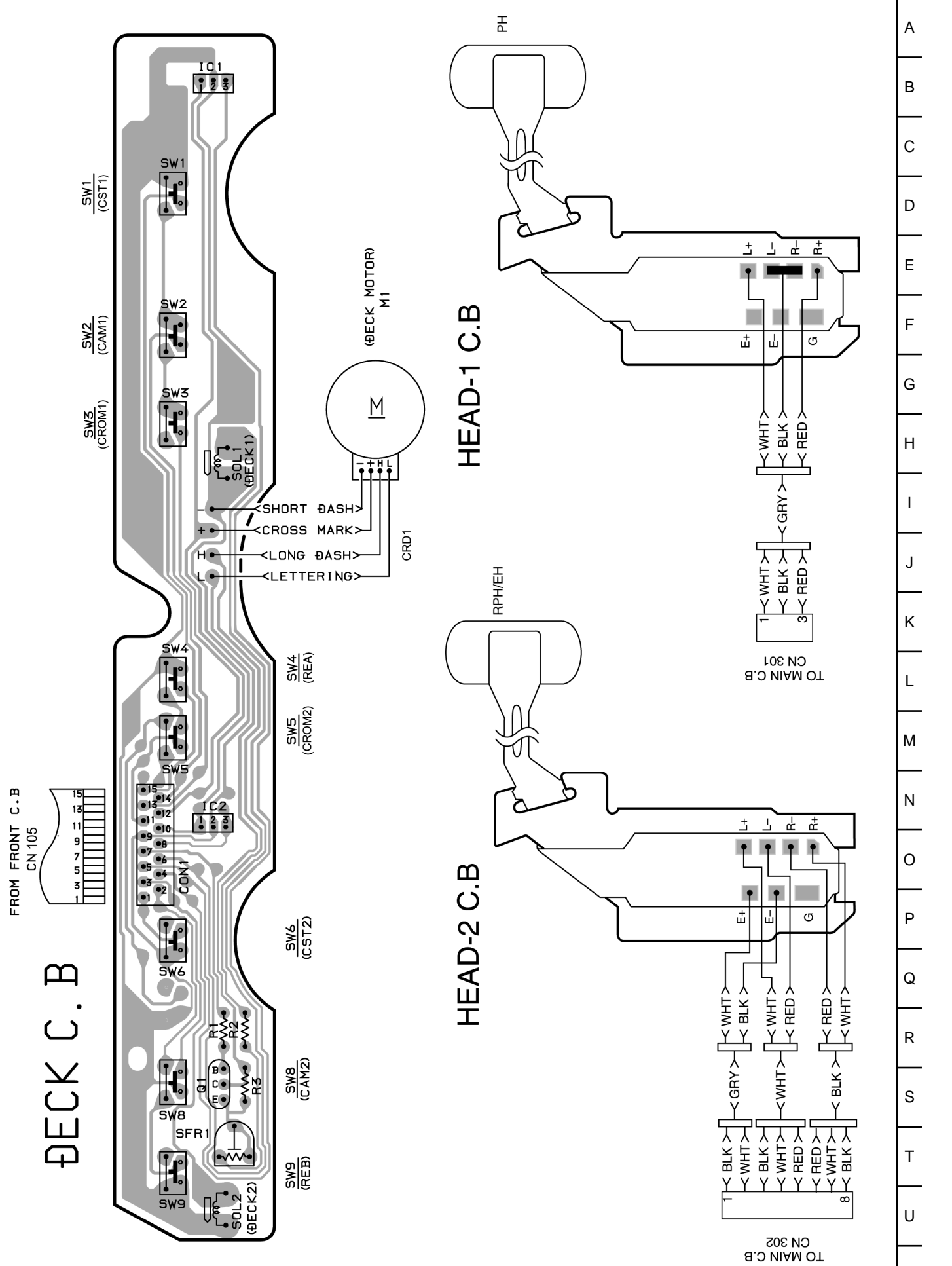


SCHEMATIC DIAGRAM-6/6 (HP/VM)

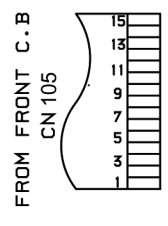


WIRING-6/6 (DECK)

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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DECK C.B.



HEAD-1 C.B.

HEAD-2 C.B.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
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IC DESCRIPTION ( $\mu$ PD780226GF-034-3BA)-1/2

Pin No.	Pin Name	I/O	Description
1	O-MOTOR	O	DECK MOTOR output.
2	O-SOL1	O	DECK SOL1 output.
3	O-SOL2	O	DECK SOL2 output.
4	O-LED_STB	O	STB output for shift register
5	O-MUTE	O	MUTE output.
6	O-KSCAN	O	Initial scan output.
7	O-PLL_CE	O	TUNER chip enable output.
8	I-TM_BASE	I	Reference clock input for clock.(8Hz)
9	I-FUNC_A	I	Rotary encoder input function A.
10	I-FUNC_B	I	Rotary encoder input function B.
11	I-CAM2	I	DECK CAM2 input.
12	I-CAM1	I	DECK CAM1 input.
13	I-AUTO2	I	DECK AUTO2 input.
14	I-AUTO1	I	DECK AUTO1 input.
15	I-CST2	I	DECK CST2 input.
16	I-CST1	I	DECK CST1 input.
17	IC	-	GND
18	VSS0	-	GND
19	VDD0	-	Power supply for port part.
20	O-POWER	O	Power control output.
21	I-JOG_A	I	Rotary encoder input A.
22	I-JOG_B	I	Rotary encoder input B.
23	I-VOL_A	I	Rotary encoder input volume A.
24	I-VOL_B	I	Rotary encoder input volume B.
25	I-SUBQ	I	CD SUBQ input.
26	I-WRQ	I	CD WRQ input.
27	I-DRF	I	CD DRF input.
28	I-RDS_CLK	I	Clock input for RDS.
29	I-RDS_DATA	I	Input TUNER RDS DATA.
30	RESET	I	System RESET input.
31	O-DSC/O-DATA	I/O	Function IC control output./Data output.
32	O-CLK_SHIFT	O	Clock shift output
33	I-IFC	I	TUNER IF count serial data input.
34	I-RMC	I	System remote control signal input.
35	I-DISH	I	CD turntable photo sensor.
36	I-STEREO	I	Tuner stereo input.
37	VDD1	-	Power supply.
38	X2	O	Main system clock output2.
39	X1	I	Main system clock output1.
40	VSS1	-	GND
41	AVDD	-	Voltage for A/D converter.

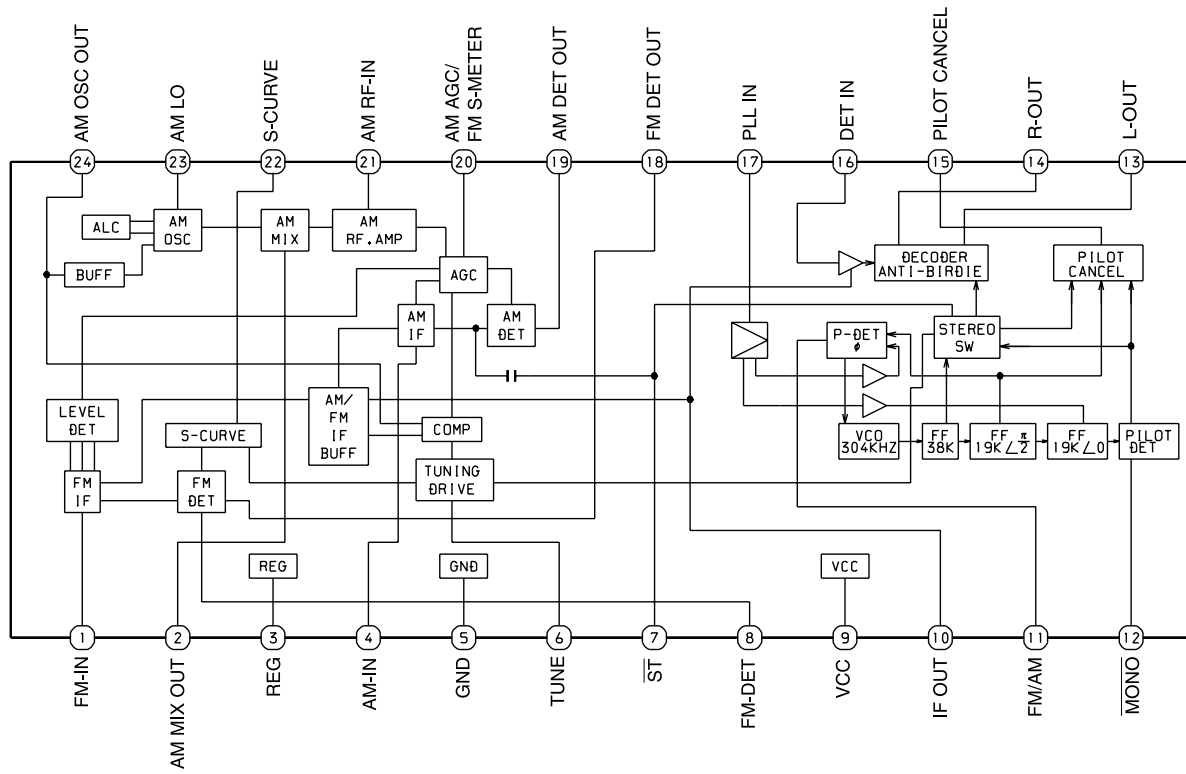
## IC DESCRIPTION (μPD780226GF-034-3BA)-2/2

