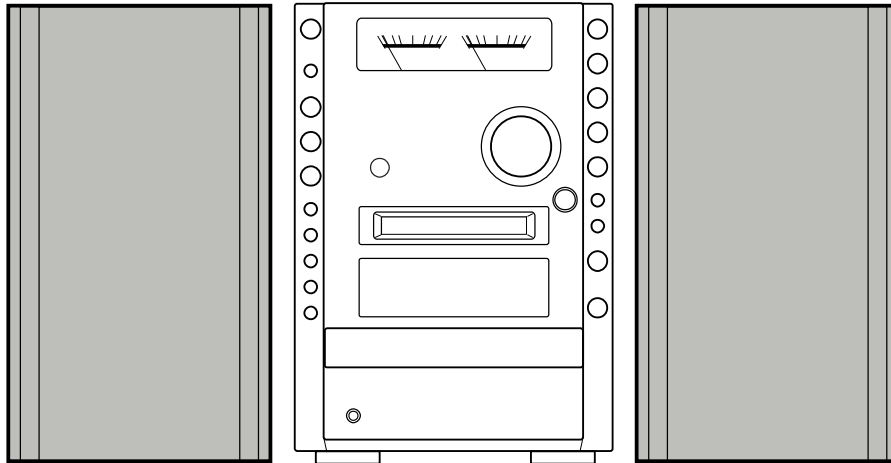


XR-FD55 CEK



SERVICE MANUAL

MICRO Hi-Fi COMPONENT SYSTEM

BASIC TAPE MECHANISM : BZM-1 AR2NC
BASIC CD MECHANISM : 3ZG-3 E14NC
BASIC MD MECHANISM : MDM-16QA

This Service Manual is "Revision Publishing" and replaces "Simple Manual"
(S/M Code No. 09-032-365-9T2).

SYSTEM	CENTER UNIT	SPEAKER	REMOTE CONTROLLER
XR-FD55	CX-LFD55	SX-LFD55	RC-CAS20



S/M Code No. 09-032-365-9R2

REVISION
DATA

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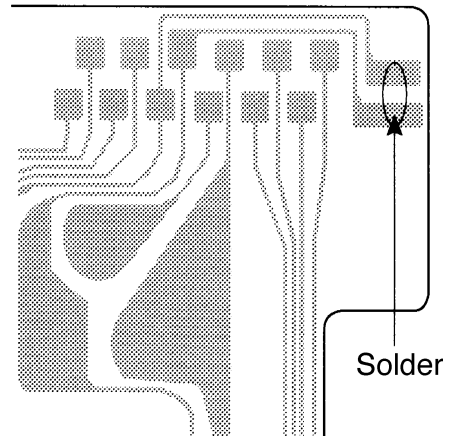
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PRECAUTION TO REPLACE OPTICAL BLOCK (PXR-104X-BP-0101)

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 right figure.

PICK-UP Assy P W B



SPECIFICATIONS -1/1

MAIN UNIT CX-LFD55

TUNER

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	16.8 dBf
FM antenna terminal	75 Ω (unbalanced)
AM tuning range	531 kHz to 1602 kHz
AM usable sensitivity	350 μ V/m
AM antenna	Loop antenna

AMPLIFIER

Power output	Rated: 24 W + 24 W (6 Ω , T.H.D.1%, 1 kHz/DIN 45500) Reference: 30 W + 30 W (6 Ω , T.H.D.10%, 1 kHz/DIN 45324)
Input	AUX IN: 800 mV DIGITAL IN (supported sampling frequencies: 32 kHz, 44.1 kHz and 48 kHz)
Outputs	SPEAKERS: 6 Ω or more PHONES: 32 Ω or more SUB WOOFER: 1.2 V

CD PLAYER

Laser	Semiconductor laser (λ = 780 nm) Emission duration: continuous
Sampling frequency	44.1 kHz
D/A converter	24 bit multi
Frequency	20 to 20000 Hz
Wow and flutter	Unmeasurable

MD RECORDER

Scanning method	Non-contact optical scanner (Semiconductor laser application)
Recording system	Magnetic polarity modulation overwrite system
Sampling frequency	44.1 kHz
No. of channels	Stereo: 2 channels Monaural: 1 channel
A/D, D/A converter	1-bit
Frequency	20 to 20000 Hz
Wow and flatter	Unmeasurable

CASSETTE DECK

Track format	4 tracks, 2 channels stereo
Frequency response	Normal tape: 50 Hz to 12500 Hz
Heads	Recording/playback x 1, erase x 1

GENERAL

Power requirements	230 V AC, 50 Hz
Power consumption	60 W
Power consumption in standby mode	With ECO mode on: 0.5 W With ECO mode off: 17 W
Dimensions (w/h/d)	Approx. 155 x 220 x 313.2 mm
Mass	Approx. 5.5 kg

SPEAKER SYSTEM SX-LFD55

Speakers system	2 way, bass-reflex type (magnetic shielded)
Speaker units	Woofer: 120 mm cone type Tweeter: 25 mm dome type
Nominal impedance	6 Ω
Dimensions (w/h/d)	Approx. 136 x 220 x 210 mm
Mass	Approx. 2.0 kg net per speaker

- Specifications and external appearance are subject to change without notice.
- US AND FOREIGN PATENTS LICENSED FROM DOLBY LABORATORIES.

ACCESSORIES PARTS LIST -1/1

! = ⚠ 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
						XR-FD55
						CEK
			O	AS1001	8C-CJE-909-010	IB, K(E) BF XR-FD55
			O	AS1002	87-A92-150-110	ANT, LOOP AM NO-CONT
			O	AS1003	87-A92-346-110	ANT, WIRE FM (FASTEN)
			O	AS1004	8C-CJE-701-010	RC UNIT, RC-CAS20
	!	O	AS1005	87-099-811-110	PLUG, ADPTR CONV(K)	a
		O	AS1006	8B-CPY-610-110	CORD, SPKR 2M	a

ELECTRICAL PARTS LIST - 1/16

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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
						XR-FD55 CEK
AMP		O	C	0597 87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
AMP		O	C	0598 87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
AMP		O	C	0601 87-012-277-080	C-CAP,U 1800P-50 K B GRM	a
AMP		O	C	0602 87-012-277-080	C-CAP,U 1800P-50 K B GRM	a
AMP		O	C	0603 87-A13-163-080	CAP,E 0.33-50 M FG	a
AMP		O	C	0604 87-A13-163-080	CAP,E 0.33-50 M FG	a
AMP		O	C	0607 87-010-405-040	CAP,E 10-50 M 11L SME	a
AMP		O	C	0608 87-010-405-040	CAP,E 10-50 M 11L SME	a
AMP		O	C	0609 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
AMP		O	C	0610 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
AMP		O	C	0611 87-010-258-040	CAP,E 22-35 M 11L SME	a
AMP		O	C	0612 87-010-258-040	CAP,E 22-35 M 11L SME	a
AMP		O	C	0613 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
AMP		O	C	0614 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
AMP		O	C	0615 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
AMP		O	C	0616 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
AMP		O	C	0617 87-A12-317-080	C-CAP,U 0.1-50 Z F	a
AMP		O	C	0618 87-A12-317-080	C-CAP,U 0.1-50 Z F	a
AMP		O	C	0619 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
AMP		O	C	0620 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
						XR-FD55 CEK
AMP		O	C	0621 87-A13-165-080	CAP,E 1-50 M FG	a
AMP		O	C	0622 87-A13-165-080	CAP,E 1-50 M FG	a
AMP		O	C	0623 87-010-177-080	C-CAP,S 820P-50 J SL C2012	a
AMP		O	C	0624 87-010-177-080	C-CAP,S 820P-50 J SL C2012	a
AMP		O	C	0633 87-012-282-080	C-CAP,U 4700P-50 K B GRM	a
AMP		O	C	0640 87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
AMP		O	C	0686 87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
AMP		O	C	0687 87-010-392-040	CAP,E 33-35 M 11L SME	a
AMP		O	C	0688 87-010-392-040	CAP,E 33-35 M 11L SME	a
AMP		X	CLP0601	87-A60-884-010	PIN,DIAL COATING-SHS	a
AMP		O	CN	0601 87-A61-013-010	CONN,15P H BLK TAC-L15P-A3	a
AMP		O	D	0562 87-A40-270-040	C-DIODE,MC2838	a
AMP		O	D	0565 87-A40-269-040	C-DIODE,MC2836	a
AMP		O	D	0601 87-A40-269-040	C-DIODE,MC2836	a
AMP		O	D	0603 87-020-465-080	DIODE,1SS133	a
AMP		O	D	0604 87-020-465-080	DIODE,1SS133	a
AMP		O	D	0605 87-A40-269-040	C-DIODE,MC2836	a
AMP		O	D	0606 87-A40-269-040	C-DIODE,MC2836	a
AMP		O	D	0607 87-A40-270-040	C-DIODE,MC2838	a
AMP		O	D	0608 87-A40-270-040	C-DIODE,MC2838	a
						XR-FD55 CEK
AMP		O	D	0617 87-A40-488-080	DIODE,1SS244	a
AMP		O	D	0618 87-A40-488-080	DIODE,1SS244	a
AMP		O	D	0650 87-A40-270-040	C-DIODE,MC2838	a
AMP		O	D	0660 87-A40-270-040	C-DIODE,MC2838	a
AMP		O	D	0661 87-A40-459-090	DIODE,RL203GW (15MM)	a
AMP		O	D	0662 87-A40-459-090	DIODE,RL203GW (15MM)	a
AMP		O	D	0687 87-A40-747-080	ZENER,UZ5.1BSB	a
AMP		O	D	0688 87-A40-749-080	ZENER,UZ5.6BSB	a
AMP		O	D	0689 87-A40-270-040	C-DIODE,MC2838	a
AMP		O	D	0690 87-A40-269-040	C-DIODE,MC2836	a
AMP		O	D	0691 87-A40-764-080	ZENER,UZ10BSC	a
AMP		O	D	0692 87-020-465-080	DIODE,1SS133	a
AMP		O	D	0693 87-020-465-080	DIODE,1SS133	a
AMP		O	Q	0539 87-A30-669-040	C-TR,SBT5401	a
AMP		O	Q	0565 87-A30-538-040	C-TR,SRA2202S	a
AMP		O	Q	0601 87-A30-675-040	C-TR,2SD1306NE07TL	a
AMP		O	Q	0602 87-A30-675-040	C-TR,2SD1306NE07TL	a
AMP		O	Q	0603 87-A30-075-040	C-TR,2SA1235F	a
AMP		O	Q	0604 87-A30-075-040	C-TR,2SA1235F	a
AMP		O	Q	0605 87-A30-075-040	C-TR,2SA1235F	a
						XR-FD55 CEK
AMP		O	Q	0606 87-A30-075-040	C-TR,2SA1235F	a
AMP		O	Q	0607 87-A30-076-040	C-TR,2SC3052F	a
AMP		O	Q	0608 87-A30-076-040	C-TR,2SC3052F	a
AMP		O	Q	0609 87-A30-076-040	C-TR,2SC3052F	a
AMP		O	Q	0610 87-A30-076-040	C-TR,2SC3052F	a
AMP		O	Q	0611 87-A30-672-080	TR,2N5551C	a
AMP		O	Q	0612 87-A30-672-080	TR,2N5551C	a
AMP		O	Q	0613 87-A30-076-040	C-TR,2SC3052F	a
AMP		O	Q	0614 87-A30-076-040	C-TR,2SC3052F	a
AMP		O	Q	0615 87-A30-670-040	C-TR,SBT5551	a
AMP		O	Q	0616 87-A30-670-040	C-TR,SBT5551	a
AMP		O	Q	0617 87-A30-255-010	TR,2SB1342	a
AMP		O	Q	0618 87-A30-255-010	TR,2SB1342	a
AMP		O	Q	0619 87-A30-256-010	TR,2SD1933	a
AMP		O	Q	0620 87-A30-256-010	TR,2SD1933	a
AMP		O	Q	0623 87-A30-669-040	C-TR,SBT5401	a
AMP		O	Q	0624 87-A30-669-040	C-TR,SBT5401	a
AMP		O	Q	0626 87-A30-669-040	C-TR,SBT5401	a
AMP		O	Q	0627 87-A30-076-040	C-TR,2SC3052F	a
AMP		O	Q	0628 87-A30-076-040	C-TR,2SC3052F	a

