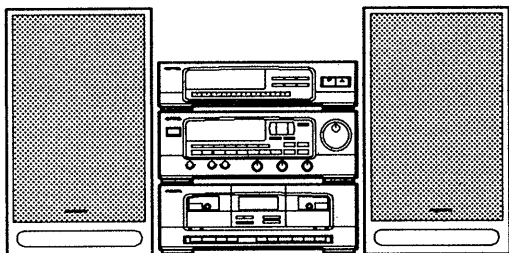


aiwa



Z - D3100M



COMPACT DISC STEREO SYSTEM

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

♠ This service manual contains service information for only altered and added sections of Model Z - D3100M.
If requiring other service information, see the service manual of Model Z - D3000M (S/M Code No. 0281).

CENTER SYSTEM	AMPLIFIER	CASSETTE DECK	TUNER	SPEAKER	CD PLAYER (OPTIONAL)	TURNTABLE (OPTIONAL)
Z - D3100M LH,HE	MX - Z3100M	FX - WZ7100	TX - Z9100	SX - Z3100	DX - Z9100M	PX - E900
Z - D3100M EE,K,EEZ,EZ	MX - Z3100M	FX - WZ7100	TX - Z9100	SX - Z3100	DX - Z9100M	PX - E800

MANUAL
SERVICE

SPECIFICATIONS

TUNER

<FM section>	
Frequency range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	2.2 μ V (75 ohms) 18.2 dB
Alternate channel selectivity	YH, YLH: 50 dB (\pm 400 kHz) YEE, YEZ: 65 dB (\pm 400kHz)
Signal-to-noise ratio	YH, YLH: 70 dB (STEREO) 78 dB (MONO) YEE, YEZ: 70 dB (STEREO) 75 dB (MONO)
Harmonic distortion	0.3 % (MONO), 1 kHz 0.8 % (STEREO), 1 kHz
Frequency response	20 Hz to 15 kHz (+0.5 dB, - 3 dB)
Stereo separation	YH, YLH: 40 dB at 1 kHz YEE, YEZ: 30 dB at 1 kHz
Antenna	75 ohms (unbalanced)

<AM section: YH,YLH>

Frequency range	531(530) kHz to 1,602 (1,710) kHz
Usable sensitivity	300 μ V/m
Selectivity	22 dB (9 kHz)
Signal-to-noise ratio	53 dB (100 dB input)
Antenna	Loop antenna

<MW section: YEE, YEZ>

Frequency range	522 kHz to 1,611 kHz
Usable sensitivity	400 μ V/m
Selectivity	22 dB (9 kHz)
Signal-to-noise ratio	53 dB (100 dB input)
Antenna	Loop antenna

<LW section: YEE, YEZ>

Frequency range	144 kHz to 290 kHz
Usable sensitivity	1,000 μ V/m
Antenna	Loop antenna

<Timer section and general>

Program timer	"Once" and/or "every"
Sleep timer	Capable of setting in 10minute increments, 99 minutes maximum.
Dimensions(W \times H \times D)	360 \times 88 \times 315 mm (14 $\frac{1}{4}$ \times 3 $\frac{1}{2}$ \times 12 $\frac{1}{2}$ in.)
Weight	2.3 kg (5.28 lb.)

AMPLIFIER

Power output	HE, LH: 50 W+50 W (6 ohms, T.H.D. 10 %, 1 kHz) EE, EZ: 40W+40 W (6 ohms, T.H.D. 1 %, 1 kHz) K: 50 W+50 W (6 ohms, T.H.D. 10 %, 1 kHz) 40 W+40 W (6 ohms, T.H.D. 1 %, 1 kHz)
Harmonic distortion	0.05 % (25 W, 1 kHz, 6 ohms)
Input sensitivity(load impedance)	VIDEO 1/DAT: 300 mV (33 kohms) VIDEO 2/AUX: 600 mV (27 kohms)
Signal-to-noise ratio	87 dB
Power consumption	HE, LH: 90 W(System total 110 W) EE, K, EZ: 230W (System total 250 W)
Dimensions(W \times H \times D)	360 \times 128 \times 332.5 mm (14 $\frac{1}{4}$ \times 5 $\frac{1}{8}$ \times 13 $\frac{1}{8}$ in.)
Weight	HE, LH: 5.3kg (11.66 lb.) EE, K, EZ: 5.4kg (11.88 lb.)