Pin No.	Pin Name	I/O	Description
42	I-HOLD	I	Input for HOLD.
43	I-CDSW	I	CD mechanism SW input.
44	I-SP1	I	Input speana DATA(LOW Frequency)
45	I-SP2	I	Input speana DATA(Middle Frequency)
46	I-SP3	I	Input speana DATA(High Frequency)
47	I-KEY1	I	KEY Input1
48	I-KEY2	I	KEY Input2
49	I-TU_SIG/I-MIC	I	Signal LEVEL A/D input for RDS./MIC Input for auto vocal fador.
50	AVSS	-	GND for A/D converter.
51	O-BIAS	O	DECK BIAS output.
52	O-CD_CE	O	CD chip enable output.
53	O-CD_CLK	O	CD CLK output.
54	O-CD_DATA	O	CD DATA output.
55	O-CLK	O	CLOCK output.
56-62	P32-P26	O	FL segment output.
63	P25/I-REB	I/O	FL segment output/DECK REB SW input.
64	P24/I-REA	I/O	FL segment output/DECK REA SW input.
65	P23/I-CAM2	I/O	FL segment output/DECK CAM2 input.
66	P22/I-CAM1	I/O	FL segment output/DECK CAM1 input.
67-70	P21-P18	O	FL segment output.
71	P17/AM10K	I/O	FL segment output/AM10K diode input.
72	P16/FM WIDE	I/O	FL segment output/FM wide diode input.
73	P15/LW	I/O	FL segment output/LW diode input.
74	P14/SW	I/O	FL segment output/SW diode input.
75	P13/OIRT	I/O	FL segment output/OIRT diode input.
76	P12/1+1	I/O	FL segment output/DECK 1+1 diode input.
77	P11/R+R	I/O	FL segment output/DECK R+R diode input.
78	P10/MPX	I/O	FL segment output/MPX initial diode input.
79	VDD2	-	Voltage supply for FIP controller.
80	VLOAD	-	Negative voltage supply for FIP controller.
81	P9/ECO-OFF	I/O	FL segment output/ECO MODE initial OFF diode input.
82	P8	I/O	FL segment output/KARAOKE initial diode input.
83	P7	I/O	FL segment output/DEMO diode input.
84-89	P6-P1	O	FL segment output.
90-100	G1-G11	O	FL grid output.

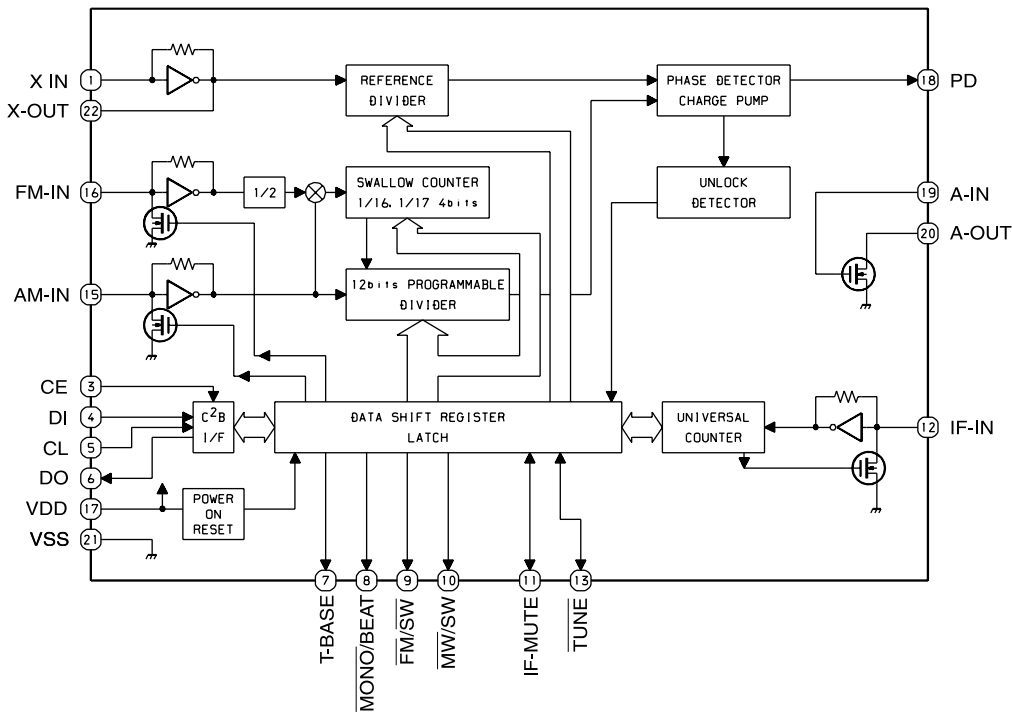


# IC BLOCK DIAGRAM-1/2

## IC, LA1845L

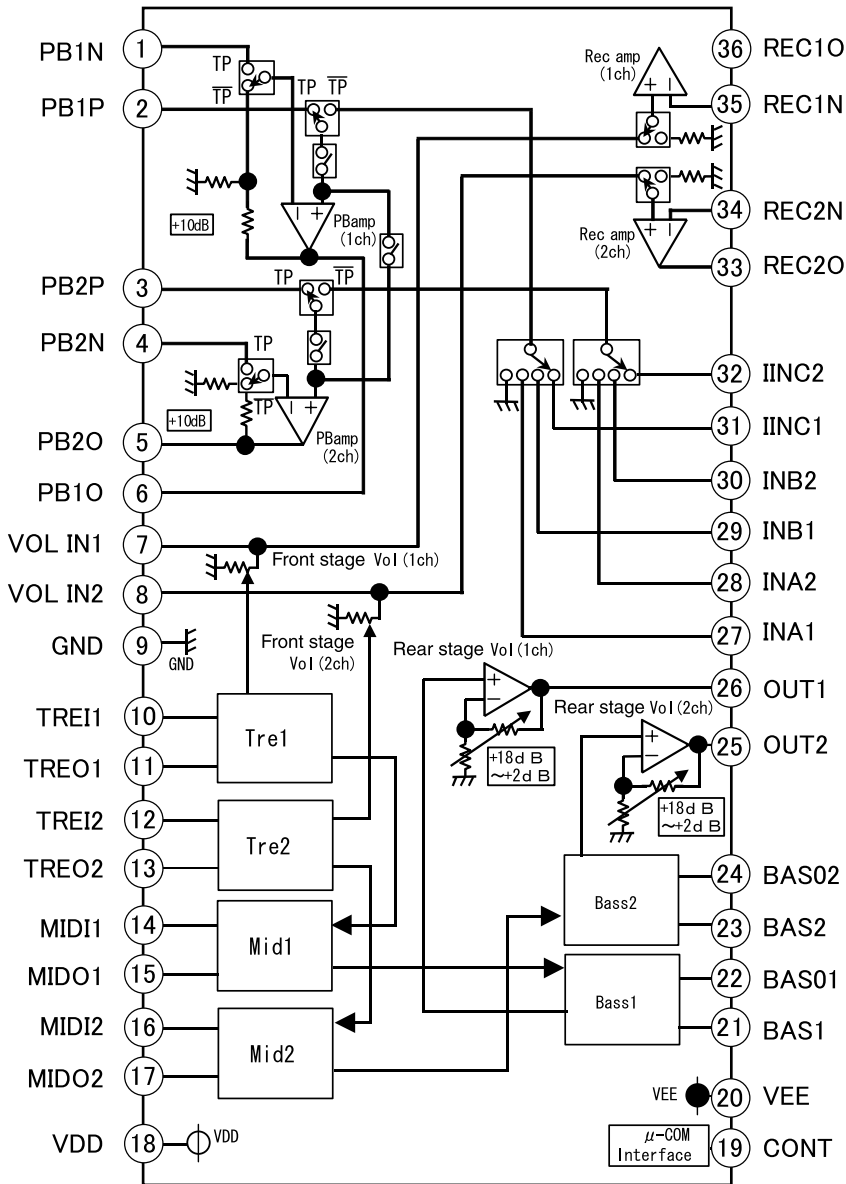


## IC, LC72131D-N

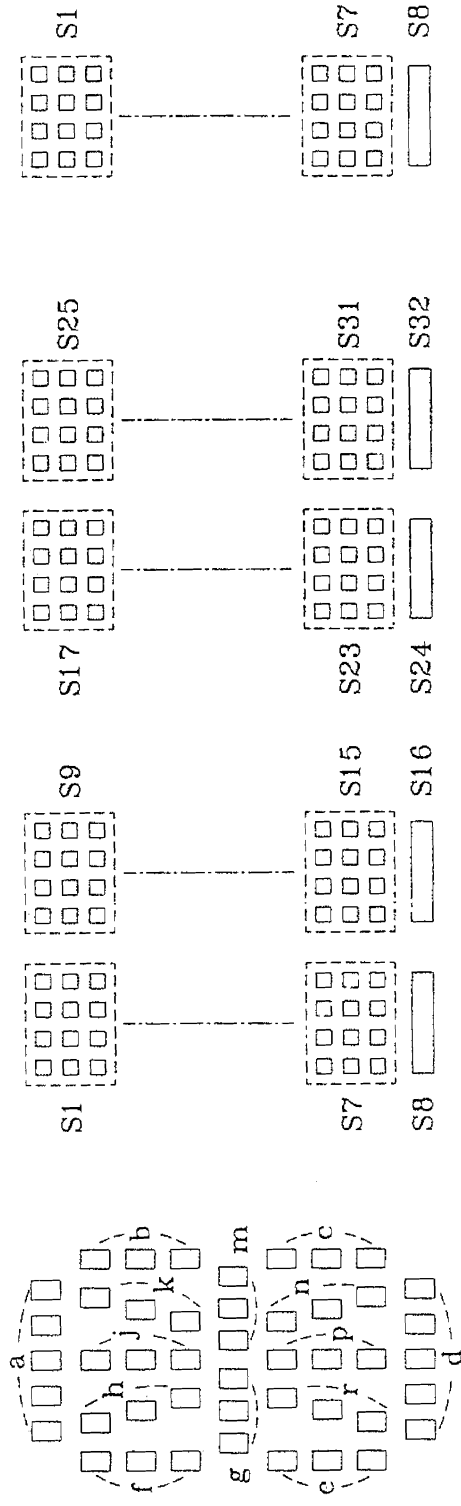
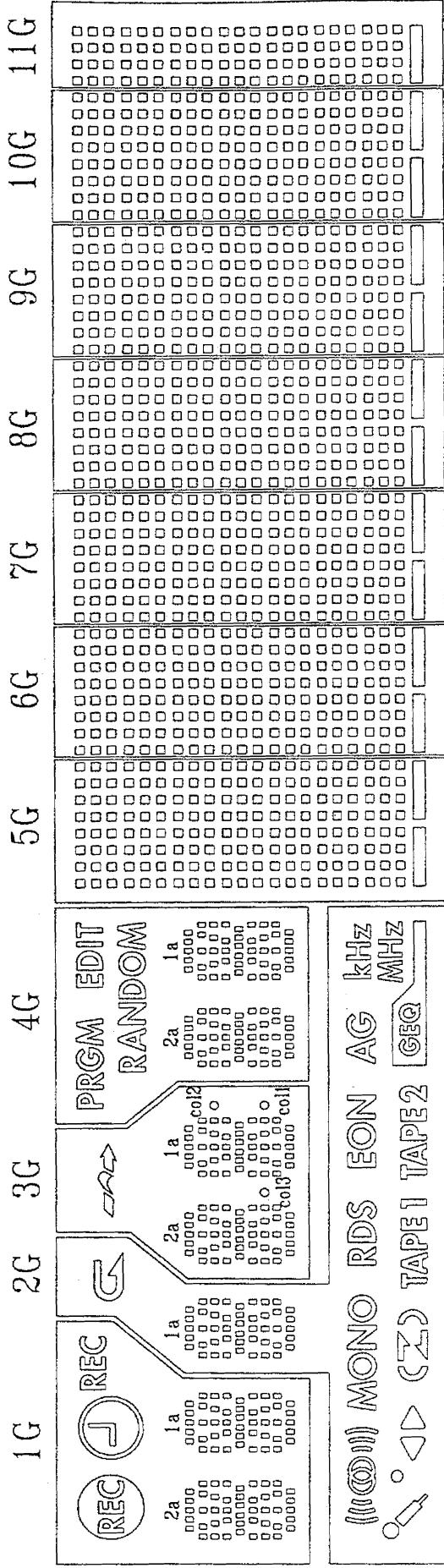