ELECTRICAL PARTS LIST - 2/16

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						XR-FD55 CEK
AMP		O	Q	0630 87-A30-670-040	C-TR, SBT5551	a
AMP		O	Q	0683 87-A30-162-010	FET, 2SK2937	a
AMP		O	Q	0684 87-A30-162-010	FET, 2SK2937	a
AMP		O	Q	0685 87-A30-076-040	C-TR, 2SC3052F	a
AMP		O	Q	0686 87-A30-075-040	C-TR, 2SA1235F	a
AMP		O	Q	0687 87-A30-075-040	C-TR, 2SA1235F	a
AMP		O	Q	0735 87-A30-075-040	C-TR, 2SA1235F	a
AMP		O	R	0552 88-108-223-080	C-RES, U 22K-1/16W J	a
AMP		X	R	0557 88-108-222-080	C-RES, U 2.2K-1/16W J	a
AMP		O	R	0559 88-118-103-080	C-RES, S 10K-1/10W J	a
AMP		O	R	0560 88-118-473-080	C-RES, S 47K-1/10W J	a
AMP		O	R	0568 88-108-224-080	C-RES, U 220K-1/16W J	a
AMP		O	R	0569 88-108-224-080	C-RES, U 220K-1/16W J	a
AMP		O	R	0571 88-108-473-080	C-RES, U 47K-1/16W J	a
AMP		O	R	0572 88-108-473-080	C-RES, U 47K-1/16W J	a
AMP		O	R	0582 88-130-272-080	RES, 2.7K-1/4W J	a
AMP		O	R	0583 88-130-272-080	RES, 2.7K-1/4W J	a
AMP		X	R	0601 88-108-392-080	C-RES, U 3.9K-1/16W J	a
AMP		X	R	0602 88-108-392-080	C-RES, U 3.9K-1/16W J	a
AMP		O	R	0603 88-108-153-080	C-RES, U 15K-1/16W J	a
						XR-FD55 CEK
AMP		O	R	0604 88-108-153-080	C-RES, U 15K-1/16W J	a
AMP		O	R	0605 88-108-223-080	C-RES, U 22K-1/16W J	a
AMP		O	R	0606 88-108-223-080	C-RES, U 22K-1/16W J	a
AMP		O	R	0607 88-108-101-080	C-RES, U 100-1/16W J	a
AMP		O	R	0608 88-108-101-080	C-RES, U 100-1/16W J	a
AMP		O	R	0611 88-118-102-080	C-RES, S 1K-1/10W J	a
AMP		O	R	0612 88-118-102-080	C-RES, S 1K-1/10W J	a
AMP		O	R	0613 88-118-223-080	C-RES, S 22K-1/10W J	a
AMP		O	R	0614 88-118-223-080	C-RES, S 22K-1/10W J	a
AMP		O	R	0617 88-108-103-080	C-RES, U 10K-1/16W J	a
AMP		O	R	0618 88-108-103-080	C-RES, U 10K-1/16W J	a
AMP		X	R	0619 88-118-101-080	C-RES, S 100-1/10W J	a
AMP		X	R	0620 88-118-101-080	C-RES, S 100-1/10W J	a
AMP		X	R	0621 88-118-101-080	C-RES, S 100-1/10W J	a
AMP		X	R	0622 88-118-101-080	C-RES, S 100-1/10W J	a
AMP		O	R	0623 88-121-222-080	RES, 2.2K-1/8W J	a
AMP		O	R	0624 88-121-222-080	RES, 2.2K-1/8W J	a
AMP		O	R	0625 88-121-222-080	RES, 2.2K-1/8W J	a
AMP		O	R	0626 88-121-222-080	RES, 2.2K-1/8W J	a
AMP		X	R	0627 88-118-390-080	C-RES, S 39-1/10W J	a
						XR-FD55 CEK
AMP		X	R	0628 88-118-390-080	C-RES, S 39-1/10W J	a
AMP		O	R	0629 87-A00-258-080	RES, M/F 0.22-1W J	a
AMP		O	R	0630 87-A00-258-080	RES, M/F 0.22-1W J	a
AMP		O	R	0631 87-A00-258-080	RES, M/F 0.22-1W J	a
AMP		O	R	0632 87-A00-258-080	RES, M/F 0.22-1W J	a
AMP		O	R	0633 88-108-332-080	C-RES, U 3.3K-1/16W J	a
AMP		O	R	0634 88-108-332-080	C-RES, U 3.3K-1/16W J	a
AMP		X	R	0635 88-108-152-080	C-RES, U 1.5K-1/16W J	a
AMP		X	R	0636 88-108-152-080	C-RES, U 1.5K-1/16W J	a
AMP		O	R	0637 88-108-101-080	C-RES, U 100-1/16W J	a
AMP		O	R	0638 88-108-101-080	C-RES, U 100-1/16W J	a
AMP		O	R	0641 88-118-102-080	C-RES, S 1K-1/10W J	a
AMP		O	R	0642 88-118-102-080	C-RES, S 1K-1/10W J	a
AMP		O	R	0651 88-108-473-080	C-RES, U 47K-1/16W J	a
AMP		O	R	0652 88-108-473-080	C-RES, U 47K-1/16W J	a
AMP		X	R	0655 88-108-682-080	C-RES, U 6.8K-1/16W J	a
AMP		X	R	0656 88-108-682-080	C-RES, U 6.8K-1/16W J	a
AMP		X	R	0657 88-108-472-080	C-RES, U 4.7K-1/16W J	a
AMP		X	R	0658 88-108-472-080	C-RES, U 4.7K-1/16W J	a
AMP		O	R	0659 88-108-103-080	C-RES, U 10K-1/16W J	a
						XR-FD55 CEK
AMP		O	R	0660 88-118-103-080	C-RES, S 10K-1/10W J	a
AMP		X	R	0661 88-108-472-080	C-RES, U 4.7K-1/16W J	a
AMP		X	R	0662 88-108-472-080	C-RES, U 4.7K-1/16W J	a
AMP		X	R	0663 88-108-472-080	C-RES, U 4.7K-1/16W J	a
AMP		X	R	0664 88-108-472-080	C-RES, U 4.7K-1/16W J	a
AMP		X	R	0665 88-108-152-080	C-RES, U 1.5K-1/16W J	a
AMP		X	R	0666 88-108-152-080	C-RES, U 1.5K-1/16W J	a
AMP		O	R	0667 88-108-103-080	C-RES, U 10K-1/16W J	a
AMP		O	R	0668 88-118-473-080	C-RES, S 47K-1/10W J	a
AMP		O	R	0671 88-118-182-080	C-RES, S 1.8K-1/10W J	a
AMP		O	R	0672 88-118-182-080	C-RES, S 1.8K-1/10W J	a
AMP		X	R	0673 88-118-222-080	C-RES, S 2.2K-1/10W J	a
AMP		X	R	0674 88-118-222-080	C-RES, S 2.2K-1/10W J	a
AMP		O	R	0675 88-118-331-080	C-RES, S 330-1/10W J	a
AMP		O	R	0676 88-118-331-080	C-RES, S 330-1/10W J	a
AMP		X	R	0677 88-128-222-080	C-RES, 2.2K-1/8W J	a
AMP		O	R	0678 88-118-103-080	C-RES, S 10K-1/10W J	a
AMP		O	R	0679 88-108-102-080	C-RES, U 1K-1/16W J	a
AMP		O	R	0680 88-108-102-080	C-RES, U 1K-1/16W J	a
AMP		X	R	0681 88-118-222-080	C-RES, S 2.2K-1/10W J	a

ELECTRICAL PARTS LIST - 3/16

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
AMP	X R	0682	88-118-222-080	C-RES,S 2.2K-1/10W J	a
AMP	O R	0684	88-118-102-080	C-RES,S 1K-1/10W J	a
AMP	O R	0685	88-108-332-080	C-RES,U 3.3K-1/16W J	a
AMP	X R	0686	88-118-222-080	C-RES,S 2.2K-1/10W J	a
AMP	O R	0687	88-118-103-080	C-RES,S 10K-1/10W J	a
AMP	O R	0688	88-118-102-080	C-RES,S 1K-1/10W J	a
AMP	X R	0689	88-128-272-080	C-RES, 2.7K-1/8W J	a
AMP	X R	0690	88-128-272-080	C-RES, 2.7K-1/8W J	a
AMP	X R	0692	88-128-222-080	C-RES, 2.2K-1/8W J	a
AMP	O R	0693	88-108-103-080	C-RES,U 10K-1/16W J	a
AMP	O R	0694	88-108-103-080	C-RES,U 10K-1/16W J	a
AMP	O R	0695	88-108-473-080	C-RES,U 47K-1/16W J	a
AMP	O R	0696	88-108-473-080	C-RES,U 47K-1/16W J	a
AMP	O R	0697	88-108-473-080	C-RES,U 47K-1/16W J	a
AMP	O R	0698	88-108-473-080	C-RES,U 47K-1/16W J	a
AMP	X R	0699	88-108-225-080	C-RES,U 2.2M-1/16W J	a
AMP	X R	0700	88-128-272-080	C-RES, 2.7K-1/8W J	a
AMP	X R	0713	88-118-563-080	C-RES,S 56K-1/10W J	a
AMP	O R	0717	88-118-683-080	C-RES,S 68K-1/10W J	a
AMP	X R	0718	88-118-105-080	C-RES,S 1M-1/10W J	a
					XR-FD55 CEK
AMP	O R	0719	88-108-103-080	C-RES,U 10K-1/16W J	a
AMP	O TH	0601	87-A91-042-080	C-THMS,100K 55001	a
AMP	O TH	0602	87-A91-042-080	C-THMS,100K 55001	a
CD	O C	0501	87-A13-118-080	CAP,E 47-16 M RA 6.3X5L	a
CD	O C	0502	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0503	87-A13-118-080	CAP,E 47-16 M RA 6.3X5L	a
CD	O C	0504	87-A13-118-080	CAP,E 47-16 M RA 6.3X5L	a
CD	O C	0505	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0506	87-A13-118-080	CAP,E 47-16 M RA 6.3X5L	a
CD	O C	0507	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
CD	O C	0510	87-012-176-080	C-CAP,U 15P-50 J CH GRM	a
CD	O C	0511	87-012-180-080	C-CAP,U 22P-50 J CH GRM	a
CD	O C	0513	87-A10-827-080	C-CAP,U 0.47-6.3 K B	a
CD	O C	0514	87-A10-260-080	C-CAP,U 0.1-16 K B	a
CD	O C	0515	87-A11-228-080	C-CAP,U 0.027-25 K B	a
CD	O C	0516	87-A11-228-080	C-CAP,U 0.027-25 K B	a
CD	O C	0517	87-012-283-080	C-CAP,U 5600P-50 K B GRM	a
CD	O C	0518	87-012-277-080	C-CAP,U 1800P-50 K B GRM	a
CD	O C	0519	87-012-279-080	C-CAP,U 2700P-50 K B GRM	a
CD	O C	0520	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
					XR-FD55 CEK
CD	O C	0521	87-012-270-080	C-CAP,U 470P-50 K B GRM	a
CD	O C	0522	87-012-199-080	C-CAP,U 220P-50 J CH GRM	a
CD	O C	0523	87-012-275-080	C-CAP,U 1200P-50 K B GRM	a
CD	O C	0524	87-012-193-080	C-CAP,U 82P-50 J CH GRM	a
CD	O C	0525	87-012-193-080	C-CAP,U 82P-50 J CH GRM	a
CD	O C	0551	87-A13-120-080	CAP,E 220-10 M RA 8X5L	a
CD	O C	0553	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0554	87-A13-118-080	CAP,E 47-16 M RA 6.3X5L	a
CD	O C	0555	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0601	87-A13-120-080	CAP,E 220-10 M RA 8X5L	a
CD	O C	0602	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0603	87-A13-120-080	CAP,E 220-10 M RA 8X5L	a
CD	O C	0604	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0605	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0606	87-A13-118-080	CAP,E 47-16 M RA 6.3X5L	a
CD	O C	0607	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0609	87-A10-047-080	C-CAP,U 1-10 Z F	a
CD	O C	0614	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0615	87-012-270-080	C-CAP,U 470P-50 K B GRM	a
CD	O C	0616	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
					XR-FD55 CEK
CD	O C	0617	87-010-784-080	C-CAP,U 0.012-25 K B GRM	a
CD	O C	0618	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
CD	O C	0619	87-A11-058-080	C-CAP,U 0.22-10 K B	a
CD	X C	0620	88-108-000-080	C-JUMPER,U	a
CD	O C	0622	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
CD	O C	0623	87-A10-260-080	C-CAP,U 0.1-16 K B	a
CD	O C	0624	87-012-165-080	C-CAP,U 3P-50 C CH GRM	a
CD	O C	0625	87-012-165-080	C-CAP,U 3P-50 C CH GRM	a
CD	O C	0626	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0627	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0628	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0629	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD	O C	0630	87-012-280-080	C-CAP,U 3300P-50 K B GRM	a
CD	O C	0631	87-A10-827-080	C-CAP,U 0.47-6.3 K B	a
CD	O C	0651	87-012-270-080	C-CAP,U 470P-50 K B GRM	a
CD	O C	0652	87-012-270-080	C-CAP,U 470P-50 K B GRM	a
CD	O C	0653	87-A13-114-080	CAP,E 2.2-50 M RA 4X5L	a
CD	O C	0654	87-A13-114-080	CAP,E 2.2-50 M RA 4X5L	a
CD	O C	0655	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
CD	O C	0656	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a