CASSETTE DECK

Track format	4 tracks, 2 channels
Frequency response	Metal tape: 20 - 17,000 Hz CrO ₂ tape: 20 - 16,000 Hz Normal tape: 20 - 15,000 Hz
Signal-to-noise ratio	65 dB (Dolby NR ON, Metal tape peak level above 5 kHz)
Wow and flutter	0.12% (WRMS) \pm 0.19% (WPEAK)
Tape speed	4.8 cm/sec. (1 $\frac{7}{8}$ ips) 9.5 cm/sec. (double speed)
Rewind time	120 sec. (C-60)
Fast forward time	120 sec. (C-60)
Recording system	AC bias
Erase system	AC erase
Motor	DC servomotor \times 2
Heads	Playback head \times 1(deck 1) Record/playback/erasure head \times 1 (deck 2)

Dimensions(W \times H \times D)

	360 \times 128 \times 309.5 mm (14 $\frac{1}{4}$ \times 5 $\frac{1}{8}$ \times 12 $\frac{1}{4}$ in.)
--	---

Weight

	3.0 kg (6.6 lb.)
--	------------------

SPEAKER

Cabinet type	3 way, bass reflex
Speaker	220 mm cone type woofer 60 mm cone type tweeter 30 mm ceramic type super tweeter
Impedance	6 ohms
Music power	60 W
Output sound pressure level	90 dB/W/m

Dimensions(W \times H \times D)

	271 \times 442 \times 230 mm (10 $\frac{3}{4}$ \times 17 $\frac{1}{2}$ \times 9 $\frac{1}{8}$ in.)
--	---

Weight

	4.8 kg (10 lbs. 9 oz)
--	-----------------------

COMMON SECTION

Power requirements	HE, LH:120/220/240 V AC, selectable, 50/60 Hz EE, EZ: 230 V AC, 50Hz K: 230 - 240 V AC, 50Hz
Dimensions(W \times H \times D)	902 \times 442 \times 332.5 mm (35 $\frac{5}{8}$ \times 17 $\frac{1}{2}$ \times 13 $\frac{1}{8}$ in.) (vertical placement) 1,262 \times 442 \times 332.5 mm (49 $\frac{3}{4}$ \times 17 $\frac{1}{2}$ \times 13 $\frac{1}{8}$ in.) (horizontal placement)
Weight	HE, LH: 20.2 kg (44.4 lb.) EE, K, EZ: 20.3 kg (44.7 lb.)