IC BLOCK DIAGRAM-2/2

IC, M61518FP



GRID ASSIGNMENT



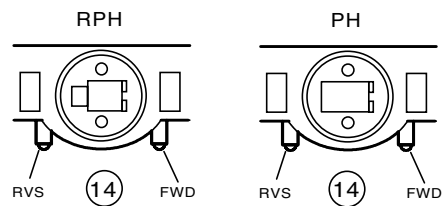
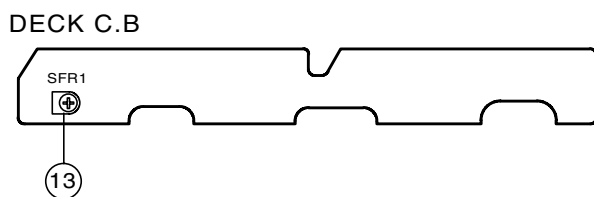
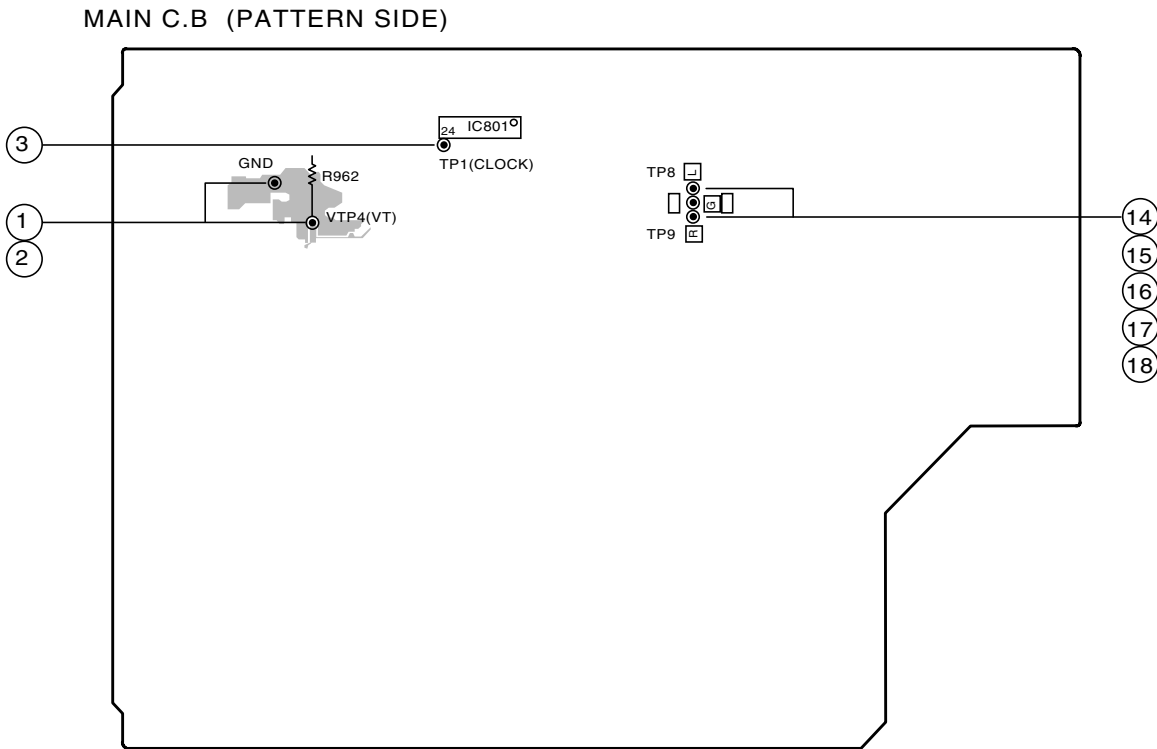
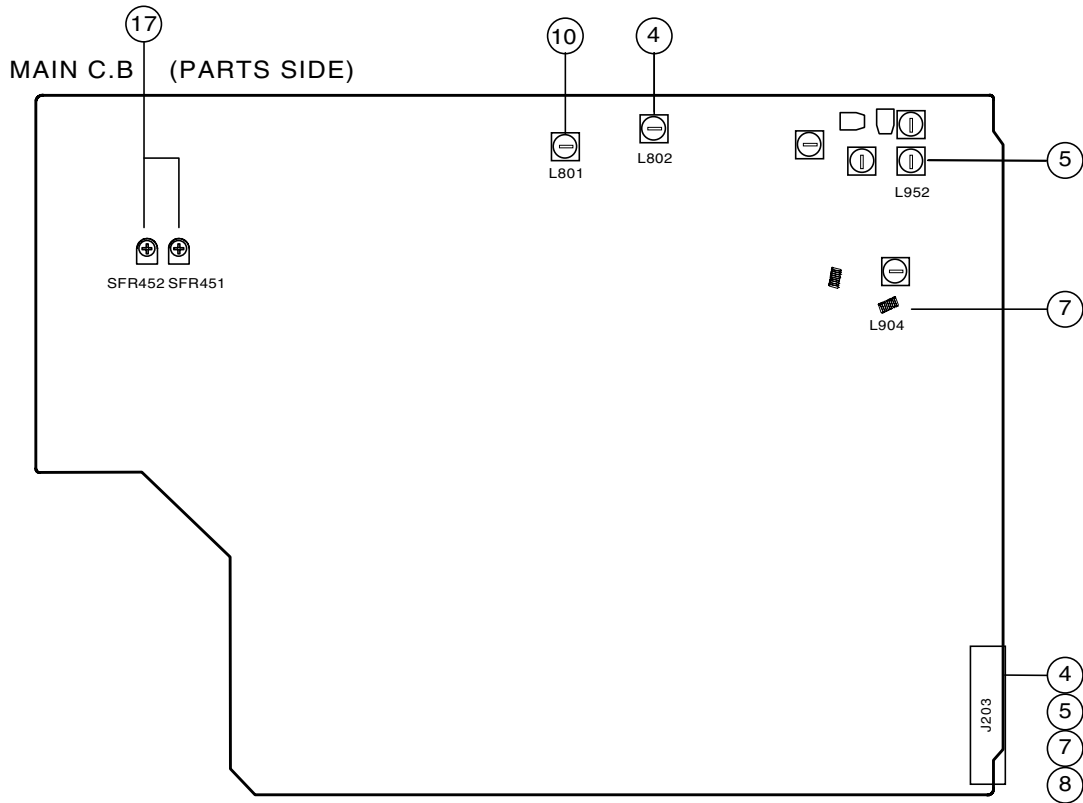
(1G - 4G) (5G, 7G, 9G) (6G, 8G, 10G) (11G)

ANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G
P1	REC			PRGM	S1	--	S1	--	S1	--	S1
P2			coll	EDIT	S9	--	S9	--	S9	--	--
P3			col2	RANDOM	--	S17	--	S17	--	S17	--
P4	--		col3	--	--	S25	--	S25	--	S25	--
P5	2a		2a	2a	S2	--	S2	--	S2	--	S2
P6	2h		2h	2h	S10	--	S10	--	S10	--	--
P7	2j	MONO	2j	2j	--	S18	--	S18	--	S18	--
P8	2k		2k	2k	--	S26	--	S26	--	S26	--
P9	2b		2b	2b	S3	--	S3	--	S3	--	S3
P10	2f		2f	2f	S11	--	S11	--	S11	--	--
P11	2m	TAPE1	2m	2m	--	S19	--	S19	--	S19	--
P12	2g	TAPE2	2g	2g	--	S27	--	S27	--	S27	--
P13	2c	RDS	2c	2c	S4	--	S4	--	S4	--	S4
P14	2e	EON	2e	2e	S12	--	S12	--	S12	--	--
P15	2r		2r	2r	--	S20	--	S20	--	S20	--
P16	2p	AG	2p	2p	--	S28	--	S28	--	S28	--
P17	2n	MHz	2n	2n	S5	--	S5	--	S5	--	S5
P18	2d	kHz	2d	2d	S13	--	S13	--	S13	--	--
P19	1a	1a	1a	1a	--	S21	--	S21	--	S21	--
P20	1h	1h	1h	1h	--	S29	--	S29	--	S29	--
P21	1j	1j	1j	1j	S6	--	S6	--	S6	--	S6
P22	1k	1k	1k	1k	S14	--	S14	--	S14	--	--
P23	1b	1b	1b	1b	--	S22	--	S22	--	S22	--
P24	1f	1f	1f	1f	--	S30	--	S30	--	S30	--
P25	1m	1m	1m	1m	S7	--	S7	--	S7	--	S7
P26	1g	1g	1g	1g	S15	--	S15	--	S15	--	--
P27	1c	1c	1c	1c	--	S23	--	S23	--	S23	--
P28	1e	1e	1e	1e	--	S31	--	S31	--	S31	--
P29	1r	1r	1r	1r	S8	--	S8	--	S8	--	S8
P30	1p	1p	1p	1p	S16	--	S16	--	S16	--	--
P31	1n	1n	1n	1n	--	S24	--	S24	--	S24	--
P32	1d	1d	1d	1d	--	S32	--	S32	--	S32	--