ELECTRICAL PARTS LIST - 4/16

! = ⚠ SAFETY PARTS
C = Components marked

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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
						XR-FD55 CEK
CD		O	C	0671 87-A13-118-080	CAP,E 47-16 M RA 6.3X5L	a
CD		O	C	0672 87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD		O	C	0673 87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD		O	C	0674 87-A13-116-080	CAP,E 10-35 M RA 5X5L	a
CD		O	C	0681 87-012-172-080	C-CAP,U 10P-50 D CH GRM	a
CD		O	C	0682 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
CD		O	C	0683 87-012-188-080	C-CAP,U 47P-50 J CH GRM	a
CD		O	C	0684 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
CD		O	C	0685 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
CD		O	C	0686 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
CD		O	C	0687 87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
CD		O	C	0691 87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD		O	C	0692 87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD		O	C	0694 87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
CD		O	C	0695 87-018-098-080	CAP,TC U 3.3P-50 K SL UP050	a
CD		O	C	0696 87-018-098-080	CAP,TC U 3.3P-50 K SL UP050	a
CD		O	C	0697 87-018-098-080	CAP,TC U 3.3P-50 K SL UP050	a
CD		O	C	0698 87-A11-148-080	CAP,TC U 0.1-50 Z F	a
CD		O	C	0699 87-A11-148-080	CAP,TC U 0.1-50 Z F	a
CD		O	CN	0501 87-A60-429-010	CONN,16P H TOC-A	a
						XR-FD55 CEK
CD		O	CN	0502 87-A60-154-010	CONN,6P H FE	a
CD		O	CN	0503 87-099-210-010	CONN,5P H BLK 6216	a
CD		O	CN	0601 87-099-030-010	CONN,13P H BLK 6216	a
CD		O	CN	0602 87-099-200-010	CONN,7P H BLK 6216	a
CD		O	CN	0603 87-009-348-010	CONN,5P H WHT PH	a
CD		O	D	0551 87-A40-553-080	DIODE,1N4003 LES	a
CD		O	D	0671 87-027-416-080	ZENER,HZ3C2	a
CD		X	FB	0601 87-003-223-080	F-BEAD,BL02RN2	a
CD		X	FB	0602 87-003-223-080	F-BEAD,BL02RN2	a
CD		O	IC	0501 87-A22-373-080	C-IC,AN22002A	a
CD		O	IC	0551 87-A22-280-040	C-IC,BA5813FM	a
CD		O	IC	0601 87-A22-372-030	C-IC,MN6627482WA	a
CD		O	IC	0602 87-017-853-040	C-IC,NJM2100V	a
CD		O	IC	0671 87-A21-993-040	C-IC,PCM1742 KE	a
CD		O	Q	0501 87-A30-075-040	C-TR,2SA1235F	a
CD		O	Q	0502 87-A30-287-040	C-TR,DTC114TKA	a
CD		O	Q	0551 87-A30-495-080	TR,2SA1981Y	a
CD		O	Q	0601 87-A30-283-040	C-TR,DTA114YKA	a
CD		O	Q	0602 87-A30-273-040	C-TR,DTC124EKA	a
CD		X	R	0501 88-108-479-080	C-RES,U 4.7-1/16W J	a
						XR-FD55 CEK
CD		X	R	0502 88-108-479-080	C-RES,U 4.7-1/16W J	a
CD		O	R	0503 88-108-101-080	C-RES,U 100-1/16W J	a
CD		X	R	0504 88-108-479-080	C-RES,U 4.7-1/16W J	a
CD		O	R	0505 88-108-822-080	C-RES,U 8.2K-1/16W J	a
CD		X	R	0506 88-108-182-080	C-RES,U 1.8K-1/16W J	a
CD		O	R	0507 88-108-332-080	C-RES,U 3.3K-1/16W J	a
CD		X	R	0510 88-108-154-080	C-RES,U 150K-1/16W J	a
CD		X	R	0511 88-108-394-080	C-RES,U 390K-1/16W J	a
CD		O	R	0512 88-108-223-080	C-RES,U 22K-1/16W J	a
CD		X	R	0513 88-108-104-080	C-RES,U 100K-1/16W J	a
CD		O	R	0514 88-108-333-080	C-RES,U 33K-1/16W J	a
CD		O	R	0515 87-022-235-080	C-RES,U 6.8K-1/16W F	a
CD		O	R	0516 87-022-280-080	C-RES,U 560-1/16W F	a
CD		O	R	0517 87-022-241-080	C-RES,U 12K-1/16W F	a
CD		X	R	0518 88-108-274-080	C-RES,U 270K-1/16W J	a
CD		X	R	0519 88-108-824-080	C-RES,U 820K-1/16W J	a
CD		O	R	0520 87-022-237-080	C-RES,U 8.2K-1/16W F	a
CD		O	R	0521 87-022-237-080	C-RES,U 8.2K-1/16W F	a
CD		X	R	0522 88-108-000-080	C-JUMPER,U	a
CD		X	R	0523 88-108-000-080	C-JUMPER,U	a
						XR-FD55 CEK
CD		X	R	0524 88-108-000-080	C-JUMPER,U	a
CD		X	R	0525 88-108-000-080	C-JUMPER,U	a
CD		X	R	0526 88-108-000-080	C-JUMPER,U	a
CD		O	R	0551 88-140-229-080	RES,2.2-1/2W J	a
CD		O	R	0552 88-108-101-080	C-RES,U 100-1/16W J	a
CD		X	R	0553 88-108-222-080	C-RES,U 2.2K-1/16W J	a
CD		X	R	0554 88-108-681-080	C-RES,U 680-1/16W J	a
CD		O	R	0555 88-108-333-080	C-RES,U 33K-1/16W J	a
CD		O	R	0556 88-108-562-080	C-RES,U 5.6K-1/16W J	a
CD		X	R	0557 88-108-000-080	C-JUMPER,U	a
CD		X	R	0558 88-108-000-080	C-JUMPER,U	a
CD		X	R	0559 88-108-000-080	C-JUMPER,U	a
CD		X	R	0560 88-108-000-080	C-JUMPER,U	a
CD		X	R	0565 88-108-181-080	C-RES,U 180-1/16W J	a
CD		O	R	0566 88-108-821-080	C-RES,U 820-1/16W J	a
CD		X	R	0601 88-108-229-080	C-RES,U 2.2-1/16W J	a
CD		X	R	0602 88-108-339-080	C-RES,U 3.3-1/16W J	a
CD		X	R	0603 88-108-100-080	C-RES,U 10-1/16W J	a
CD		X	R	0604 88-108-000-080	C-JUMPER,U	a
CD		X	R	0605 88-108-000-080	C-JUMPER,U	a

ELECTRICAL PARTS LIST - 5/16

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
CD	O R	0608	88-108-473-080	C-RES,U 47K-1/16W J	a
CD	O R	0610	88-108-123-080	C-RES,U 12K-1/16W J	a
CD	O R	0611	88-108-102-080	C-RES,U 1K-1/16W J	a
CD	X R	0612	88-108-000-080	C-JUMPER,U	a
CD	O R	0613	88-108-473-080	C-RES,U 47K-1/16W J	a
CD	X R	0614	88-108-000-080	C-JUMPER,U	a
CD	O R	0616	88-108-153-080	C-RES,U 15K-1/16W J	a
CD	O R	0617	88-108-272-080	C-RES,U 2.7K-1/16W J	a
CD	X R	0618	88-108-000-080	C-JUMPER,U	a
CD	O R	0619	88-108-102-080	C-RES,U 1K-1/16W J	a
CD	O R	0620	88-108-103-080	C-RES,U 10K-1/16W J	a
CD	X R	0621	88-108-105-080	C-RES,U 1M-1/16W J	a
CD	X R	0622	88-108-475-080	C-RES,U 4.7M-1/16W J	a
CD	X R	0623	88-108-104-080	C-RES,U 100K-1/16W J	a
CD	X R	0624	88-108-104-080	C-RES,U 100K-1/16W J	a
CD	O R	0625	88-108-333-080	C-RES,U 33K-1/16W J	a
CD	X R	0626	88-108-331-080	C-RES,U 330-1/16W J	a
CD	O R	0628	88-108-474-080	C-RES,U 470K-1/16W J	a
CD	X R	0629	88-108-221-080	C-RES,U 220-1/16W J	a
CD	X R	0631	88-108-220-080	C-RES,U 22-1/16W J	a
					XR-FD55 CEK
CD	X R	0632	88-108-000-080	C-JUMPER,U	a
CD	X R	0633	88-108-104-080	C-RES,U 100K-1/16W J	a
CD	X R	0634	88-108-000-080	C-JUMPER,U	a
CD	O R	0635	88-108-103-080	C-RES,U 10K-1/16W J	a
CD	X R	0636	88-108-000-080	C-JUMPER,U	a
CD	X R	0637	88-108-000-080	C-JUMPER,U	a
CD	X R	0638	88-108-000-080	C-JUMPER,U	a
CD	X R	0639	88-108-000-080	C-JUMPER,U	a
CD	X R	0640	88-108-000-080	C-JUMPER,U	a
CD	X R	0641	88-108-000-080	C-JUMPER,U	a
CD	O R	0642	88-108-473-080	C-RES,U 47K-1/16W J	a
CD	X R	0643	88-108-393-080	C-RES,U 39K-1/16W J	a
CD	X R	0644	88-108-393-080	C-RES,U 39K-1/16W J	a
CD	X R	0645	88-108-104-080	C-RES,U 100K-1/16W J	a
CD	O R	0646	88-108-272-080	C-RES,U 2.7K-1/16W J	a
CD	O R	0647	88-108-683-080	C-RES,U 68K-1/16W J	a
CD	O R	0648	88-108-103-080	C-RES,U 10K-1/16W J	a
CD	O R	0649	88-108-103-080	C-RES,U 10K-1/16W J	a
CD	X R	0653	88-108-152-080	C-RES,U 1.5K-1/16W J	a
CD	X R	0654	88-108-152-080	C-RES,U 1.5K-1/16W J	a
					XR-FD55 CEK
CD	O R	0655	88-108-102-080	C-RES,U 1K-1/16W J	a
CD	O R	0656	88-108-102-080	C-RES,U 1K-1/16W J	a
CD	O R	0657	88-108-103-080	C-RES,U 10K-1/16W J	a
CD	O R	0658	88-108-103-080	C-RES,U 10K-1/16W J	a
CD	X R	0659	88-108-000-080	C-JUMPER,U	a
CD	X R	0660	88-108-000-080	C-JUMPER,U	a
CD	O R	0671	88-108-101-080	C-RES,U 100-1/16W J	a
CD	O R	0681	88-108-101-080	C-RES,U 100-1/16W J	a
CD	O R	0682	88-108-101-080	C-RES,U 100-1/16W J	a
CD	O R	0683	88-108-101-080	C-RES,U 100-1/16W J	a
CD	O R	0684	88-108-101-080	C-RES,U 100-1/16W J	a
CD	O R	0685	88-108-101-080	C-RES,U 100-1/16W J	a
CD	O R	0686	88-108-101-080	C-RES,U 100-1/16W J	a
CD	O R	0687	88-108-101-080	C-RES,U 100-1/16W J	a
CD	X R	0688	88-108-000-080	C-JUMPER,U	a
CD	X R	0689	88-108-000-080	C-JUMPER,U	a
CD	X R	0690	88-108-000-080	C-JUMPER,U	a
CD	X R	0692	88-108-000-080	C-JUMPER,U	a
CD	X R	0693	88-108-000-080	C-JUMPER,U	a
CD	X R	0695	88-108-222-080	C-RES,U 2.2K-1/16W J	a
					XR-FD55 CEK
CD	X R	0697	88-108-000-080	C-JUMPER,U	a
CD	X W	0602	8C-CJE-661-010	WIRE ASSY,120 BLACK FASTON	a
CD	O X	0602	87-A70-363-010	VIB,XTAL 16.9344MHZ CSA-309	a
HP	O C	0223	87-012-272-080	C-CAP,U 680P-50 K B GRM	a
HP	O C	0224	87-012-272-080	C-CAP,U 680P-50 K B GRM	a
HP	X C	0230	87-A11-120-080	CAP,TC U 2200P-50 J CH	a
HP	X C	0231	87-A11-120-080	CAP,TC U 2200P-50 J CH	a
HP	O CNA	0201	8C-CJE-603-010	CONN ASSY,5P TID-A300	a
HP	O J	0201	87-A61-821-010	JACK,3.5 BLK ST W/SW GLD	a
HP	X R	0243	88-130-151-080	RES,150-1/4W J	a
HP	X R	0244	88-130-151-080	RES,150-1/4W J	a
HP	X R	0245	88-130-151-080	RES,150-1/4W J	a
HP	X R	0246	88-130-151-080	RES,150-1/4W J	a
HP	O R	0265	88-121-222-080	RES,2.2K-1/8W J	a
HP	O R	0266	88-121-222-080	RES,2.2K-1/8W J	a
HP	O WH	0101	87-A90-459-010	HLD,R,WIRE 2.5-5P	a
KEY	O C	0101	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
KEY	O C	0102	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
KEY	O C	0103	87-015-698-040	CAP,E 4.7-50 M 7L SRA	a
KEY	O C	0104	87-015-698-040	CAP,E 4.7-50 M 7L SRA	a

ELECTRICAL PARTS LIST - 6/16

! = ⚠ 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.