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

MODEL NO.
MX - Z3100M

ALTERATION MAIN PARTS LIST

ELECTRICAL MAIN PARTS LIST

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

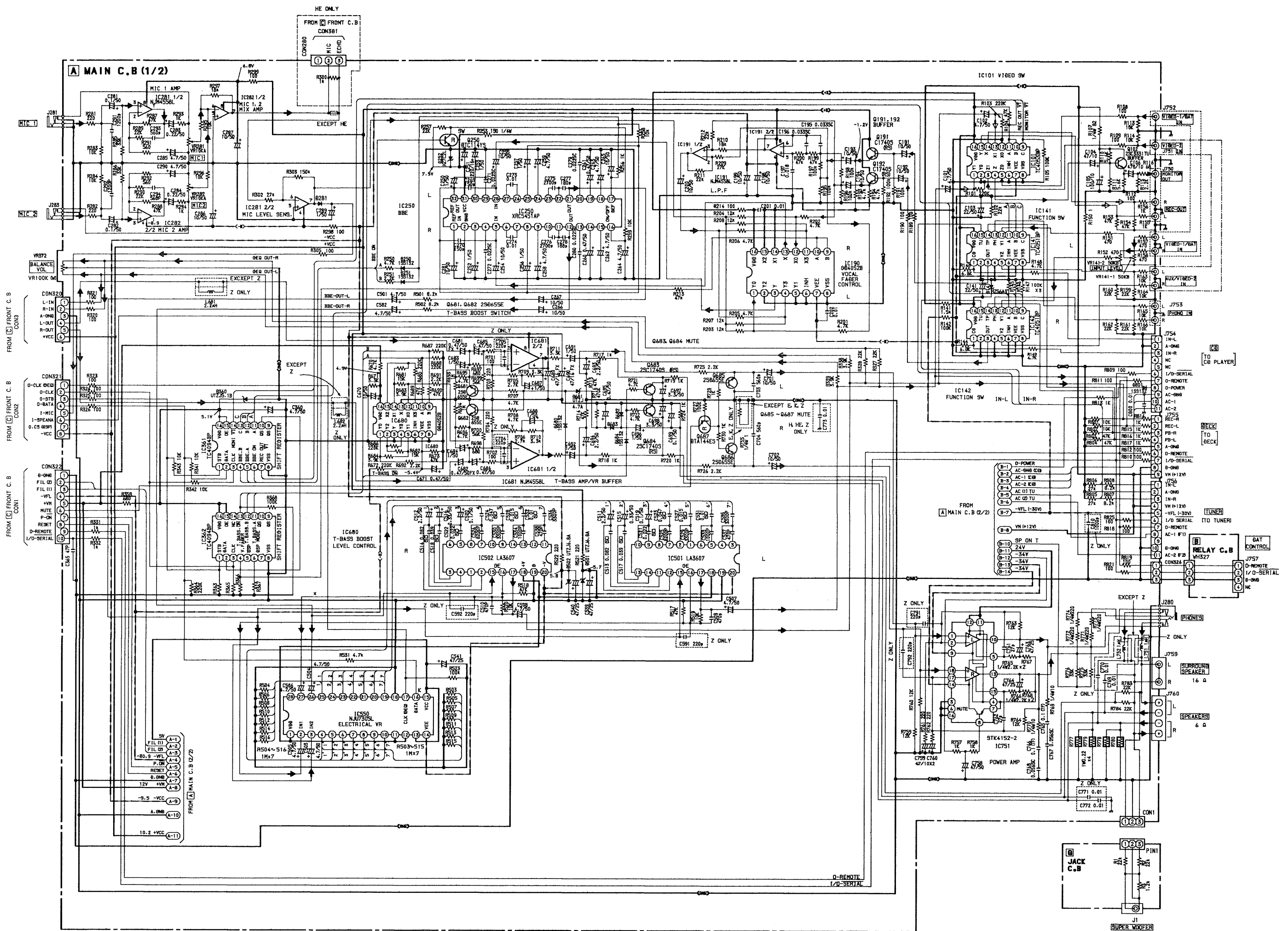
REF. NO.	PART NO.	カリ NO.	DESCRIPTION
IC			
	87-027-938-019		IC, TC4053BP
	87-027-958-019		IC, TC4051BP
	87-017-448-019		IC, GD4052B
	87-017-374-019		IC, TC4094BP
MAIN C. B			
L681	87-003-098-089		COIL, 2. 2UH<EEZ, EZ>
L682	87-003-098-089		COIL, 2. 2UH<EEZ, EZ>
MISCELLANEOUS			
△	87-050-032-019		AC CORD ASSY K 3P S<K>
△	87-050-034-019		AC CORD ASSY, E<HE, EE, EEZ, EZ>
△	87-034-749-019		AC CORD, H W/PLUG<LH>
△	87-085-184-010		BUSHING, AC CORD D<LH>
△	87-085-185-010		BUSHING, AC CORD E<EXCEPT LH>