# ELECTRICAL ADJUSTMENT-1/6

## ADJUSTMENT(TUNER/DECK)



## ELECTRICAL ADJUSTMENT-2/6

1. Pressing any function key during PLAY stops the test mode.
2. After repeating the focus search for three times, then the gain is changed to the CR-RW gain value from the 4th focus search.
3. Do not keep pressing the FF button or the RWD button. If the FF button or the RWD button is kept pressed when the optical pickup stays in the innermost track or in the outermost track, the gear can be damaged because the sled motor keeps rotating.
4. Align the alphabetical letters in the front of the MAIN C.B and the DECK C.B with the alphabetical letters printed on conductor side of the boards.

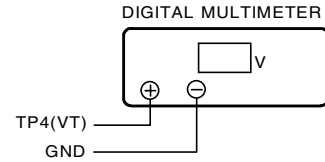
### <Tuner Adjustment>

#### 1. VT Check (AM)

##### Conditions

- Measuring equipment: Digital multimeter  
Test point: TP4 (VT) and GND

- 1) Connect a digital multimeter between TP4 (VT) and GND.
- 2) Set the function switch to AM and tune the reception frequency to 1710 kHz.
- 3) Check that the digital multimeter reading is 9 V or less.
- 4) Tune the reception frequency to 530 kHz.
- 5) Check that the digital multimeter reading is 0.5 V.



#### 2. VT Adjustment and Check (FM)

##### Conditions: Same as item 1.

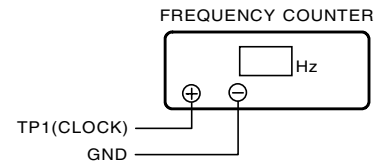
- 1) Connect a digital multimeter between TP4 (VT) and GND.
- 2) Set the function switch to FM and tune the reception frequency to 108.0 MHz.
- 3) Adjust L907 (RED) until the digital multimeter reading is 7.0 +/- 0.1 V.
- 4) Tune the reception frequency to 87.5 MHz.
- 5) Check that the digital multimeter reading is 1.5 V or less.

#### 3. Clock Check

##### Conditions

- Measuring equipment: Frequency counter  
Test point: TP1 (CLOCK), GND

- 1) Connect a frequency counter between TP1 (CLOCK) and GND.
- 2) Set the function switch to AM and tune the reception frequency to 1710kHz.
- 3) Check that the frequency counter reading is 2.160 kHz +/- 45 H.



## ELECTRICAL ADJUSTMENT-3/6

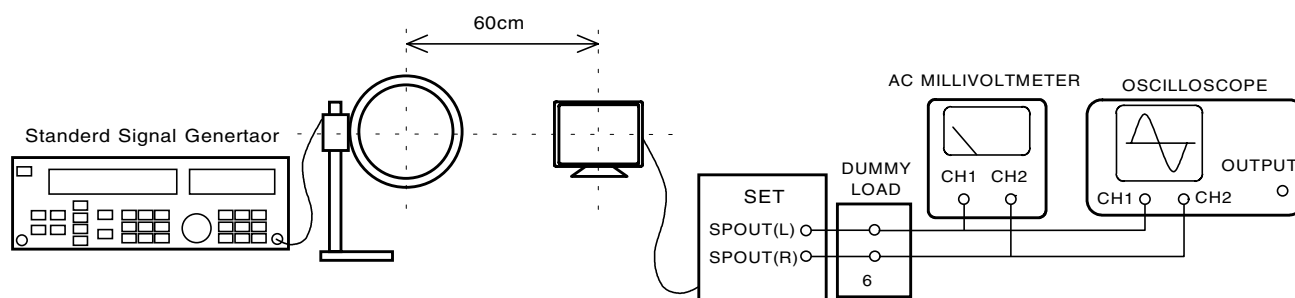
### <AM Adjustment>

Before starting the AM adjustment, perform the preparation shown below.

#### Preparation

- Measuring equipment: Standard signal generator (S.S.G), loop antenna, oscilloscope, milli-volt meter and dummy resistor ( $6\Omega$ )

- 1) Connect measuring equipment as shown below.
- 2) Place loop antenna of signal generator 60 cm apart from the loop antenna of the receiver as shown.



#### 4. IF Adjustment

Conditions: The same conditions as specified in Preparation.

- Adjustment point: L802

- 1) Set up the S.S.G.. to AM, carrier 1,000 kHz, modulation degree 30% and source 1 kHz.
- 2) Tune the reception frequency to AM 1,000 kHz.
- 3) While observing the 1 kHz waveform with an oscilloscope, decrease the S.S.G.. output level. (Decrease until small noise is visible on waveform.)
- 4) Adjust L802 until the milli-volt meter reading becomes maximum.

#### 5. Tracking Adjustment

Conditions: The same conditions as specified in Preparation.

- Adjustment point: L952

- 1) Set up the S.S.G.. to AM, carrier 1,000 kHz, modulation degree 30% and source 1 kHz.
- 2) Tune the reception frequency to AM 1,000 kHz.
- 3) While observing the 1 kHz waveform with an oscilloscope, decrease the S.S.G.. output level. (Decrease until small noise is visible on waveform.)
- 4) Adjust L952 until the milli-volt meter reading becomes maximum.

#### 6. Auto Stop Check

Conditions: The same conditions as specified in Preparation.

- 1) Set up the S.S.G.. to AM, carrier 1,000 kHz, modulation degree 30%, source 1 kHz and output 40 to 65 dBu.
- 2) Let the NSX-R90 start the Tuning Search. Check that the Tuning Search stops at AM 1,000 kHz automatically.

## ELECTRICAL ADJUSTMENT-4/6

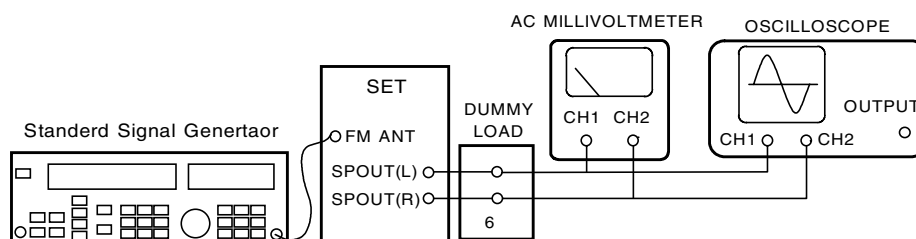
### <FM Adjustment>

Before starting the FM adjustment, perform the preparation shown below.

#### Preparation

- Measuring equipment: Standard signal generator (S.S.G), oscilloscope, milli-volt meter and dummy resistor ( $6\Omega$ )

- 1) Connect measuring equipment as shown below.
- 2) Connect the S.S.G. output to antenna input of the NSX-R90.



#### 7. Tracking Adjustment

Conditions: The same conditions as specified in Preparation.

- Adjustment point: L904

- 1) Set up the S.S.G.. to FM, carrier 87.5 MHz, modulation 75 kHz and source 1 kHz.
- 2) Tune the reception frequency to 87.5 MHz.
- 3) While observing the 1 kHz waveform with an oscilloscope, decrease the S.S.G.. output level. (Decrease until small noise is visible on waveform.)
- 4) Adjust L904 until the milli-volt meter reading becomes maximum.

#### 8. Separation Check

Conditions: The same conditions as specified in Preparation.

- 1) Set up the S.S.G.. to FM, carrier 98 MHz, modulation 67.5 kHz, source 1 kHz and output 74 dBuV.
- 2) Switch the S.S.G. to PILOT ON and set the PILOT to 7.5 kHz.
- 3) Tune the reception frequency to FM 98 MHz.
- 4) Set the S.S.G. output to L-channel only. Check that the level difference between L-channel and R-channel is 25 dB or more.
- 5) Check the R-channel in the same way.

#### 9. Auto Stop Check

Conditions: The same conditions as specified in Preparation.

- 1) Set up the S.S.G.. to FM, carrier 98 MHz, modulation 75 kHz, source 1 kHz and output 35 dBuV or less.
- 2) Let the NSX-R90 start the Tuning Search. Check that the Tuning Search stops at FM 98 MHz automatically.

#### 10. DC Balance/Mono Distortion Adjustment

Settings : 

- Test point : TP8, TP9 (DC balance)
- Adjustment location : L801
- Input level : 60dBuV

Method : Set to FM 98.0 MHz and adjust L801 so that the voltage between TP2 and TP3 is  $0\text{ V} \pm 500\text{ mV}$ .  
Next, check that the distortion is less than 1.2%.



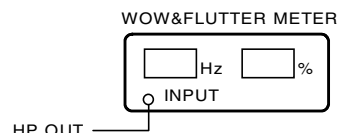
## ELECTRICAL ADJUSTMENT-5/6

### <Mechanism Deck>

#### 11. Tape Speed Adjustment (DECK2)

##### Conditions

- Measuring equipment: Wow & flutter meter (frequency counter)  
Test tape: TTA-100 (3 kHz)  
Test point: TP OUT  
Adjustment point: SFR1



- 1) Connect a wow & flutter meter to TP OUT (Headphones output).
- 2) Insert the test tape (TTA-100) in the DECK2. Play the center portion of the tape in the FWD mode. Adjust SFR1 until 3,000 Hz  $\pm$ 5 Hz is obtained.