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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
						XR-FD55 CEK
KEY		O	C	0105 87-010-408-040	CAP,E 47-50 M 11L SME	a
KEY		O	C	0106 87-A12-317-080	C-CAP,U 0.1-50 Z F	a
KEY		O	C	0114 87-015-699-040	CAP,E 10-50 M 7L SRA	a
KEY		O	C	0115 87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
KEY		O	C	0117 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
KEY		O	C	0118 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
KEY		O	C	0120 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
KEY		O	C	0121 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
KEY		O	C	0122 87-A11-088-080	CAP,TC U 100P-50 J CH	a
KEY		O	C	0145 87-012-172-080	C-CAP,U 10P-50 D CH GRM	a
KEY		O	C	0146 87-012-172-080	C-CAP,U 10P-50 D CH GRM	a
KEY		O	C	0147 87-012-172-080	C-CAP,U 10P-50 D CH GRM	a
KEY		O	C	0148 87-012-172-080	C-CAP,U 10P-50 D CH GRM	a
KEY		O	CN	0108 87-099-034-010	CONN,17P H BLK 6216	a
KEY		O	D	0110 87-A40-269-040	C-DIODE,MC2836	a
KEY		O	FL	0101 8C-CJE-609-010	FL,15-BT-89GINK	a
KEY		O	IC	0103 87-A22-043-010	IC,SPS-440-1-E1	a
KEY		O	LED0101	87-A40-317-080	LED,SLR-342VCT31 RED	a
KEY		O	LED0102	87-A41-112-010	LED,SEL2710K YEL	a
KEY		O	Q	0111 87-A30-435-040	C-TR,DTC144EKA	a
						XR-FD55 CEK
KEY		O	Q	0113 87-A30-435-040	C-TR,DTC144EKA	a
KEY		O	R	0101 88-118-153-080	C-RES,S 15K-1/10W J	a
KEY		O	R	0102 88-118-153-080	C-RES,S 15K-1/10W J	a
KEY		X	R	0105 88-121-220-080	RES,22-1/8W J	a
KEY		O	R	0106 88-108-821-080	C-RES,U 820-1/16W J	a
KEY		O	R	0108 88-108-821-080	C-RES,U 820-1/16W J	a
KEY		X	R	0110 88-100-000-010	PLATING-JW, 0.58 SN95	a
KEY		O	R	0136 88-108-102-080	C-RES,U 1K-1/16W J	a
KEY		O	R	0138 88-108-563-080	C-RES,U 56K-1/16W J	a
KEY		O	R	0145 88-108-223-080	C-RES,U 22K-1/16W J	a
KEY		O	R	0146 88-108-223-080	C-RES,U 22K-1/16W J	a
KEY		X	R	0147 88-108-221-080	C-RES,U 220-1/16W J	a
KEY		O	R	0148 88-108-272-080	C-RES,U 2.7K-1/16W J	a
KEY		O	R	0150 88-108-103-080	C-RES,U 10K-1/16W J	a
KEY		O	R	0151 88-108-103-080	C-RES,U 10K-1/16W J	a
KEY		O	R	0157 88-108-103-080	C-RES,U 10K-1/16W J	a
KEY		O	R	0158 88-108-103-080	C-RES,U 10K-1/16W J	a
KEY		O	R	0159 88-108-103-080	C-RES,U 10K-1/16W J	a
KEY		O	R	0160 88-108-103-080	C-RES,U 10K-1/16W J	a
KEY		O	R	0170 88-108-103-080	C-RES,U 10K-1/16W J	a
						XR-FD55 CEK
KEY		O	R	0171 88-108-122-080	C-RES,U 1.2K-1/16W J	a
KEY		O	R	0172 88-108-122-080	C-RES,U 1.2K-1/16W J	a
KEY		X	R	0173 88-108-222-080	C-RES,U 2.2K-1/16W J	a
KEY		X	R	0174 88-108-222-080	C-RES,U 2.2K-1/16W J	a
KEY		O	R	0175 88-108-332-080	C-RES,U 3.3K-1/16W J	a
KEY		X	R	0176 88-108-472-080	C-RES,U 4.7K-1/16W J	a
KEY		O	R	0177 88-108-822-080	C-RES,U 8.2K-1/16W J	a
KEY		O	R	0178 88-108-183-080	C-RES,U 18K-1/16W J	a
KEY		X	R	0179 88-108-393-080	C-RES,U 39K-1/16W J	a
KEY		O	R	0212 88-108-103-080	C-RES,U 10K-1/16W J	a
KEY		O	R	0213 88-108-122-080	C-RES,U 1.2K-1/16W J	a
KEY		O	R	0214 88-108-122-080	C-RES,U 1.2K-1/16W J	a
KEY		X	R	0215 88-108-222-080	C-RES,U 2.2K-1/16W J	a
KEY		X	R	0216 88-108-222-080	C-RES,U 2.2K-1/16W J	a
KEY		O	R	0217 88-108-332-080	C-RES,U 3.3K-1/16W J	a
KEY		X	R	0218 88-108-472-080	C-RES,U 4.7K-1/16W J	a
KEY		O	R	0219 88-108-822-080	C-RES,U 8.2K-1/16W J	a
KEY		O	R	0220 88-108-183-080	C-RES,U 18K-1/16W J	a
KEY		X	R	0221 88-108-393-080	C-RES,U 39K-1/16W J	a
KEY		O	S	0101 87-A91-024-180	SW,TACT KSHG611BT	a
						XR-FD55 CEK
KEY		O	S	0102 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0103 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0104 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0105 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0106 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0107 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0108 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0109 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0110 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0111 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0112 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0113 87-A92-419-010	SW,RTRY EC12E24304WITH VC	a
KEY		O	S	0114 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0115 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0116 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0117 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0118 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0119 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0120 87-A91-024-180	SW,TACT KSHG611BT	a
KEY		O	S	0123 87-A90-894-010	SW,RTRY EC12E12444	a

ELECTRICAL PARTS LIST - 7/16

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
LED	O C	0130	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
LED	O C	0131	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
LED	O C	0136	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
LED	O C	0138	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
LED	O CN	0106	87-A60-538-010	CONN,5P H TUC-P05X-B1	a
LED	O D	0105	87-A40-821-080	LED,SMLS1BE16C BLU/UMB	a
LED	O D	0106	87-A40-821-080	LED,SMLS1BE16C BLU/UMB	a
LED	X R	0222	88-108-560-080	C-RES,U 56-1/16W J	a
LED	O R	0223	88-108-103-080	C-RES,U 10K-1/16W J	a
LED	O R	0224	88-108-103-080	C-RES,U 10K-1/16W J	a
LED	X R	0226	88-108-151-080	C-RES,U 150-1/16W J	a
LED	X R	0227	88-108-560-080	C-RES,U 56-1/16W J	a
LED	O R	0228	88-108-103-080	C-RES,U 10K-1/16W J	a
LED	O R	0229	88-108-103-080	C-RES,U 10K-1/16W J	a
LED	X R	0233	88-108-151-080	C-RES,U 150-1/16W J	a
MAIN	O C	0001	87-A10-520-000	CAP,E 3300-35 M SMG	a
MAIN	O C	0002	87-A10-520-000	CAP,E 3300-35 M SMG	a
MAIN	O C	0003	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN	O C	0004	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN	O C	0005	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
					XR-FD55 CEK
MAIN	O C	0006	87-A12-317-080	C-CAP,U 0.1-50 Z F	a
MAIN	O C	0009	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0010	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0011	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0012	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0013	87-012-282-080	C-CAP,U 4700P-50 K B GRM	a
MAIN	O C	0014	87-010-384-040	CAP,E 100-25 M 11L SME	a
MAIN	O C	0016	87-012-282-080	C-CAP,U 4700P-50 K B GRM	a
MAIN	O C	0017	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0021	87-010-928-000	CAP,E 4700-25 M SMG	a
MAIN	O C	0022	87-010-928-000	CAP,E 4700-25 M SMG	a
MAIN	O C	0025	87-010-247-080	CAP,E 100-50 M SME	a
MAIN	O C	0026	87-010-247-080	CAP,E 100-50 M SME	a
MAIN	O C	0029	87-010-393-080	CAP,E 100-35 M SME	a
MAIN	O C	0030	87-010-393-080	CAP,E 100-35 M SME	a
MAIN	O C	0031	87-010-263-040	CAP,E 100-10 M 11L SME	a
MAIN	O C	0034	87-010-260-040	CAP,E 47-25 M 11L SME	a
MAIN	O C	0035	87-010-391-040	CAP,E 10-35 M 11L SME	a
MAIN	O C	0036	87-010-386-080	CAP,E 330-25 M SME	a
MAIN	O C	0041	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
					XR-FD55 CEK
MAIN	O C	0042	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0043	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0044	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0045	87-A12-829-000	CAP,E 4700-25 M 85 GS	a
MAIN	O C	0051	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0053	87-010-252-080	CAP,E 1000-6.3 M SME	a
MAIN	O C	0060	87-010-403-040	CAP,E 3.3-50 M 11L SME	a
MAIN	O C	0061	87-010-260-040	CAP,E 47-25 M 11L SME	a
MAIN	O C	0101	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN	O C	0102	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN	O C	0103	87-015-698-040	CAP,E 4.7-50 M 7L SRA	a
MAIN	O C	0104	87-015-698-040	CAP,E 4.7-50 M 7L SRA	a
MAIN	O C	0109	87-015-681-040	CAP,E 10-16 7L SRA	a
MAIN	O C	0110	87-015-681-040	CAP,E 10-16 7L SRA	a
MAIN	O C	0111	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0112	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0225	87-A10-307-080	CAP,M 0.1-50 J	a
MAIN	O C	0226	87-A10-307-080	CAP,M 0.1-50 J	a
MAIN	O C	0227	87-A10-307-080	CAP,M 0.1-50 J	a
MAIN	O C	0228	87-A10-307-080	CAP,M 0.1-50 J	a
					XR-FD55 CEK
MAIN	O C	0229	87-010-191-080	C-CAP,S 0.015-50 Z F GRM	a
MAIN	O C	0230	87-010-191-080	C-CAP,S 0.015-50 Z F GRM	a
MAIN	O C	0231	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0232	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0233	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0303	87-012-275-080	C-CAP,U 1200P-50 K B GRM	a
MAIN	O C	0304	87-012-275-080	C-CAP,U 1200P-50 K B GRM	a
MAIN	O C	0305	87-012-270-080	C-CAP,U 470P-50 K B GRM	a
MAIN	O C	0363	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0451	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0452	87-015-690-040	CAP,E 22-35 M 7L SRA	a
MAIN	O C	0453	87-012-279-080	C-CAP,U 2700P-50 K B GRM	a
MAIN	O C	0454	87-012-279-080	C-CAP,U 2700P-50 K B GRM	a
MAIN	O C	0455	87-012-279-080	C-CAP,U 2700P-50 K B GRM	a
MAIN	O C	0456	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0457	87-A12-361-080	CAP,M 5600P-100 J CP	a
MAIN	O C	0458	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN	O C	0459	87-012-271-080	C-CAP,U 560P-50 K B GRM	a
MAIN	O C	0460	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MAIN	O C	0461	87-012-158-080	C-CAP,S 390P-50 J CH GRM	a