ALTERATION PARTS LIST

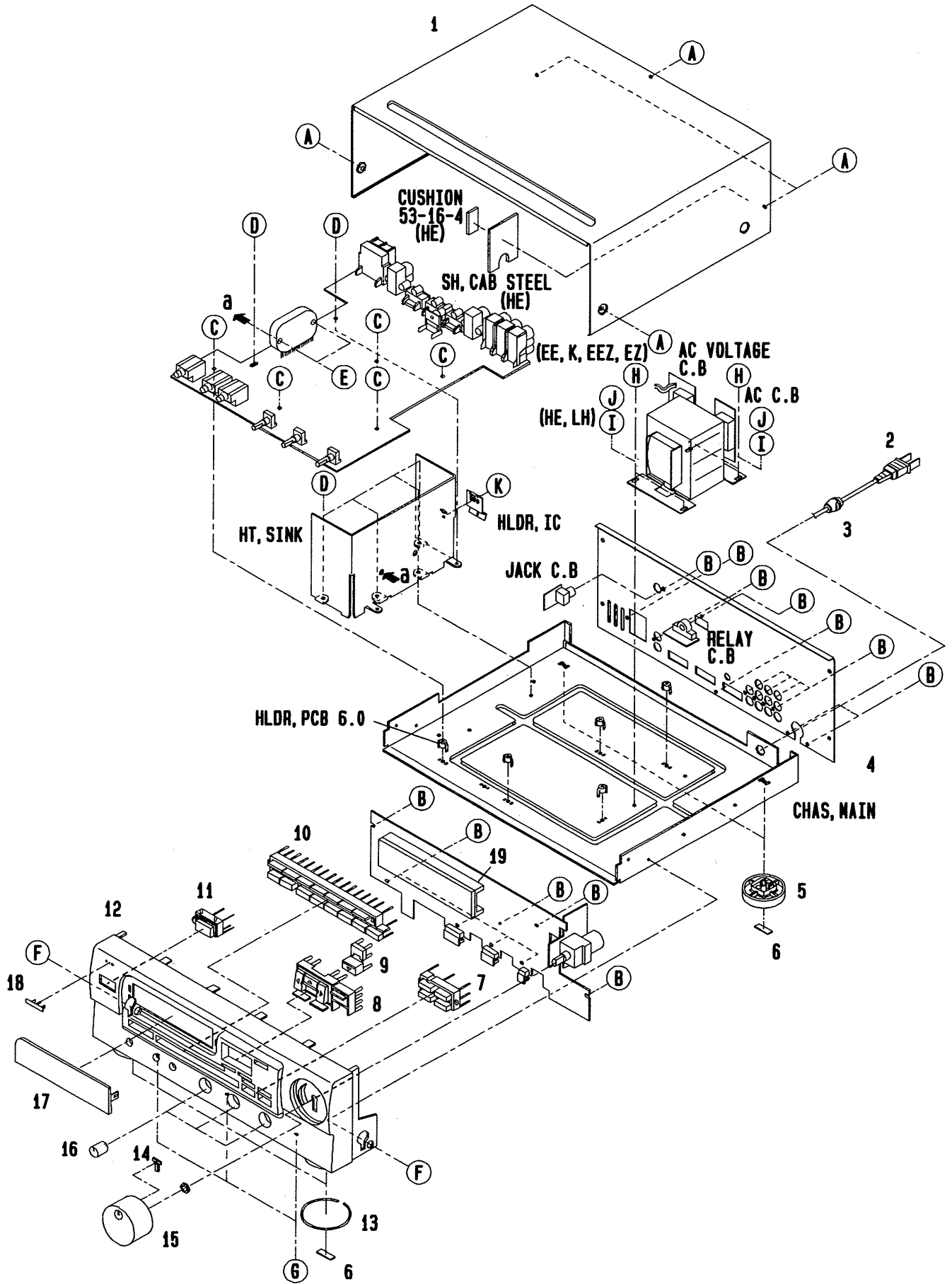
■ ACCESSORIES/PACKAGE LIST

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

REF. NO.	PARTS NO.	カンリ NO.	DESCRIPTION
1	84-VP3-901-019		IB,ESC (S)
2	84-VP3-902-019		IB,GFI (S) <EE,EEZ,EZ>
3	87-009-724-019		PLUG,ADPTR IR39 <LH>
4	87-009-725-019		PLUG,ADPTR IR40 <HEJ>



MECHANICAL EXPLODED VIEW 1/1 (MX - Z3100M)



MECHANICAL PARTS LIST 1/1 (MX - Z3100M)