#### 12. Tape Speed Adjustment (DECK1)

##### Conditions: The same conditions as item 10.

- 1) Insert the test tape (TTA-100) in the DECK1. Play the center portion of the tape in the FWD mode. Check that DECK1 tape speed is within  $\pm$ 55 Hz of the DECK2 tape speed.

#### 13. Wow and Flutter Check (DECK1, DECK2)

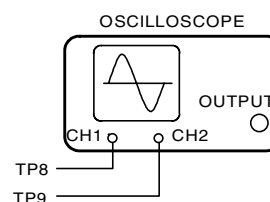
##### Conditions: The same conditions as item 10.

- 1) Connect a wow & flutter meter to TP OUT (Headphones output).
- 2) Set INDICATOR of the wow & flutter meter to JIS position. Set its mode to W RMS (WTD).
- 3) Insert the test tape (TTA-100) and play the center portion of the tape. Check that wow & flutter is 0.15% or less.

#### 14. Head Azimuth Adjustment (DECK1, DECK2)

##### Conditions

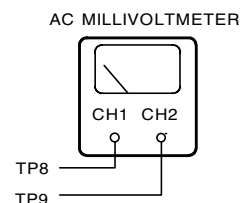
- Measuring equipment: Oscilloscope  
Test tape: TTA-300 (10 kHz)  
Test point: TP8 (L-ch), TP9 (R-ch)  
Adjustment point: Head azimuth adjustment screw



- 1) Connect oscilloscope probes CH1 to TP8 (L-ch) and CH2 to TP9 (R-ch).
- 2) Set the Vert. mode of an oscilloscope to ADD.
- 3) Insert the test tape (TTA-300) in the DECK1. Play the center portion of the tape in the FWD mode. Adjust the azimuth adjustment screw until the playback waveform becomes maximum when 10 kHz is played back.
- 4) Upon completion of adjustment, fix the screw with Bond Lock (1600B).
- 5) Perform the steps 3) and 4) on DECK2.

#### 15. Playback Frequency Response Characteristics Check (DECK1, DECK2)

- Measuring equipment: Milli-volt meter  
Test tape: TTA-300 (315 Hz/10 kHz)  
Test point: TP8 (L-ch), TP9 (R-ch)



- 1) Connect oscilloscope probes CH1 to TP8 (L-ch) and CH2 to TP9 (R-ch).
- 2) Insert the test tape (TTA-300) in the DECK1. Play 315 Hz and 10 kHz segments.
- 3) Check that the 10 kHz signal level is within  $\pm$ 3dB with respect to the 315 Hz output level that is the reference output.
- 4) Perform the steps 2) and 3) on DECK2.

#### 16. Playback Sensitivity Check (DECK1, DECK2)

- Measuring equipment: Milli-volt meter  
Test tape: TTA-200 (400 Hz)  
Test point: TP8 (L-ch), TP9 (R-ch)

- 1) Connect oscilloscope probes CH1 to TP8 (L-ch) and CH2 to TP9 (R-ch).
- 2) Insert the test tape (TTA-200) in the DECK1. Play it back.
- 3) Check that the output level is within 140 mV within  $\pm$ 3 dB.
- 4) Perform the steps 2) and 3) on DECK2.

## ELECTRICAL ADJUSTMENT-6/6

### 17. Record/Playback Frequency Response Characteristics Adjustment (DECK2)

#### Conditions

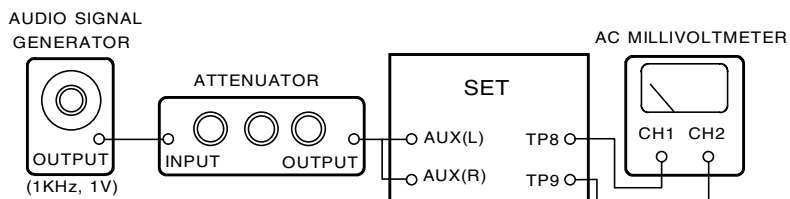
- Measuring equipment: Milli-volt meter  
Audio signal generator  
(Low frequency oscillator)  
Attenuator

Test tape: TTA-602 (NORMAL)

Test point: TP8 (L-ch), TP9 (R-ch)

Input point: AUX (1 kHz/8 kHz)

Adjustment point: SFR451 (L-ch), SFR452 (R-ch)



- 1) Connect a milli-voltmeter CH1 to TP8 (L-ch) and CH2 to TP9 (R-ch).
- 2) Connect an oscillator output to an attenuator. Connect an attenuator output to AUX of the NSX-R90.
- 3) Insert the test tape (TTA-602) into DECK2 and record the 1 kHz signal from AUX.
- 4) Adjust the attenuator so that TP8 and TP9 output level become 10 mV.
- 5) Record the 1 kHz signal and 8 kHz signal alternately.
- 6) Adjust SFR451 (L-ch) and SFR452 (R-ch) so that the 8 kHz playback output level is within 0 +/- 1dB with respect to the 1 kHz output level that is the reference output.

### 18. Record/Playback Sensitivity Check (DECK2)

#### Conditions

- Measuring equipment: Same as item 16.  
Test tape: TTA-602 (NORMAL)  
Test point: TP8 (L-ch), TP9 (R-ch)  
Input point: AUX (1 kHz)

- 1) Insert the test tape (TTA-602) into DECK2 and record the 1 kHz signal from AUX.
- 2) Adjust the attenuator so that TP8 and TP9 output level become 100 mV.
- 3) Play back the 1 kHz portion and check that the 1 kHz playback output level is within -2 dB +/- 3.5dB with respect to the record mode output level.

## CD TEST MODE-1/1

### 1. How to Start the CD Test Mode

While pressing the CD OPEN/CLOSE button, insert the AC plug to the power outlet.  
When the test mode is started, the message [TEST] is displayed.

### 2. How to Exit the CD Test Mode

Press the POWER button, push other FUNCTION button or disconnect the AC plug.  
\* Pressing any other function key during PLAY, aborts the test mode.

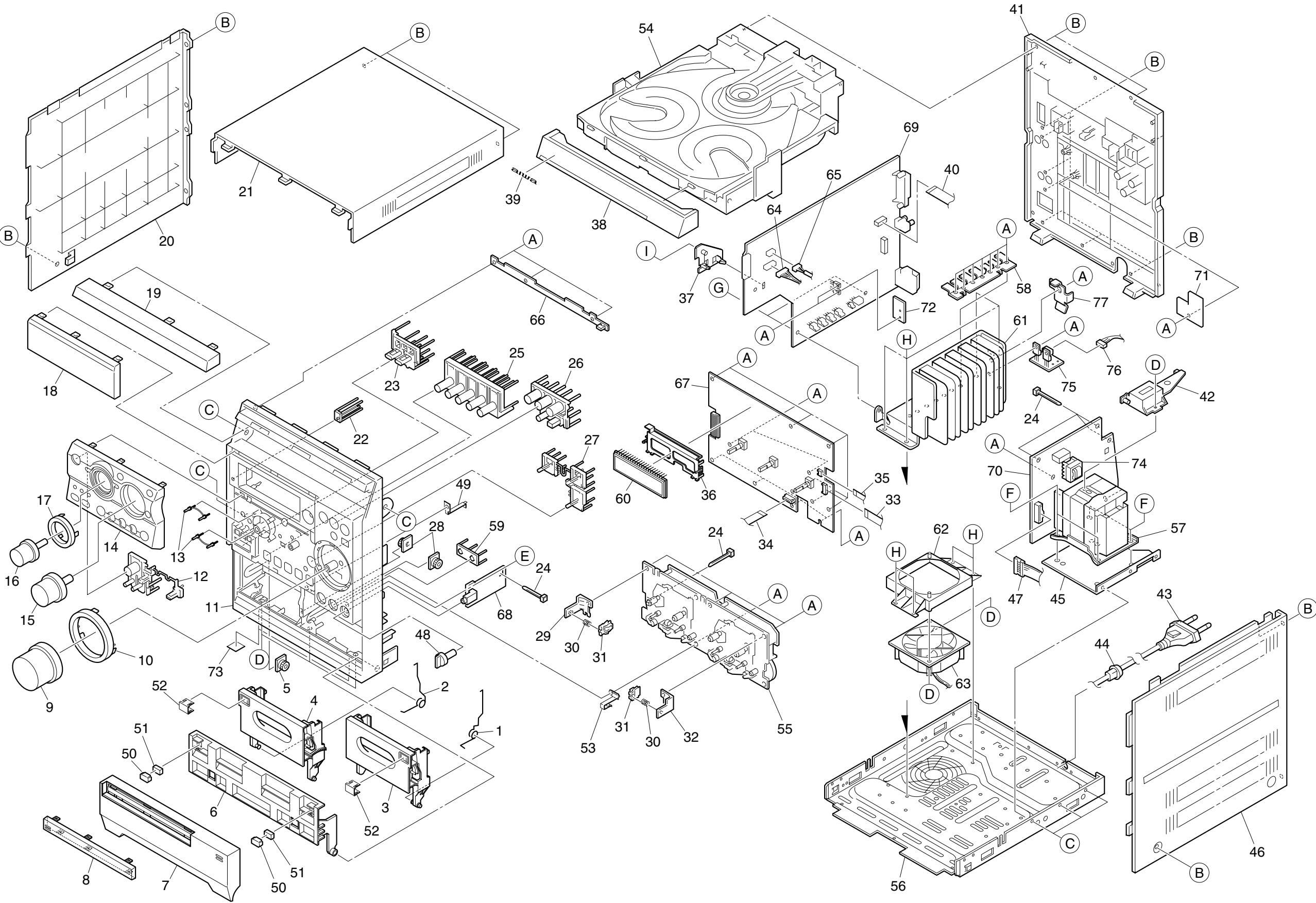
### 3. Function Descriptions and Application of the CD Test Mode