ELECTRICAL PARTS LIST - 8/16

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
MAIN	O C	0462	87-012-158-080	C-CAP,S 390P-50 J CH GRM	a
MAIN	O C	0463	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0464	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN	O C	0601	87-012-188-080	C-CAP,U 47P-50 J CH GRM	a
MAIN	O C	0602	87-012-188-080	C-CAP,U 47P-50 J CH GRM	a
MAIN	O C	0603	87-010-555-040	CAP,E 100-10 M 5L SRE	a
MAIN	O C	0604	87-010-555-040	CAP,E 100-10 M 5L SRE	a
MAIN	O C	0605	87-012-284-080	C-CAP,U 6800P-50 K B GRM	a
MAIN	O C	0606	87-012-284-080	C-CAP,U 6800P-50 K B GRM	a
MAIN	O C	0607	87-012-273-080	C-CAP,U 820P-50 K B GRM	a
MAIN	O C	0608	87-012-273-080	C-CAP,U 820P-50 K B GRM	a
MAIN	O C	0609	87-A13-165-080	CAP,E 1-50 M FG	a
MAIN	O C	0610	87-A13-165-080	CAP,E 1-50 M FG	a
MAIN	O C	0613	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
MAIN	O C	0614	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
MAIN	O C	0615	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
MAIN	O C	0616	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
MAIN	O C	0617	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0618	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0619	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
					XR-FD55 CEK
MAIN	O C	0620	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0621	87-010-545-040	CAP,E 0.22-50 M 11L SME	a
MAIN	O C	0622	87-010-545-040	CAP,E 0.22-50 M 11L SME	a
MAIN	O C	0623	87-010-545-040	CAP,E 0.22-50 M 11L SME	a
MAIN	O C	0624	87-010-545-040	CAP,E 0.22-50 M 11L SME	a
MAIN	O C	0625	87-012-281-080	C-CAP,U 3900P-50 K B GRM	a
MAIN	O C	0626	87-012-281-080	C-CAP,U 3900P-50 K B GRM	a
MAIN	O C	0631	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
MAIN	O C	0632	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a
MAIN	O C	0633	87-012-284-080	C-CAP,U 6800P-50 K B GRM	a
MAIN	O C	0634	87-012-284-080	C-CAP,U 6800P-50 K B GRM	a
MAIN	O C	0635	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0636	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0637	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN	O C	0638	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MAIN	O C	0651	87-A13-045-040	CAP,E 220-16 M VR-GSO	a
MAIN	O C	0652	87-A13-030-040	CAP,E 47-35 M VR-GSO	a
MAIN	O C	0655	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0656	87-012-186-080	C-CAP,U 39P-50 J CH GRM	a
MAIN	O C	0657	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
					XR-FD55 CEK
MAIN	O C	0658	87-012-281-080	C-CAP,U 3900P-50 K B GRM	a
MAIN	O C	0659	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0660	87-010-402-040	CAP,E 2.2-50 M 11L SME	a
MAIN	O C	0663	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0664	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0667	87-015-684-040	CAP,E 47-16 M 7L SRA	a
MAIN	O C	0669	87-012-271-080	C-CAP,U 560P-50 K B GRM	a
MAIN	O C	0670	87-012-271-080	C-CAP,U 560P-50 K B GRM	a
MAIN	O C	0672	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0676	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0677	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MAIN	O C	0681	87-015-695-040	CAP,E 1-50 7L SRA	a
MAIN	O C	0682	87-015-695-040	CAP,E 1-50 7L SRA	a
MAIN	O C	0683	87-010-497-040	CAP,E 4.7-35 M 5L SRE	a
MAIN	O C	0684	87-015-698-040	CAP,E 4.7-50 M 7L SRA	a
MAIN	O C	0693	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0694	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	O C	0751	87-010-497-040	CAP,E 4.7-35 M 5L SRE	a
MAIN	O C	0752	87-010-497-040	CAP,E 4.7-35 M 5L SRE	a
MAIN	O C	0753	87-010-494-040	CAP,E 1-50 M 5L SRE	a
					XR-FD55 CEK
MAIN	O C	0754	87-010-494-040	CAP,E 1-50 M 5L SRE	a
MAIN	O C	0755	87-010-754-080	CAP,E 220-10 M 7L SRA	a
MAIN	O C	0756	87-A10-189-040	CAP,E 220-10 M 5L	a
MAIN	O C	0803	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MAIN	X	CLP0301	87-A60-884-010	PIN,DIA1 COATING-SHS	a
MAIN	O CN	0101	87-A61-108-010	CONN,5P V TID-A	a
MAIN	O CN	0302	87-A60-625-010	CONN,8P V 2MM JMT	a
MAIN	O CN	0601	87-099-394-010	CONN,28P V BLK 6216	a
MAIN	O CN	0602	87-099-195-010	CONN,7P V BLK 6216	a
MAIN	O CN	0604	87-099-013-010	CONN,11P V BLK 6216	a
MAIN	O CN	0605	87-A60-998-010	CONN,15P V BLK TAC-L15X-A3	a
MAIN	O CN	0607	87-099-195-010	CONN,7P V BLK 6216	a
MAIN	O CN	0608	87-099-014-010	CONN,12P V BLK 6216	a
MAIN	O CNA0001	8C-CJE-602-010	CONN ASSY,11P TID-A200		a
MAIN	O D	0001	87-A40-455-080	DIODE,RL203 GW	a
MAIN	O D	0002	87-A40-455-080	DIODE,RL203 GW	a
MAIN	O D	0003	87-A40-455-080	DIODE,RL203 GW	a
MAIN	O D	0004	87-A40-455-080	DIODE,RL203 GW	a
MAIN	O D	0005	87-A40-455-080	DIODE,RL203 GW	a
MAIN	O D	0006	87-A40-455-080	DIODE,RL203 GW	a

ELECTRICAL PARTS LIST - 9/16

! = Δ 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.

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

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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
						XR-FD55 CEK
MAIN		O	D	0007	87-A40-455-080	DIODE,RL203 GW
MAIN		O	D	0008	87-A40-455-080	DIODE,RL203 GW
MAIN		O	D	0011	87-A40-270-040	C-DIODE,MC2838
MAIN		O	D	0012	87-020-465-080	DIODE,1SS133
MAIN		O	D	0013	87-A40-764-080	ZENER,UZ10BSC
MAIN		O	D	0014	87-A40-455-080	DIODE,RL203 GW
MAIN		O	D	0015	87-A40-455-080	DIODE,RL203 GW
MAIN		O	D	0027	87-A40-553-080	DIODE,1N4003 LES
MAIN		O	D	0029	87-A40-686-080	ZENER,MTZJ39D
MAIN		O	D	0030	87-A40-553-080	DIODE,1N4003 LES
MAIN		O	D	0033	87-020-465-080	DIODE,1SS133
MAIN		O	D	0041	87-A40-270-040	C-DIODE,MC2838
MAIN		O	D	0042	87-A40-269-040	C-DIODE,MC2836
MAIN		O	D	0061	87-A40-752-080	ZENER,UZ6.2BSC
MAIN		O	D	0063	87-A40-270-040	C-DIODE,MC2838
MAIN		O	D	0064	87-A40-269-040	C-DIODE,MC2836
MAIN		O	D	0065	87-A40-270-040	C-DIODE,MC2838
MAIN		O	D	0066	87-A40-750-080	ZENER,UZ6.2BSA
MAIN		O	D	0076	87-A40-269-040	C-DIODE,MC2836
MAIN		O	D	0077	87-A40-270-040	C-DIODE,MC2838
						XR-FD55 CEK
MAIN		O	D	0093	87-A40-270-040	C-DIODE,MC2838
MAIN		O	D	0094	87-A40-269-040	C-DIODE,MC2836
MAIN		O	D	0095	87-A40-269-040	C-DIODE,MC2836
MAIN		O	D	0301	87-A40-269-040	C-DIODE,MC2836
MAIN		O	D	0621	87-020-465-080	DIODE,1SS133
MAIN		O	D	0632	87-A40-761-080	ZENER,UZ9.1BSB
MAIN		O	D	0661	87-A40-745-080	ZENER,UZ4.7BSA
MAIN		O	D	0662	87-A40-745-080	ZENER,UZ4.7BSA
MAIN		O	D	0751	87-020-465-080	DIODE,1SS133
MAIN		O	D	0752	87-020-465-080	DIODE,1SS133
MAIN		O	D	0753	87-020-465-080	DIODE,1SS133
MAIN		O	D	0754	87-020-465-080	DIODE,1SS133
MAIN		X	FB	0601	88-108-000-080	C-JUMPER,U
MAIN		X	FB	0602	88-108-000-080	C-JUMPER,U
MAIN		X	FB	0603	88-100-000-010	PLATING-JW, 0.58 SN95
MAIN		X	FB	0604	88-108-000-080	C-JUMPER,U
MAIN		O	IC	0001	87-A21-365-010	IC,NJM7808FA(A)
MAIN		O	IC	0051	87-A21-363-010	IC,NJM7805FA(A)
MAIN		O	IC	0101	87-A21-419-040	C-IC,NJM14558MD-TE2
MAIN		O	IC	0452	87-A30-076-040	C-TR,2SC3052F
						XR-FD55 CEK
MAIN		O	IC	0601	87-A22-235-040	C-IC,M61518FP
MAIN		O	IC	0602	87-017-726-040	C-IC,BU4052BCF
MAIN		O	IC	0615	87-A30-076-040	C-TR,2SC3052F
MAIN		O	IC	0616	87-A30-076-040	C-TR,2SC3052F
MAIN		O	IC	0751	87-A30-076-040	C-TR,2SC3052F
MAIN		O	IC	0751	87-A21-419-040	C-IC,NJM14558MD-TE2
MAIN		O	IC	0752	87-A30-076-040	C-TR,2SC3052F
MAIN		O	IC	0753	87-A30-075-040	C-TR,2SA1235F
MAIN		O	IC	0803	87-A22-371-010	IC,GP1FA501RZ
MAIN		O	J	0203	87-A60-238-010	TERMINAL,SP 4P (MSC)
MAIN		O	J	0205	87-099-801-010	JACK,PIN 1P BLK W/O SW
MAIN		O	J	0602	87-A60-881-010	JACK,PIN 2P MSP 242V05 PBSN
MAIN		O	L	0201	87-A50-611-010	COIL,1UH K(CS)
MAIN		O	L	0202	87-A50-611-010	COIL,1UH K(CS)
MAIN		O	L	0451	87-007-342-010	COIL,OSC 85KHZ BIAS
MAIN		O	Q	0001	87-A30-630-080	TR,2SC5343GL
MAIN		O	Q	0002	87-A30-630-080	TR,2SC5343GL
MAIN		O	Q	0003	87-A30-076-040	C-TR,2SC3052F
MAIN		O	Q	0009	87-A30-494-080	TR,2SA1980G
MAIN		O	Q	0010	87-A30-076-040	C-TR,2SC3052F
						XR-FD55 CEK
MAIN		O	Q	0011	87-A30-614-010	TR,2SB1548
MAIN		O	Q	0012	87-A30-630-080	TR,2SC5343GL
MAIN		O	Q	0013	87-A30-076-040	C-TR,2SC3052F
MAIN		O	Q	0014	87-A30-076-040	C-TR,2SC3052F
MAIN		O	Q	0060	87-A30-076-040	C-TR,2SC3052F
MAIN		O	Q	0061	87-A30-075-040	C-TR,2SA1235F
MAIN		O	Q	0062	87-A30-076-040	C-TR,2SC3052F
MAIN		O	Q	0063	87-A30-075-040	C-TR,2SA1235F
MAIN		O	Q	0064	87-A30-076-040	C-TR,2SC3052F
MAIN		O	Q	0065	87-A30-075-040	C-TR,2SA1235F
MAIN		O	Q	0066	87-026-245-080	TR,DTC114ES
MAIN		O	Q	0305	87-A30-091-080	FET,2SJ460
MAIN		O	Q	0306	87-A30-091-080	FET,2SJ460
MAIN		O	Q	0307	87-A30-090-080	FET,2SK2541
MAIN		O	Q	0308	87-A30-090-080	FET,2SK2541
MAIN		O	Q	0309	87-A30-090-080	FET,2SK2541
MAIN		O	Q	0451	87-A30-630-080	TR,2SC5343GL
MAIN		O	Q	0453	89-333-317-880	TR,2SC3331(T/U)
MAIN		O	Q	0454	89-333-317-880	TR,2SC3331(T/U)
MAIN		O	Q	0601	87-A30-538-040	C-TR,SRA2202S