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

REF. NO	PART NO.	カソリ NO.	DESCRIPTION	REF. NO	PART NO.	カソリ NO.	DESCRIPTION
	1 82-VP2-011-019		CAB, STEEL	12	84-VP3-008-019		CAB, FR LH<LH>
△	2 87-050-032-019		AC CORD ASSY K 3P S<K>	13	81-VW1-015-019		RING, FOOT
△	2 87-050-034-019		AC CORD ASSY, E<HE, EE, EEZ, EZ>	14	82-MA2-026-019		IND, VOL
△	2 87-034-749-019		AC CORD, H W/PLUG<LH>	15	82-MA2-023-019		KNOB, VOL
	3 87-085-184-010		BUSHING, AC CORD D<LH>	16	81-VP1-005-019		KNOB, BBE
	3 87-085-185-010		BUSHING, AC CORD E<EXCEPT LH>	17	82-VP2-007-019		WINDOW, AMP
	4 84-VP3-002-019		PANEL, REAR EEBN<EE>	18	81-DS1-011-019		BADGE, AIWA N
	4 84-VP3-004-019		PANEL, REAR EZBN<EEZ, EZ>	19	82-VP2-203-019		GUIDE, FL
	4 84-VP3-011-019		PANEL, REAR HEJBN<HE>	A	87-067-641-019		UTT2+3-8 W/O SLOT BLK
	4 84-VP3-003-019		PANEL, REAR KBN<K>	B	87-067-660-019		BVT2+3-8W/O SLOT BLK
	4 84-VP3-013-019		PANEL, REAR LHBN<LH>	C	87-067-758-019		BVT2+3-12<W/O SLOT>
	5 81-VX1-012-019		FOOT, REAR	D	87-067-584-019		BVT2+3-6 W/O SLOT
	6 82-VW2-211-019		FELT, 20-7. 5-2	E	87-067-581-019		BVT2+3-15 W/O SLOT
	7 82-VP3-004-019		KEY, BBE	F	87-591-094-419		QIT + 3 - 6 GOLD
	8 82-VP2-004-019		KEY, CRSR	G	87-067-716-019		BVTT+3-6 BLK
	9 82-VP2-005-019		KEY CRSR DOWN	H	87-078-019-019		S-SCREW, 1T+4-6<EE, K, EEZ>
	10 82-VP2-003-119		KEY, FUN	I	87-067-747-019		W, 4. 3-14-1<HE, LH>
	11 82-VP2-002-019		KEY, POWER	J	87-067-586-019		BVTT +4-8<HE, LH>
	12 84-VP3-001-019		CAB, FR<EE, K, EEZ, EZ>	K	87-761-094-419		VFT2+3-6 W/O SLOT GOLD
	12 84-VP3-009-019		CAB, FR H<HE>				

MODEL NO.

FX – WZ7100

This service manual contains service information for only altered sections of Model FX – WZ7100.

If requiring other service information, see the service manual of Model FX – WZ5000.

ALTERATION MAIN PARTS LIST

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

ELECTRICAL MAIN PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
IC901	87-017-374-019	IC,TC4094BP
IC902	87-017-374-019	IC,TC4094BP
C513	87-012-154-089	C-CAPS,150P-50 CH
C514	87-012-154-089	C-CAPS,150P-50 CH
C611	87-010-196-089	C-CAPS,0.1-25 F

MECHANICAL PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
1-3	84-VW2-006-019	PANEL,REAR
1-15	09-047-746-010	CAB,FR ASSY
1-17	84-VW2-003-019	BOX,CASS 1
1-18	84-VW2-004-019	BOX,CASS 2

MODEL NO.

TX – Z9100

This service manual contains service information for only altered sections of Model TX – Z9100.

If requiring other service information, see the service manual of Model TX – Z7000.

ALTERATION PARTS LIST MECHANICAL PARTS LIST

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

REF. NO	PART NO.	カリ NO.	DESCRIPTION
3	84-VT1-006-019		PANEL, REAR YLHBN (YLH)
3	84-VT1-002-019		PANEL, REAR YEEBN (YEE)
3	84-VT1-005-019		PANEL, REAR YHJBN (YHJ)
3	84-VT1-003-019		PANEL, REAR YEZBN (YEZ)
8	84-VT1-001-019		CAB, FR
17	81-VX1-207-110		HLD, WIRE (YEE, YEZ)
18	87-038-039-019		WIRE BINDER (YEE, YEZ)

MODEL NO.

SX — Z3100

MECHANICAL PARTS LIST

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

REF. NO.	PART NO.	カリ NO.	DESCRIPTION
1	84-VS3-005-010		PANEL FR
2	84-VS3-008-010		PANEL TW. ASSY (YJ, YL)
3	84-VS3-006-010		GRILL FRAME ASSY
4	82-VS3-601-010		SPEAKER WOOFER (YJ, Y)
5	84-VS3-601-010		SPEAKER WOOFER (YL)
6	84-VS3-603-010		SPEAKER TWEETER (YJ)
7	84-VS3-605-010		SPEAKER TWEETER (YL)
8	82-MS1-603-010		SPEAKER TWEETER (Y)
9	81-NSC-602-010		SPEAKER CERAMIC (Y)
10	83-096-614-010		SPEAKER CORD (YJ, YL)
11	84-VS3-004-010		ADAPTOR (YJ, YL)

REFERENCE NAME LIST

ELECTRICAL SECTION

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

MECHANICAL SECTION

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

サービス技術ニュース	
番号	連絡内容
G - -	
G - -	
G - -	

アイワ株式会社
AIWA CO.,LTD.

723019, 921502, 750038

Tokyo Japan