No	Mode	Operation	Display	Function	Checking item
1	Start mode		All indicators light	<ul style="list-style-type: none"> <li>All FL indicators light</li> </ul>	<ul style="list-style-type: none"> <li>FL check</li> <li>Microprocessor check</li> </ul>
2	Search mode	STOP button	READING	<ul style="list-style-type: none"> <li>LD illuminates all the time</li> <li>Focus search continuous operations *1,*2</li> <li>Spindle motor continuous kick</li> </ul>	<ul style="list-style-type: none"> <li>APC circuit check</li> <li>Laser current measurement</li> <li>Focus search waveform check</li> <li>Focus error waveform check (DRF in the search mode is ignored)</li> </ul>
3	Play mode	Play button	Normal	<ul style="list-style-type: none"> <li>Normal playback</li> <li>If TOC cannot be read, focus search is continued</li> </ul>	<ul style="list-style-type: none"> <li>Each servo circuit is checked</li> <li>DRF check</li> </ul>
4	Traverse mode	PAUSE button	Normal	<ul style="list-style-type: none"> <li>Tracking servo OFF/ON</li> <li>Each time PAUSE button is pressed, the tracking servo repeats turning OFF/ON</li> </ul>	<ul style="list-style-type: none"> <li>Tracking balance check</li> </ul>
5	Sled mode	FF button	TEST	<ul style="list-style-type: none"> <li>Pickup moves to the inner circumference *3</li> <li>At the same time, lens kicks to the inner circumference</li> </ul>	<ul style="list-style-type: none"> <li>Sled circuit check</li> <li>Tracking circuit check</li> <li>Mechanism operation check</li> <li>Pickup check</li> </ul>
		RWD button	TEST	<ul style="list-style-type: none"> <li>Pickup moves to the outer circumference *3</li> <li>At the same time, lens kicks to the outer circumference</li> </ul>	
6	Spindle mode	REC/REC MUTE button	All indicators light	<ul style="list-style-type: none"> <li>The spindle motor rotates forward (rough speed) by pressing the button and rotates backward by pressing one more time and stops by pressing again</li> </ul>	<ul style="list-style-type: none"> <li>Spindle circuit</li> <li>Spindle motor</li> </ul>

\*1: The driver IC heats up and the protection circuit starts working when the focus search is continued for 10 minutes or longer.  
There can be a case that operations can not be performed correctly.  
In such a case, turn off the main power. After cooling down the machine, restart the machine.

\*2: After the focus search is executed three times, the gain is changed to the CD-RW gain from the fourth time.

\*3: Be careful not to damage the gear because the sled motor rotates while the FF or RWD button is being pressed even if the pick-up is located in the innermost track or the outermost track.



# MECHANICAL PARTS LIST -1/2

! = SAFETY PARTS  
 C = Components marked

All components used on this model at the production line are shown in this service manual.

However, please note that not all components will be available as spare parts for after-sales service.

Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.

Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90 LHSM
	O	MC1001	8A-NF8-282-010	SPR-T, EJECT 2	a
	O	MC1002	8A-NF8-281-010	SPR-T, EJECT 1	a
	O	MC1003	8B-NF1-003-110	BOX, CASS 2	a
	O	MC1004	8B-NF1-002-110	BOX, CASS 1	a
	O	MC1005	8Z-NF6-210-010	DMPR, 150 N	a
	O	MC1006	8B-NF1-008-010	BOX, DOOR	a
	O	MC1007	8C-NF5-002-010	PANEL, DOOR REV	a
	O	MC1008	8B-NF1-010-010	WINDOW, CASS	a
	O	MC1009	8B-NF1-021-110	KNOB, RTRY VOL	a
	O	MC1010	8B-NF1-023-010	PANEL, VOL	a
	O	MC1011	8C-NF5-001-110	CABI, FR LH	a
	O	MC1012	8B-NF1-015-110	KEY, POWER	a
	O	MC1013	8B-NF1-028-010	REFLECTOR, FUN	a
	O	MC1014	8C-NF5-004-010	PANEL, FR LH	a
	O	MC1015	8B-NF1-022-110	KNOB, RTRY JOG	a
	O	MC1016	8B-NF1-024-010	KNOB, RTRY FUN	a
	O	MC1017	8B-NF1-025-010	WINDOW, FUN	a
	O	MC1018	8C-NF4-006-010	WINDOW, DISP LH	a
	O	MC1019	8B-NF1-014-010	WINDOW, CD	a
	O	MC1020	8B-NF1-005-010	PANEL, LEFT	a
					CX-SNR90 LHSM
	O	MC1021	8B-NF1-007-010	PANEL, TOP	a
	O	MC1022	8B-NF1-027-010	REFLECTOR, ECO	a
	O	MC1023	8C-NF5-010-010	KEY, REC EZ	a
	O	MC1024	87-069-033-010	CABLE, TIE	a
	O	MC1025	8C-NF5-006-010	KEY, OPE LH	a
	O	MC1026	8B-NF1-016-010	KEY, CD	a
	O	MC1027	8B-NF1-017-110	KEY, ENTER	a
	O	MC1028	8A-NF8-209-010	OIL-DMPR, 120	a
	O	MC1029	87-NF4-216-010	HLD, LOCK 1	a
	O	MC1030	86-NF9-224-010	SPR-C, LOCK	a
	O	MC1031	82-NF5-229-010	PLATE, LOCK (*)	a
	O	MC1032	87-NF4-217-110	HLD, LOCK 2	a
	O	MC1033	88-908-301-110	FF-CABLE, 8P 1.25 300MM	a
	O	MC1034	88-915-101-110	FF-CABLE, 15P 1.25 100MM	a
	O	MC1035	88-904-201-110	FF-CABLE, 4P 1.25	a
	O	MC1036	8B-NF9-207-010	GUIDE, FL 90.2-20	a
	O	MC1037	8A-NF8-206-010	HLD, PWB M	a
	O	MC1038	8B-NF1-013-010	PANEL, TRAY	a
	O	MC1039	87-CE3-023-010	BADGE, AIWA 30N SILV	a
	O	MC1040	88-906-251-110	FF-CABLE, 6P 1.25	a
					CX-SNR90 LHSM
	O	MC1041	8C-NF4-005-010	CABI, REAR LHSM	a
	O	MC1042	8A-NF7-225-010	HLD, PWB PT 85S	a
	!	MC1043	87-A80-188-010	AC CORD ASSY, BRAZ BLK SUN FAI	a
	O	MC1044	87-085-185-010	BUSHING, AC CORD(E) CM-22B	a
	X	MC1045	8C-NF5-224-010	PLATE, PT 96	a
	O	MC1046	8B-NF1-006-010	PANEL, RIGHT	a
	O	MC1047	8A-NF8-653-010	CONN ASSY, 9P TID-A(480)	a
	O	MC1048	8C-NF5-032-010	KNOB, RTRY MIC	a
	X	MC1049	8C-NF5-205-010	PLATE, EARTH MIC	a
	O	MC1050	8B-NF1-209-010	COVER, MAGNET	a
	O	MC1051	8B-NF1-206-010	MAGNET, BOX 11-6-4	a
	O	MC1052	8B-NF1-207-010	PLATE, BOX	a
	X	MC1053	87-NF4-218-010	PLATE, EARTH MECHA	a
	X	MC1054	M8-BZG-59Z-130	BZG-5 ZD5GNM	a
	X	MC1055	M8-2ZM-384-030	2ZM-3MK2 PR7NM	a
	X	MC1056	8C-NF5-223-010	CHAS, MAIN CM 96-60 FAN	a
	!	MC1057	8C-NF4-609-010	PT, CNF-4 LH	a
	X	MC1058	8C-NF5-203-010	HLD, TR 7	a
	O	MC1059	8C-NF5-031-010	PLATE, MIC	a
	O	MC1060	8C-NF5-603-010	FL, HUA-11MM42T	a
					CX-SNR90 LHSM
	X	MC1061	8C-NF5-228-110	HT-SINK, ASSY140-4	a
	X	MC1061a	8C-NF5-213-010	HT-SINK, FIN 140	a
	X	MC1061b	8C-NF5-212-110	HT-SINK, MAIN S	a
	O	MC1062	8B-NF7-238-110	HLD, FAN LOW	a
	O	MC1063	87-A91-751-010	FAN, DSB0812M-S382 -400MM	a
	O	MC1064	87-NF6-616-010	CONN ASSY, 8P RPB	a
	O	MC1065	87-NF6-615-010	CONN ASSY, 3P PB	a
	X	MC1066	8C-NF5-622-010	PWB, CD LED CNF-5	a
	X	MC1067	8C-NF5-621-010	PWB, FRONT CNF-5	a
	X	MC1068	8C-NF5-634-210	PWB, HP2 U/LH/HR/V	a
	X	MC1069	8C-NF5-631-210	PWB, MAIN U/LH/HR/V	a
	X	MC1070	8C-NF4-650-010	PWB, PT 96 2M	a
	X	MC1071	8C-NF5-637-210	PWB, HLD WIRE2 U/LH/HR/V	a
	X	MC1072	8B-NF6-215-010	HT-SINK, FET	a
	X	MC1073	8B-NF9-204-010	CUSH, 11-8.5-2	a
	O	MC1074	8B-MA6-673-010	PT, SUB BMA H (VRK)	a
	X	MC1075	8C-NF5-635-210	PWB, VM U/LH/HR/V	a
	O	MC1076	8C-NF4-603-010	CONN ASSY, 3P V CNF-4	a
	O	MC1077	8A-NF8-226-010	HLD, IC T2	a
	O	MC1A	87-067-703-010	BVT2+3-10 W/O SLOT	a