ELECTRICAL PARTS LIST - 10/16

! = Δ SAFTY PARTS
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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
						XR-FD55 CEK
MAIN		O	Q	0621 87-A30-494-080	TR,2SA1980G	a
MAIN		O	Q	0622 87-A30-288-040	C-TR,DTC114YKA	a
MAIN		X	R	0001 88-130-159-080	RES,1.5-1/4W J	a
MAIN		X	R	0002 88-130-159-080	RES,1.5-1/4W J	a
MAIN		X	R	0005 88-130-159-080	RES,1.5-1/4W J	a
MAIN		X	R	0006 88-130-159-080	RES,1.5-1/4W J	a
MAIN		O	R	0009 88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN		O	R	0010 88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN		O	R	0011 88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN		O	R	0012 88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN		X	R	0013 88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN		X	R	0014 88-118-100-080	C-RES,S 10-1/10W J	a
MAIN		X	R	0015 88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN		X	R	0018 88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN		X	R	0019 88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN		O	R	0024 88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN		O	R	0026 88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN		X	R	0027 88-100-000-010	PLATING-JW, 0.58 SN95	a
MAIN		X	R	0028 88-108-221-080	C-RES,U 220-1/16W J	a
MAIN		O	R	0029 88-108-473-080	C-RES,U 47K-1/16W J	a
						XR-FD55 CEK
MAIN		X	R	0031 88-108-154-080	C-RES,U 150K-1/16W J	a
MAIN		O	R	0032 88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN		O	R	0033 88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN		O	R	0035 88-108-123-080	C-RES,U 12K-1/16W J	a
MAIN		X	R	0041 88-121-181-080	RES,180-1/8W J	a
MAIN		O	R	0042 88-121-121-080	RES,120-1/8W J	a
MAIN		X	R	0043 88-118-121-080	C-RES,S 120-1/10W J	a
MAIN		X	R	0044 88-118-121-080	C-RES,S 120-1/10W J	a
MAIN		X	R	0045 88-118-121-080	C-RES,S 120-1/10W J	a
MAIN		X	R	0046 88-121-181-080	RES,180-1/8W J	a
MAIN		X	R	0048 88-121-151-080	RES,150-1/8W J	a
MAIN		O	R	0051 88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN		O	R	0052 88-121-102-080	RES,1K-1/8W J	a
MAIN		X	R	0056 88-118-680-080	C-RES,S 68-1/10W J	a
MAIN		X	R	0057 88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN		O	R	0058 88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN		X	R	0059 88-108-221-080	C-RES,U 220-1/16W J	a
MAIN		O	R	0060 88-108-471-080	C-RES,U 470-1/16W J	a
MAIN		O	R	0061 88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN		O	R	0062 88-108-223-080	C-RES,U 22K-1/16W J	a
						XR-FD55 CEK
MAIN		O	R	0063 88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN		O	R	0064 88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN		O	R	0065 88-108-123-080	C-RES,U 12K-1/16W J	a
MAIN		X	R	0066 88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN		O	R	0067 88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN		O	R	0068 88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN		O	R	0069 88-108-101-080	C-RES,U 100-1/16W J	a
MAIN		X	R	0070 88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN		X	R	0071 88-108-152-080	C-RES,U 1.5K-1/16W J	a
MAIN		O	R	0072 88-121-103-080	RES,10K-1/8W J	a
MAIN		O	R	0076 88-121-473-080	RES,47K-1/8W J	a
MAIN		X	R	0077 88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN		O	R	0078 88-108-823-080	C-RES,U 82K-1/16W J	a
MAIN		O	R	0084 88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN		O	R	0085 88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN		O	R	0086 88-108-563-080	C-RES,U 56K-1/16W J	a
MAIN		O	R	0087 88-108-563-080	C-RES,U 56K-1/16W J	a
MAIN		O	R	0088 88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN		O	R	0089 88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN		O	R	0091 88-108-563-080	C-RES,U 56K-1/16W J	a
						XR-FD55 CEK
MAIN		X	R	0092 88-108-393-080	C-RES,U 39K-1/16W J	a
MAIN		O	R	0093 88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN		O	R	0094 88-108-563-080	C-RES,U 56K-1/16W J	a
MAIN		X	R	0095 88-108-393-080	C-RES,U 39K-1/16W J	a
MAIN		O	R	0096 88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN		O	R	0101 88-121-102-080	RES,1K-1/8W J	a
MAIN		O	R	0102 88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN		O	R	0103 88-108-123-080	C-RES,U 12K-1/16W J	a
MAIN		O	R	0104 88-108-123-080	C-RES,U 12K-1/16W J	a
MAIN		O	R	0105 88-108-101-080	C-RES,U 100-1/16W J	a
MAIN		O	R	0106 88-108-101-080	C-RES,U 100-1/16W J	a
MAIN		O	R	0107 88-108-563-080	C-RES,U 56K-1/16W J	a
MAIN		O	R	0108 88-108-563-080	C-RES,U 56K-1/16W J	a
MAIN		O	R	0109 88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN		O	R	0110 88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN		O	R	0111 88-121-101-080	RES,100-1/8W J	a
MAIN		O	R	0112 88-108-101-080	C-RES,U 100-1/16W J	a
MAIN		X	R	0113 88-100-000-010	PLATING-JW, 0.58 SN95	a
MAIN		X	R	0114 88-100-000-010	PLATING-JW, 0.58 SN95	a
MAIN		O	R	0247 88-130-100-080	RES,10-1/4W J	a

ELECTRICAL PARTS LIST - 11/16

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
MAIN	O R	0248	88-130-100-080	RES,10-1/4W J	a
MAIN	O R	0249	88-121-100-080	RES,10-1/8W J	a
MAIN	O R	0250	88-121-100-080	RES,10-1/8W J	a
MAIN	O R	0251	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN	O R	0252	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN	O R	0253	88-108-122-080	C-RES,U 1.2K-1/16W J	a
MAIN	O R	0303	88-108-823-080	C-RES,U 82K-1/16W J	a
MAIN	O R	0304	88-108-823-080	C-RES,U 82K-1/16W J	a
MAIN	O R	0305	88-108-224-080	C-RES,U 220K-1/16W J	a
MAIN	X R	0451	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	O R	0453	88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN	X R	0454	88-121-829-080	RES,8.2-1/8W J	a
MAIN	O R	0455	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN	O R	0456	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN	X R	0457	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN	O R	0458	88-108-563-080	C-RES,U 56K-1/16W J	a
MAIN	O R	0459	88-118-472-080	C-RES,S 4.7K-1/10W J	a
MAIN	O R	0463	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN	O R	0464	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN	O R	0601	88-108-101-080	C-RES,U 100-1/16W J	a
					XR-FD55 CEK
MAIN	O R	0602	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN	X R	0603	88-108-394-080	C-RES,U 390K-1/16W J	a
MAIN	X R	0604	88-108-394-080	C-RES,U 390K-1/16W J	a
MAIN	O R	0605	88-108-122-080	C-RES,U 1.2K-1/16W J	a
MAIN	O R	0606	88-108-122-080	C-RES,U 1.2K-1/16W J	a
MAIN	O R	0607	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN	O R	0608	88-108-183-080	C-RES,U 18K-1/16W J	a
MAIN	X R	0611	88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN	X R	0612	88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN	X R	0613	88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN	X R	0614	88-108-682-080	C-RES,U 6.8K-1/16W J	a
MAIN	O R	0615	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN	O R	0616	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN	O R	0617	88-121-333-080	RES,33K-1/8W J	a
MAIN	O R	0618	88-108-333-080	C-RES,U 33K-1/16W J	a
MAIN	O R	0619	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN	O R	0620	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN	O R	0621	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN	O R	0622	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN	X R	0623	88-108-222-080	C-RES,U 2.2K-1/16W J	a
					XR-FD55 CEK
MAIN	X R	0624	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	X R	0625	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	X R	0626	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	X R	0627	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	X R	0628	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	O R	0629	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN	O R	0630	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN	X R	0631	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	X R	0632	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	O R	0633	88-108-272-080	C-RES,U 2.7K-1/16W J	a
MAIN	O R	0634	88-108-272-080	C-RES,U 2.7K-1/16W J	a
MAIN	O R	0635	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN	O R	0636	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN	X R	0637	88-108-331-080	C-RES,U 330-1/16W J	a
MAIN	X R	0638	88-108-331-080	C-RES,U 330-1/16W J	a
MAIN	X R	0639	88-121-183-080	RES,18K-1/8W J	a
MAIN	X R	0640	88-121-183-080	RES,18K-1/8W J	a
MAIN	O R	0641	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN	X R	0642	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	X R	0643	88-108-104-080	C-RES,U 100K-1/16W J	a
					XR-FD55 CEK
MAIN	X R	0644	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN	O R	0645	88-108-473-080	C-RES,U 47K-1/16W J	a
MAIN	X R	0646	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MAIN	X R	0649	88-108-152-080	C-RES,U 1.5K-1/16W J	a
MAIN	X R	0650	88-108-152-080	C-RES,U 1.5K-1/16W J	a
MAIN	O R	0651	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN	O R	0652	88-108-101-080	C-RES,U 100-1/16W J	a
MAIN	X R	0653	88-100-000-010	PLATING-JW, 0.58 SN95	a
MAIN	O R	0654	88-108-224-080	C-RES,U 220K-1/16W J	a
MAIN	X R	0655	88-108-274-080	C-RES,U 270K-1/16W J	a
MAIN	X R	0656	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN	X R	0657	88-108-564-080	C-RES,U 560K-1/16W J	a
MAIN	X R	0658	88-108-000-080	C-JUMPER,U	a
MAIN	O R	0659	88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN	O R	0660	88-108-153-080	C-RES,U 15K-1/16W J	a
MAIN	X R	0661	88-108-182-080	C-RES,U 1.8K-1/16W J	a
MAIN	X R	0662	88-108-182-080	C-RES,U 1.8K-1/16W J	a
MAIN	O R	0663	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN	O R	0666	88-121-120-080	RES,12-1/8W J	a
MAIN	O R	0667	88-121-120-080	RES,12-1/8W J	a

ELECTRICAL PARTS LIST - 12/16

! = Δ 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.