# MECHANICAL PARTS LIST -2/2

- ! =  $\Delta$ SAFTY PARTS
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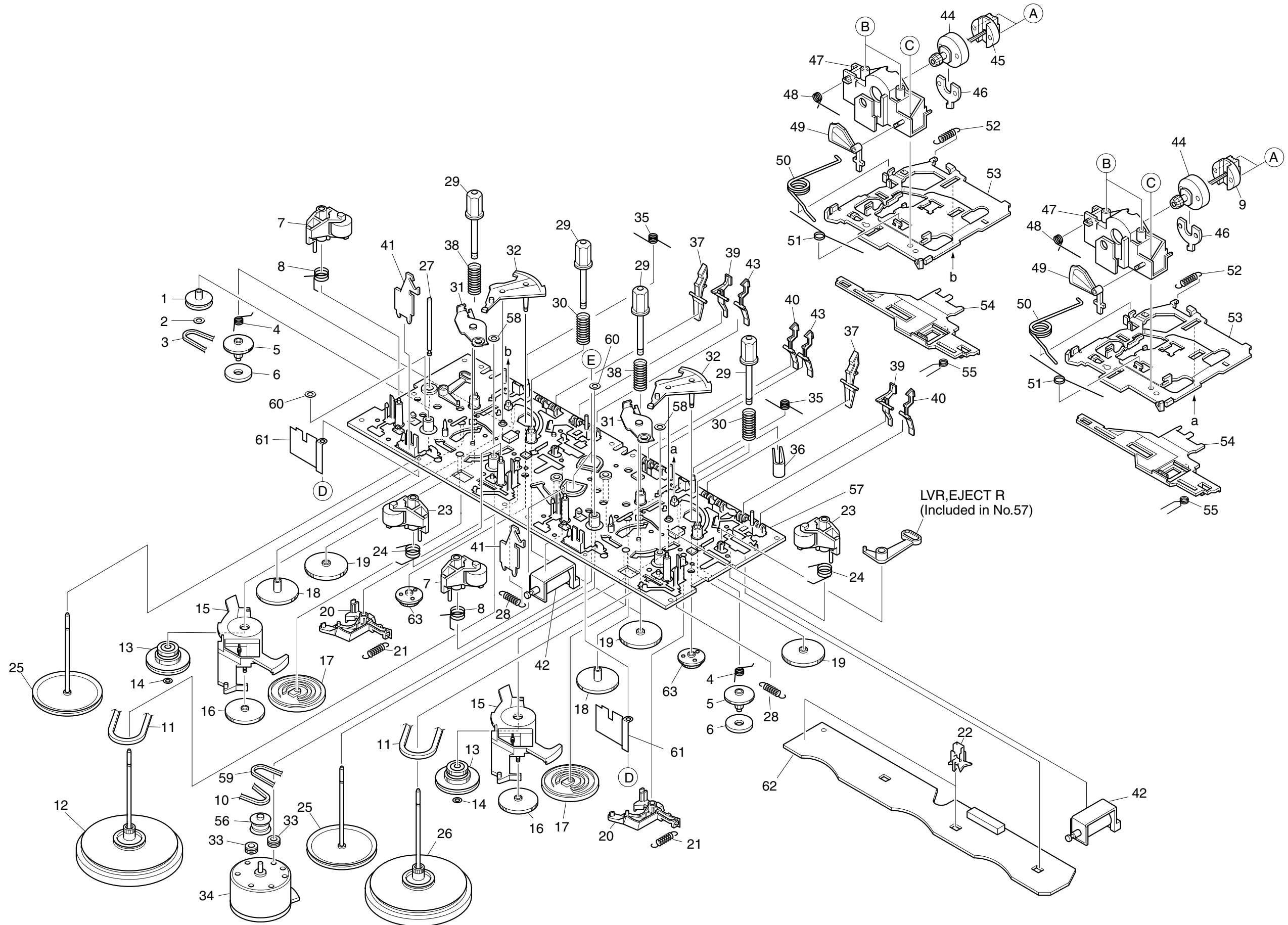
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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90
					LHSM
	O	MC1B	87-B10-091-010	UIT2+3-10 W/O SLOT BLK	a
	O	MC1C	87-721-096-410	QT2+3-10 W/O SLOT	a
	O	MC1D	87-067-579-010	BVT2+3-8 W/O SLOT	a
	O	MC1E	88-AR1-217-010	S-SCREW,BFT2+3-8	a
	O	MC1F	87-078-199-010	S-SCREW,ITC+4-10 R	a
	O	MC1G	87-NF4-224-010	S-SCREW,IT3B+3-8 CU	a
	O	MC1H	87-B10-315-010	BVIT3B+3-8 R W/O	a
	O	MC1I	8C-NF5-222-010	W,4-7-0.65 W/ADH	a

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	HT	Transparent Gray
HM	Metallic Gray	NH	Champagne Gold	M	Wood Pattern

TAPE MECHANISM EXPLODED VIEW-1/1 (2ZM-3MK2)





# TAPE MECHANISM PARTS LIST -1/2 (2ZM-3MK2)

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					2ZM-3MK2 PR7NM
		O ST1001	82-ZM3-335-310	PULLEY, COUPLER M3	a
		O ST1002	87-B10-043-010	W-P, 0.99-4-0.25 SLT	a
		O ST1003	86-ZM1-206-010	BELT, MAIN L	a
		O ST1004	82-ZM1-322-010	SPR-T, FR 60	a
		O ST1005	82-ZM1-220-210	GEAR, IDLER	a
		O ST1006	82-ZM3-616-010	RING MAGNET 4	a
		O ST1007	82-ZM1-363-010	LEVER, ASSY PINCH LD	a
	X	ST1007a	82-ZM1-357-010	LEVER, PINCH L D	a
	X	ST1007b	82-ZM1-361-010	ROLLER, ASSY YD	a
	X	ST1007c	82-ZM1-355-010	CLR, ROLLER 3	a
	X	ST1007d	82-ZM3-347-010	ROLLER, RUBBER Y	a
	O	ST1008	82-ZM1-258-210	SPR-T, PINCH L	a
	O	ST1009	87-A91-195-110	HEAD, RPH KC9142 FPC	a
	X	ST1009a	82-ZM3-620-010	PWB, FLEX M	a
	O	ST1010	82-ZM3-342-010	BELT, SBU MOT 3	a
	O	ST1011	82-ZM1-338-110	BELT, FR 4	a
	O	ST1012	09-001-420-010	FLY-WHL, R ASSY	a
	X	ST1012a	82-ZM3-338-310	FLY-WHL, R3W	a
	X	ST1012b	82-ZM1-239-010	CAPSTAN, 2.2-41.7	a
	O	ST1013	82-ZM3-333-310	SLIP DISK ASSY 2	a
					2ZM-3MK2 PR7NM
	X	ST1013a	82-ZM1-230-110	GEAR, TAKE UP	a
	X	ST1013b	82-ZM1-231-010	CLR, SLIP	a
	X	ST1013c	82-ZM1-232-010	FELT, DIA 8.4-13-1	a
	X	ST1013c	82-ZM3-332-310	PULLEY, FR 2	a
	X	ST1013d	82-ZM1-233-110	SPR-C, SLIP	a
	O	ST1014	82-ZM3-334-010	PW, 2.16-6-0.4	a
	O	ST1015	82-ZM3-306-110	LVR, FR M2	a
	O	ST1016	82-ZM1-225-210	GEAR, FR	a
	O	ST1017	82-ZM3-305-310	GEAR, CAM M2	a
	O	ST1018	82-ZM1-226-010	GEAR, REW	a
	O	ST1019	82-ZM1-216-510	GEAR, REEL	a
	O	ST1020	82-ZM1-227-310	LVR, TRIG	a
	O	ST1021	82-ZM1-265-310	SPR-E, TRIG	a
	O	ST1022	82-ZM3-351-010	HLDR, IC 2	a
	O	ST1023	82-ZM1-362-010	LEVER, ASSY PINCH RD	a
	X	ST1023a	82-ZM1-356-010	LEVER, PINCH R D	a
	X	ST1023b	82-ZM1-361-010	ROLLER, ASSY YD	a
	X	ST1023c	82-ZM1-355-010	CLR, ROLLER 3	a
	X	ST1023d	82-ZM3-347-010	ROLLER, RUBBER Y	a
	O	ST1024	82-ZM1-259-310	SPR-T, PINCH R	a
					2ZM-3MK2 PR7NM
	O	ST1025	82-ZM1-234-310	FLY-WHL ASSY, L	a
	X	ST1025a	82-ZM1-348-110	FLY-WHL, L W	a
	X	ST1025b	82-ZM1-236-010	CAPSTAN, 2-41.5	a
	O	ST1026	82-ZM1-237-610	FLY-WHL R ASSY	a
	X	ST1026a	82-ZM1-349-110	FLY-WHL, R W	a
	X	ST1026b	82-ZM1-239-010	CAPSTAN, 2.2-41.7	a
	O	ST1027	82-ZM3-339-110	SHAFT, COUPLER N3	a
	O	ST1028	82-ZM1-255-310	SPR-E, LVR DIR	a
	O	ST1029	82-ZM1-217-410	REEL, TABLE	a
	O	ST1030	82-ZM1-285-410	SPR-C, BT L	a
	O	ST1031	82-ZM1-333-210	PLATE, LINK2	a
	O	ST1032	82-ZM1-222-310	LVR, PLAY	a
	X	ST1033	82-ZM3-307-010	CUSH-G, DIA 3.7-8-2.9	a
	O	ST1034	87-A92-321-010	MOT, SHU2L 60	a
	O	ST1035	82-ZM1-257-010	SPR-T, CAS	a
	X	ST1036	82-ZM3-340-010	SH, BELT D2	a
	O	ST1037	82-ZM1-242-010	LVR, CAS	a
	O	ST1038	82-ZM1-244-510	SPR-C, BT	a
	O	ST1039	82-ZM1-243-010	LVR, STOP	a
	O	ST1040	82-ZM1-240-110	LVR, REC	a
					2ZM-3MK2 PR7NM
	X	ST1041	85-ZM3-607-210	PWB, HEAD FPC	a
	O	ST1042	82-ZM3-627-010	SOL ASSY, 27 SO	a
	X	ST1042a	82-ZM3-629-010	HLDR, BOBBIN SOL SO	a
	X	ST1042b	82-ZM3-630-010	YOKE, SOL SO	a
	X	ST1042c	82-ZM3-631-010	SHAFT, CORE SOL SO	a
	X	ST1042d	82-ZM3-632-010	SHAFT, PLUNGER SOL SO	a
	X	ST1042e	82-ZM3-633-010	TERMINAL, SOL SO	a
	O	ST1043	82-ZM1-241-310	LVR, MC	a
	O	ST1044	82-ZM1-208-310	HLDR, HEAD	a
	O	ST1045	87-A91-196-110	HEAD, PH KP9142 FPC	a
	X	ST1045a	82-ZM3-620-010	PWB, FLEX M	a
	O	ST1046	82-ZM1-314-110	PLATE, HEAD	a
	O	ST1047	82-ZM1-207-910	GUIDE, TAPE	a
	O	ST1048	82-ZM3-353-010	SPR-T, HEAD 2	a
	O	ST1049	82-ZM1-210-110	GEAR, H T	a
	O	ST1050	82-ZM1-219-110	SPR-T, LINK	a
	O	ST1051	82-ZM1-269-210	SPR-T, BRG	a
	O	ST1052	82-ZM1-218-010	SPR-E, HB	a
	O	ST1053	82-ZM1-206-910	CHAS, HEAD	a
	O	ST1054	82-ZM1-266-310	LVR, DIR	a