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

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
MAIN	O R	0668	88-121-120-080	RES,12-1/8W J	a
MAIN	O R	0672	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN	X R	0673	88-108-000-080	C-JUMPER,U	a
MAIN	O R	0673	88-121-182-080	RES,1.8K-1/8W J	a
MAIN	O R	0674	88-108-123-080	C-RES,U 12K-1/16W J	a
MAIN	X R	0681	88-108-000-080	C-JUMPER,U	a
MAIN	X R	0682	88-100-000-010	PLATING-JW, 0.58 SN95	a
MAIN	X R	0685	88-108-000-080	C-JUMPER,U	a
MAIN	X R	0686	88-108-000-080	C-JUMPER,U	a
MAIN	O R	0687	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN	O R	0688	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN	X R	0689	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	X R	0690	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	X R	0691	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN	X R	0692	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN	O R	0695	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN	O R	0696	88-108-223-080	C-RES,U 22K-1/16W J	a
MAIN	X R	0697	88-108-182-080	C-RES,U 1.8K-1/16W J	a
MAIN	X R	0698	88-108-182-080	C-RES,U 1.8K-1/16W J	a
MAIN	O R	0751	88-108-333-080	C-RES,U 33K-1/16W J	a
					XR-FD55 CEK
MAIN	O R	0752	88-108-333-080	C-RES,U 33K-1/16W J	a
MAIN	O R	0753	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN	O R	0754	88-108-273-080	C-RES,U 27K-1/16W J	a
MAIN	O R	0755	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN	O R	0756	88-108-102-080	C-RES,U 1K-1/16W J	a
MAIN	X R	0757	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN	X R	0758	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN	X R	0759	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN	X R	0760	88-108-104-080	C-RES,U 100K-1/16W J	a
MAIN	X R	0761	88-108-000-080	C-JUMPER,U	a
MAIN	X R	0762	88-108-000-080	C-JUMPER,U	a
MAIN	X R	0763	88-121-183-080	RES,18K-1/8W J	a
MAIN	O R	0764	88-108-103-080	C-RES,U 10K-1/16W J	a
MAIN	X R	0765	88-108-105-080	C-RES,U 1M-1/16W J	a
MAIN	O R	0766	88-108-683-080	C-RES,U 68K-1/16W J	a
MAIN	X R	0767	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	X R	0768	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MAIN	X R	0805	88-108-000-080	C-JUMPER,U	a
MAIN	X R	0806	88-108-470-080	C-RES,U 47-1/16W J	a
MAIN	O	SFR0451	87-024-435-080	SFR,33K H RH063MC	a
					XR-FD55 CEK
MAIN	O	SFR0452	87-024-435-080	SFR,33K H RH063MC	a
MAIN	X W	0010	8C-CJE-671-010	WIRE ASSY,130 BLACK LUG	a
MAIN	X W	0011	89-950-051-110	WIRE,U24H0-5-3	a
MAIN	X W	0012	89-950-091-110	WIRE,U24H0-9-3	a
MAIN	O WH	0001	87-A91-179-010	HLD R,WIRE 2.5-11P	a
METER	O CN	0105	87-A60-539-010	CONN,5P V TUC-P05P-B1	a
METER	O CN	0109	87-099-201-010	CONN,8P H BLK 6216	a
METER	O LM	0101	8C-CJE-625-010	METER,WS23-01	a
METER	O Q	0104	87-A30-435-040	C-TR,DTC144EKA	a
METER	O Q	0106	87-A30-435-040	C-TR,DTC144EKA	a
METER	O Q	0114	87-026-609-080	TR,KTA1266GR	a
METER	O Q	0115	87-026-609-080	TR,KTA1266GR	a
METER	O Q	0116	87-A30-427-040	C-TR,DTC114EKA	a
METER	X R	0186	88-108-104-080	C-RES,U 100K-1/16W J	a
METER	O R	0187	88-108-563-080	C-RES,U 56K-1/16W J	a
METER	X R	0188	88-108-104-080	C-RES,U 100K-1/16W J	a
METER	O R	0198	88-108-563-080	C-RES,U 56K-1/16W J	a
METER	X R	0269	88-130-101-080	RES,100-1/4W J	a
METER	X R	0271	88-118-220-080	C-RES,S 22-1/10W J	a
METER	X R	0272	88-118-390-080	C-RES,S 39-1/10W J	a
					XR-FD55 CEK
METER	X R	0273	88-118-390-080	C-RES,S 39-1/10W J	a
METER	X R	0274	88-118-390-080	C-RES,S 39-1/10W J	a
METER	X R	0275	88-118-390-080	C-RES,S 39-1/10W J	a
METER	X R	0276	88-118-220-080	C-RES,S 22-1/10W J	a
METER	X R	0277	88-118-390-080	C-RES,S 39-1/10W J	a
METER	X R	0278	88-118-390-080	C-RES,S 39-1/10W J	a
METER	X R	0279	88-118-390-080	C-RES,S 39-1/10W J	a
METER	X R	0280	88-118-390-080	C-RES,S 39-1/10W J	a
METER	X R	0281	88-108-000-080	C-JUMPER,U	a
METER	X R	0282	88-108-681-080	C-RES,U 680-1/16W J	a
METER	X R	0283	88-108-000-080	C-JUMPER,U	a
METER	X R	0284	88-108-681-080	C-RES,U 680-1/16W J	a
MICON	O C	0108	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MICON	O C	0112	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MICON	O C	0113	87-010-060-040	CAP,E 100-16 M 7L SRA	a
MICON	O C	0116	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a
MICON	O C	0119	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MICON	O C	0127	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MICON	O C	0128	87-012-176-080	C-CAP,U 15P-50 J CH GRM	a
MICON	O C	0129	87-012-176-080	C-CAP,U 15P-50 J CH GRM	a

ELECTRICAL PARTS LIST - 13/16

! = SAFETY PARTS
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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
MICON	O C	0135	87-012-174-080	C-CAP,U 12P-50 J CH GRM	a
MICON	O C	0137	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a
MICON	O C	0139	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MICON	O C	0140	87-A10-189-040	CAP,E 220-10 M 5L	a
MICON	O C	0141	87-012-184-080	C-CAP,U 33P-50 J CH GRM	a
MICON	O C	0142	87-A10-353-080	C-CAP,U 0.22-10 K B	a
MICON	O C	0143	87-012-287-080	C-CAP,U 0.015-25 Z F C1608	a
MICON	O C	0152	87-012-184-080	C-CAP,U 33P-50 J CH GRM	a
MICON	O C	0153	87-012-184-080	C-CAP,U 33P-50 J CH GRM	a
MICON	O C	0201	87-010-408-040	CAP,E 47-50 M 11L SME	a
MICON	O C	0801	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MICON	O C	0802	87-010-831-080	C-CAP,U 0.1-16 Z F GRM	a
MICON	O C	0803	87-018-103-080	CAP,TC U 8.2P-50 K SL UP050	a
MICON	O C	0804	87-018-103-080	CAP,TC U 8.2P-50 K SL UP050	a
MICON	O C	0805	87-018-103-080	CAP,TC U 8.2P-50 K SL UP050	a
MICON	O C	0806	87-018-103-080	CAP,TC U 8.2P-50 K SL UP050	a
MICON	O C	0808	87-010-248-040	CAP,E 220-10 M 11L SME	a
MICON	O C	0809	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a
MICON	O C	0811	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
MICON	O C	0812	87-010-263-040	CAP,E 100-10 M 11L SME	a
					XR-FD55 CEK
MICON	X	CLP0101	87-A60-884-010	PIN,DIA1 COATING-SHS	a
MICON	O CN	0110	87-099-015-010	CONN,13P V BLK 6216	a
MICON	O CN	0111	87-099-394-010	CONN,28P V BLK 6216	a
MICON	O CN	0112	87-099-196-010	CONN,8P V BLK 6216	a
MICON	O CN	0114	87-099-019-010	CONN,17P V BLK 6216	a
MICON	O CN	0115	87-099-014-010	CONN,12P V BLK 6216	a
MICON	O CN	0116	87-099-196-010	CONN,8P V BLK 6216	a
MICON	O CN	0117	87-A61-695-010	CONN,28P V WHT FMN-BTK-A	a
MICON	O CNA	0101	8C-CJE-606-010	CONN ASSY,5P D-OUT	a
MICON	O D	0101	87-A40-269-040	C-DIODE,MC2836	a
MICON	O D	0102	87-A40-269-040	C-DIODE,MC2836	a
MICON	O D	0103	87-A40-748-080	ZENER,UZ5.6BSA	a
MICON	O D	0107	87-020-465-080	DIODE,1SS133	a
MICON	O D	0109	87-020-465-080	DIODE,1SS133	a
MICON	X FB	0801	88-100-000-010	PLATING-JW, 0.58 SN95	a
MICON	O IC	0102	8C-CJE-610-030	C-IC,LC8752B2A-50Y2	a
MICON	O IC	0801	87-A21-359-040	C-IC,SN74LV00APW	a
MICON	O IC	0802	87-A21-916-040	C-IC,SN74LV125APW	a
MICON	O IC	0804	87-A22-360-040	C-IC,S-814A31AMC	a
MICON	X JW	0131	88-108-472-080	C-RES,U 4.7K-1/16W J	a
					XR-FD55 CEK
MICON	O L	0102	8C-NFT-603-010	COIL,CLK9.43MHZ POT	a
MICON	O Q	0101	87-A30-076-040	C-TR,2SC3052F	a
MICON	O Q	0102	87-A30-494-080	TR,2SA1980G	a
MICON	O Q	0103	87-A30-076-040	C-TR,2SC3052F	a
MICON	O Q	0105	87-A30-076-040	C-TR,2SC3052F	a
MICON	O Q	0107	87-A30-484-080	C-TR,KRA102S	a
MICON	O Q	0108	87-A30-073-080	C-TR,RT1N 141C	a
MICON	O Q	0109	89-112-965-080	TR,2SA1296GR	a
MICON	O Q	0110	87-A30-495-080	TR,2SA1981Y	a
MICON	O Q	0112	87-A30-073-080	C-TR,RT1N 141C	a
MICON	O R	0111	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0112	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0113	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0114	88-108-000-080	C-JUMPER,U	a
MICON	O R	0115	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0116	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0117	88-108-000-080	C-JUMPER,U	a
MICON	X R	0118	88-108-000-080	C-JUMPER,U	a
MICON	O R	0119	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0120	88-108-000-080	C-JUMPER,U	a
					XR-FD55 CEK
MICON	O R	0121	88-121-102-080	RES,1K-1/8W J	a
MICON	O R	0122	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0123	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0124	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0125	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0126	88-108-152-080	C-RES,U 1.5K-1/16W J	a
MICON	O R	0127	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0128	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0129	88-108-152-080	C-RES,U 1.5K-1/16W J	a
MICON	O R	0130	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0131	88-108-152-080	C-RES,U 1.5K-1/16W J	a
MICON	O R	0132	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0133	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0135	88-108-104-080	C-RES,U 100K-1/16W J	a
MICON	X R	0137	88-108-104-080	C-RES,U 100K-1/16W J	a
MICON	O R	0140	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0141	88-108-104-080	C-RES,U 100K-1/16W J	a
MICON	O R	0143	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0144	88-108-472-080	C-RES,U 4.7K-1/16W J	a
MICON	O R	0149	88-108-102-080	C-RES,U 1K-1/16W J	a

ELECTRICAL PARTS LIST - 14/16

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
MICON	X R	0152	88-108-392-080	C-RES,U 3.9K-1/16W J	a
MICON	O R	0153	88-108-562-080	C-RES,U 5.6K-1/16W J	a
MICON	O R	0154	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0155	88-108-392-080	C-RES,U 3.9K-1/16W J	a
MICON	O R	0156	88-108-562-080	C-RES,U 5.6K-1/16W J	a
MICON	O R	0161	88-108-153-080	C-RES,U 15K-1/16W J	a
MICON	O R	0162	88-108-471-080	C-RES,U 470-1/16W J	a
MICON	O R	0163	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0164	88-108-392-080	C-RES,U 3.9K-1/16W J	a
MICON	O R	0165	88-108-562-080	C-RES,U 5.6K-1/16W J	a
MICON	O R	0166	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0168	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0169	88-108-000-080	C-JUMPER,U	a
MICON	O R	0180	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0181	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0182	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0183	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0185	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	X R	0189	88-108-392-080	C-RES,U 3.9K-1/16W J	a
MICON	O R	0190	88-108-102-080	C-RES,U 1K-1/16W J	a
					XR-FD55 CEK
MICON	X R	0191	88-108-392-080	C-RES,U 3.9K-1/16W J	a
MICON	O R	0192	88-121-102-080	RES,1K-1/8W J	a
MICON	O R	0193	88-121-102-080	RES,1K-1/8W J	a
MICON	O R	0194	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0195	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0196	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0197	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0199	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0200	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0201	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0202	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0203	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0204	88-121-102-080	RES,1K-1/8W J	a
MICON	O R	0205	88-121-102-080	RES,1K-1/8W J	a
MICON	O R	0206	88-121-102-080	RES,1K-1/8W J	a
MICON	O R	0207	88-121-102-080	RES,1K-1/8W J	a
MICON	O R	0208	88-121-102-080	RES,1K-1/8W J	a
MICON	O R	0209	88-108-102-080	C-RES,U 1K-1/16W J	a
MICON	O R	0210	88-108-562-080	C-RES,U 5.6K-1/16W J	a
MICON	O R	0211	88-108-562-080	C-RES,U 5.6K-1/16W J	a
					XR-FD55 CEK
MICON	O R	0225	88-108-101-080	C-RES,U 100-1/16W J	a
MICON	X R	0231	88-108-000-080	C-JUMPER,U	a
MICON	O R	0232	88-108-224-080	C-RES,U 220K-1/16W J	a
MICON	O R	0234	88-108-123-080	C-RES,U 12K-1/16W J	a
MICON	O R	0235	88-108-473-080	C-RES,U 47K-1/16W J	a
MICON	O R	0236	88-108-224-080	C-RES,U 220K-1/16W J	a
MICON	O R	0237	88-108-122-080	C-RES,U 1.2K-1/16W J	a
MICON	X R	0238	88-108-391-080	C-RES,U 390-1/16W J	a
MICON	O R	0239	88-108-153-080	C-RES,U 15K-1/16W J	a
MICON	O R	0241	88-108-103-080	C-RES,U 10K-1/16W J	a
MICON	X R	0243	88-108-124-080	C-RES,U 120K-1/16W J	a
MICON	O R	0244	88-108-333-080	C-RES,U 33K-1/16W J	a
MICON	O R	0245	88-108-563-080	C-RES,U 56K-1/16W J	a
MICON	O R	0246	88-108-153-080	C-RES,U 15K-1/16W J	a
MICON	O R	0247	88-108-273-080	C-RES,U 27K-1/16W J	a
MICON	X R	0250	88-108-222-080	C-RES,U 2.2K-1/16W J	a
MICON	O R	0251	88-108-103-080	C-RES,U 10K-1/16W J	a
MICON	X R	0252	88-100-000-010	PLATING-JW, 0.58 SN95	a
MICON	X R	0267	88-108-104-080	C-RES,U 100K-1/16W J	a
MICON	X R	0268	88-108-104-080	C-RES,U 100K-1/16W J	a
					XR-FD55 CEK
MICON	X R	0801	88-108-680-080	C-RES,U 68-1/16W J	a
MICON	X R	0802	88-108-100-080	C-RES,U 10-1/16W J	a
MICON	X R	0803	88-108-330-080	C-RES,U 33-1/16W J	a
MICON	X R	0808	88-108-000-080	C-JUMPER,U	a
MICON	X R	0809	88-108-180-080	C-RES,U 18-1/16W J	a
MICON	O X	0101	87-030-364-010	VIB,XTAL 32.768KHZ CFS-308 CT	a
PT	O C	0081	87-010-387-080	CAP,E 470-25 M SME	a
PT	O C	0085	87-A11-148-080	CAP,TC U 0.1-50 Z F	a
PT	O C	0086	87-A11-148-080	CAP,TC U 0.1-50 Z F	a
PT	! O C	0087	87-A10-479-080	CAP,CER 2200P-250 M E KH	a
PT	O CN	0081	87-A61-122-010	CONN,11P V TID-A	a
PT	! O CN	0082	87-099-674-010	CONN,2P V VA	a
PT	O D	0081	87-020-465-080	DIODE,1SS133	a
PT	O D	0082	87-020-465-080	DIODE,1SS133	a
PT	O D	0083	87-020-465-080	DIODE,1SS133	a
PT	O D	0084	87-020-465-080	DIODE,1SS133	a
PT	O D	0085	87-020-465-080	DIODE,1SS133	a
PT	X PR	0081	88-100-000-010	PLATING-JW, 0.58 SN95	a
PT	X PR	0082	88-100-000-010	PLATING-JW, 0.58 SN95	a
PT	! O PT	0001	8C-CJE-666-010	PT,K CCJ-E	a