# TAPE MECHANISM PARTS LIST -2/2 (2ZM-3MK2)

! =  $\Delta$ SAFTY PARTS  
 C = Components marked

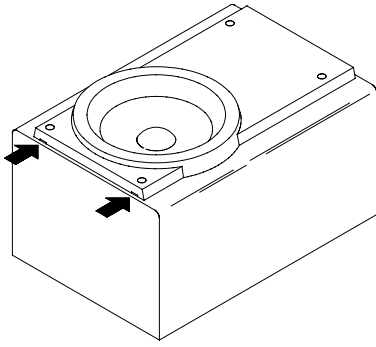
All components used on this model at the production line are shown in this service manual.  
 However, please note that not all components will be available as spare parts for after-sales service.  
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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					2ZM-3MK2
					PR7NM
	O	ST1055	82-ZM1-214-010	SPR-T, DIR	a
	O	ST1056	82-ZM3-221-210	PULLEY, MOT 2M	a
	O	ST1057	82-ZM3-301-610	CHAS ASSY, M2	a
	X	ST1057a	82-ZM1-317-210	OILLESS-BRG 2.2RN	a
	X	ST1057b	82-ZM1-318-210	OILLESS-BRG 2LN	a
	X	ST1057c	82-ZM3-302-610	OUT-SERT ASSY, M2	a
	X	ST1057d	82-ZM3-303-210	CHAS, M2	a
	O	ST1058	80-ZM6-243-010	SH 1.75-3.6-0.5 SLT	a
	O	ST1059	82-ZM3-329-410	BELT, SBU R2	a
	O	ST1060	82-ZM1-288-010	SH, 1.63-3.2-0.5 SLT	a
	X	ST1061	85-ZM3-201-210	PLATE, SHLD M3	a
	X	ST1062	85-ZM3-606-110	PWB, MAIN FPC	a
	O	ST1063	82-ZM1-223-010	GEAR, PLAY	a
	O	ST1A	80-ZM6-207-010	V+1.6-7	a
	O	ST1B	86-ZM4-206-110	S-SCREW, AZIMUTH L	a
	O	ST1C	85-ZM3-202-010	S-SCREW, TG	a
	O	ST1D	82-ZM3-222-010	S-SCREW, SHILD PLATE	a
	O	ST1E	82-ZM3-318-110	S-SCREW MOTOR M2	a

## SPEAKER DISASSEMBLY -1/1

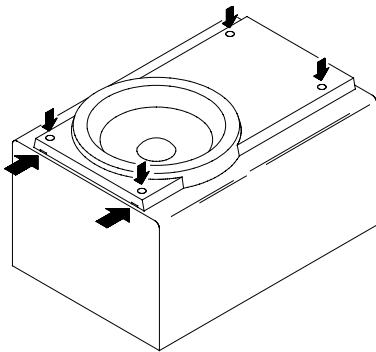
### Type.1

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



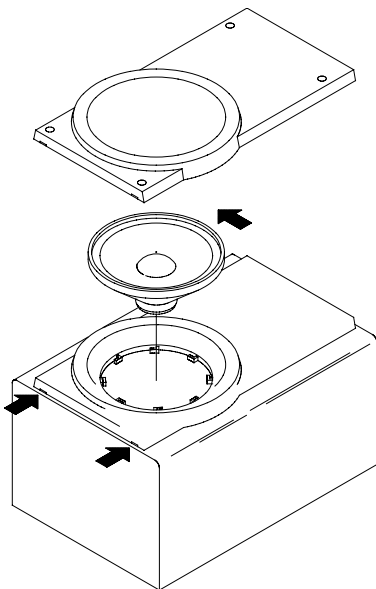
### Type.2

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.

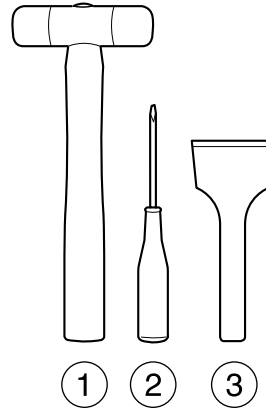


### Type.3

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 around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "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.

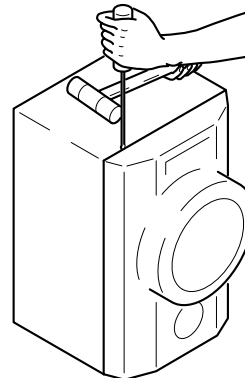


Fig-1

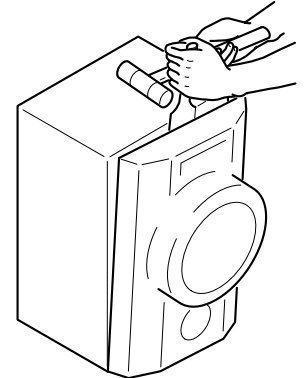


Fig-2

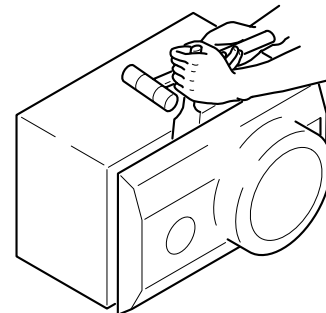


Fig-3

### 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 -1/2 (SX-SNR90)

- ! =  $\Delta$ SAFTY PARTS
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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					SX-SNR90 YLSN
	O	SP1001	88-NSK-610-010	SPKR, CERAMIC ASSY	a
	O	SP1002	8A-NSJ-006-010	BADGE,AIWA S35	a
	O	SP1003	8B-NSH-612-010	CORD,SPKR	a
	O	SP1004	8C-NS4-001-010	PANEL,FR A R	a
	O	SP1005	8C-NS4-002-010	PANEL,FR A L	a
	X	SP1006	8C-NS4-003-010	PANEL,BA A R	a
	X	SP1007	8C-NS4-004-010	PANEL,BA A L	a
	O	SP1008	8C-NS4-005-010	PANEL,FR B R	a
	O	SP1009	8C-NS4-006-010	PANEL,FR B L	a
	X	SP1010	8C-NS4-007-010	PANEL,BA B R	a
	X	SP1011	8C-NS4-008-010	PANEL,BA B L	a
	X	SP1012	8C-NS4-009-010	LBL,SPEC YL R	a
	X	SP1013	8C-NS4-010-010	LBL,SPEC YL L	a
	O	SP1014	8C-NS4-011-010	PROTECTOR, SQ	a
	O	SP1015	8C-NS4-012-010	PROTECTOR, TW L	a
	O	SP1016	8C-NS4-013-010	PROTECTOR, TW R	a
	O	SP1017	8C-NS4-602-010	SPKR, W 180 40/4	a
	O	SP1018	8C-NS4-604-010	SPKR, M 100 25/2	a
	O	SP1019	8C-NS4-606-010	SPKR, T 50 14/2	a
	O	SP1020	8C-NS5-009-010	PLATE,W	a
					SX-SNR90 YLSN
	O	SP1021	8Z-NS3-026-010	CORD,BUSH L	a
	X	SP1022	8C-NS4-851-010	CUSHION,ASSY CNS4	a

# SPEAKER PARTS LIST -2/2 (SX-SR165)

- ! =  $\Delta$ SAFTY PARTS
- C = Components marked

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					SX-SR165
					YLSN
	O	SP2001	8A-NSJ-006-010	BADGE,AIWA S35	a
	O	SP2002	8C-NSL-001-010	PANEL,BA	a
	O	SP2003	8C-NSL-002-010	CABI,REAR	a
	O	SP2004	8C-NSL-003-010	PANEL,FR ASSY R165	a
	X	SP2005	8C-NSL-004-010	PANEL,FR	a
	X	SP2006	8C-NSL-005-010	PROTECTOR,	a
	O	SP2007	8C-NSL-006-010	CORD,5M RCA	a
	X	SP2008	8C-NSL-007-010	LBL,SPEC R165	a
	O	SP2009	8C-NSL-601-010	SPKR,80 16/2	a
	O	SP2010	8Z-NS3-025-010	CORD,BUSH S	a
	X	SP2011	8C-NSM-851-010	CUSHION,ASSY TTT	a

# OTHER PARTS LIST -1/2

- ! =  $\Delta$ SAFTY PARTS
- C = Components marked

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CX-SNR90
					LHSM
	X		8B-NF1-031-110	SH, CD	a
	X		8B-NF1-213-010	SH, 11.5-17.5-0.12 W/ADH	a
	X		87-B40-281-010	LBL, BAR-CODE A 35X8	a
	X		87-057-995-010	LBL, CAUTION EFSD	a
	X		87-057-961-010	LBL, CAUTION TRIANGLE	a
	X		8B-NF1-029-010	SH, FL	a
	X		80-MQ1-209-010	CLOTH, 20-7	a
	X		87-B40-447-010	SH, 28-10-0.35 W/ADH	a
	X		8B-NF1-214-010	SH, FFC	a
	X		8B-NF1-032-010	SH, LED	a

# OTHER PARTS LIST -2/2 (2ZM-3MK2)

- ! =  $\triangle$  SAFETY PARTS
- C = Components marked

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					2ZM-3MK2
					PR7NM
	X		82-ZM3-987-010	BAG, PV 0.04-300-210	a

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