ELECTRICAL PARTS LIST - 15/16

! = ⚠ 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
					XR-FD55 CEK
PT	!	O PT	0081 8B-MA6-675-010	PT,SUB BMA E (VRK)	a
PT	!	O RY	0081 87-A91-418-010	RELAY,AC 12V G5PA-1-M	a
PT		X W	0081 8C-CJE-608-010	WIRE ASSY,140 BLACK FASTON	a
USB		O C	0703 87-015-689-040	CAP,E 10-35 M 7L SRA	a
USB		O C	0705 87-012-178-080	C-CAP,U 18P-50 J CH GRM	a
USB		O C	0706 87-012-178-080	C-CAP,U 18P-50 J CH GRM	a
USB		O C	0710 87-015-689-040	CAP,E 10-35 M 7L SRA	a
USB		O C	0711 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
USB		O C	0712 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
USB		O C	0713 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
USB		O C	0714 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
USB		O C	0715 87-012-276-080	C-CAP,U 1500P-50 K B GRM	a
USB		O C	0716 87-012-276-080	C-CAP,U 1500P-50 K B GRM	a
USB		O C	0717 87-015-695-040	CAP,E 1-50 7L SRA	a
USB		O C	0718 87-015-695-040	CAP,E 1-50 7L SRA	a
USB		O C	0719 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
USB		O C	0720 87-012-286-080	C-CAP,U 0.01-25 K B GRM	a
USB		O C	0725 87-015-684-040	CAP,E 47-16 M 7L SRA	a
USB		O C	0727 87-015-699-040	CAP,E 10-50 M 7L SRA	a
USB		O C	0737 87-012-276-080	C-CAP,U 1500P-50 K B GRM	a
					XR-FD55 CEK
USB		O C	0738 87-012-276-080	C-CAP,U 1500P-50 K B GRM	a
USB		O CN	0701 87-099-200-010	CONN,7P H BLK 6216	a
USB		O D	0702 87-020-465-080	DIODE,1SS133	a
USB		O D	0703 87-020-465-080	DIODE,1SS133	a
USB		X FB	0701 88-108-000-080	C-JUMPER,U	a
USB		X FB	0702 88-108-000-080	C-JUMPER,U	a
USB		X FB	0704 88-108-000-080	C-JUMPER,U	a
USB		X FB	0705 88-108-000-080	C-JUMPER,U	a
USB		X FB	0706 88-108-000-080	C-JUMPER,U	a
USB		X FB	0707 88-108-000-080	C-JUMPER,U	a
USB		X FB	0708 88-108-000-080	C-JUMPER,U	a
USB		X FB	0709 88-108-000-080	C-JUMPER,U	a
USB		O IC	0701 87-A22-110-040	C-IC,PCM2702E/2K-USB DAC	a
USB		O J	0701 8C-CJE-660-010	JACK,USB-22V02-B	a
USB		O Q	0702 87-A30-432-040	C-TR,DTC124XKA	a
USB		O Q	0703 87-A30-450-040	C-TR,DTA124XKA	a
USB		X R	0704 88-100-000-010	PLATING-JW, 0.58 SN95	a
USB		X R	0705 88-108-152-080	C-RES,U 1.5K-1/16W J	a
USB		X R	0706 88-108-105-080	C-RES,U 1M-1/16W J	a
USB		X R	0707 88-108-222-080	C-RES,U 2.2K-1/16W J	a
					XR-FD55 CEK
USB		X R	0708 88-108-222-080	C-RES,U 2.2K-1/16W J	a
USB		X R	0709 88-108-220-080	C-RES,U 22-1/16W J	a
USB		X R	0710 88-108-220-080	C-RES,U 22-1/16W J	a
USB		X R	0711 88-108-220-080	C-RES,U 22-1/16W J	a
USB		O R	0715 88-108-102-080	C-RES,U 1K-1/16W J	a
USB		O R	0716 88-108-102-080	C-RES,U 1K-1/16W J	a
USB		X R	0730 88-100-000-010	PLATING-JW, 0.58 SN95	a
USB		O R	0737 88-108-102-080	C-RES,U 1K-1/16W J	a
USB		O R	0738 88-108-102-080	C-RES,U 1K-1/16W J	a
USB		X R	0740 88-108-220-080	C-RES,U 22-1/16W J	a
USB		X R	0741 88-108-100-080	C-RES,U 10-1/16W J	a
USB		O R	0743 88-108-101-080	C-RES,U 100-1/16W J	a
USB		O R	0744 88-108-101-080	C-RES,U 100-1/16W J	a
USB		O X	0701 87-A70-350-010	VIB,XTAL 12MHZ CSA-309	a

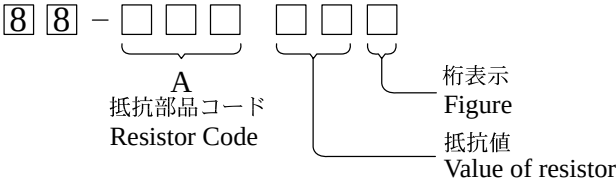
ELECTRICAL PARTS LIST - 16/16

- 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.

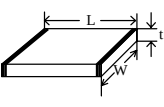
チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

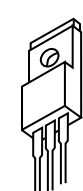
Chip Resistor Part Coding



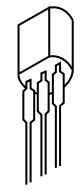
チップ抵抗
Chip resistor

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

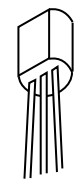
TRANSISTOR ILLUSTRATION -1/1



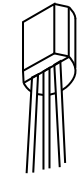
B C E
2SB1342
2SD1933



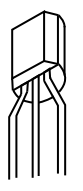
E C B
2SA1296GR



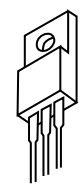
E C B
2SA1980G
2SA1981Y
2SC3331(T/U)
KTA1266GR



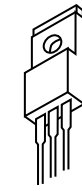
E C B
2SC5343GL



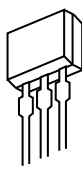
E C B
2N5551C



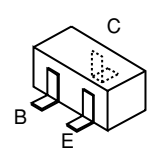
B C E
2SB1548



G D S
2SK2937



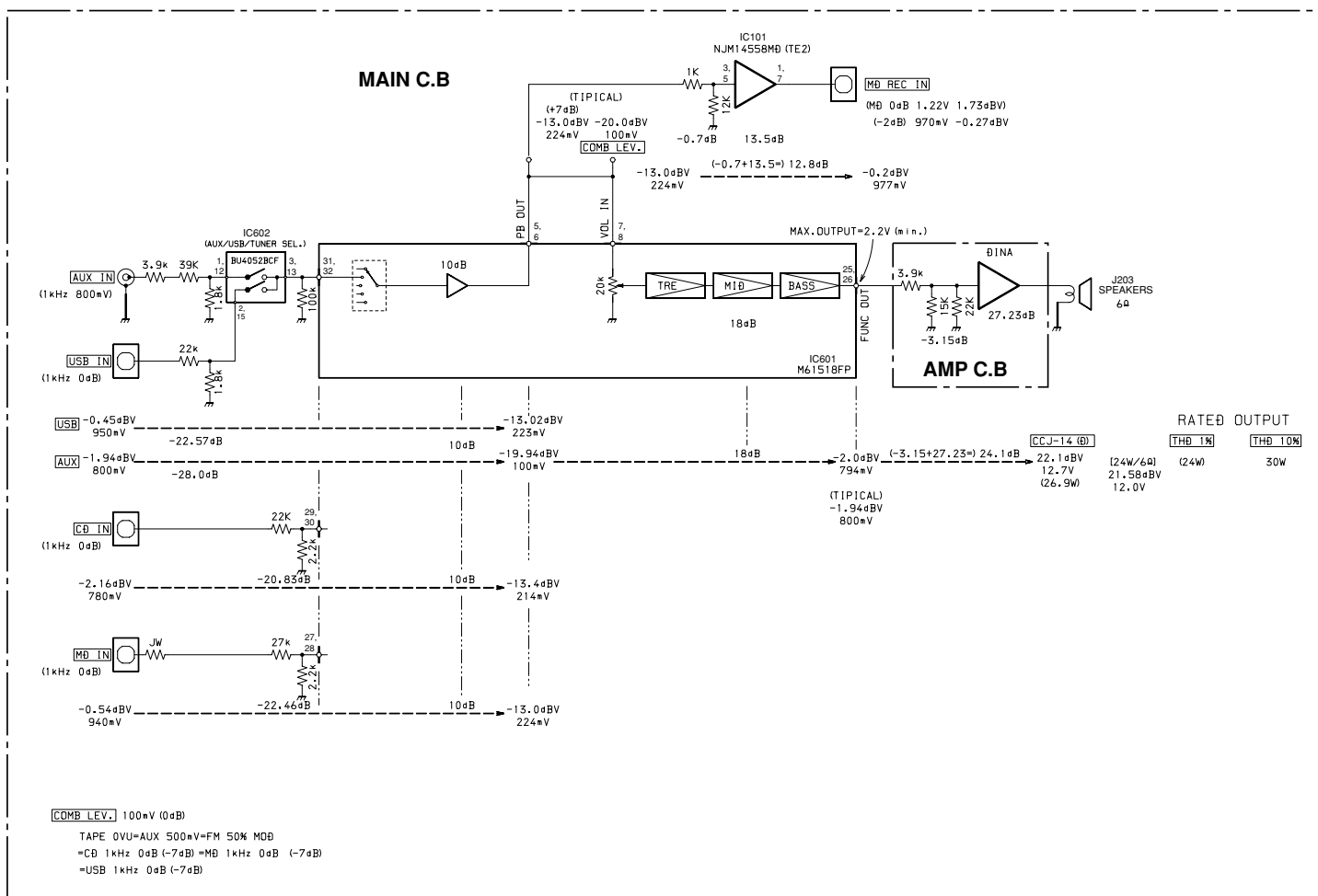
S D G
2SJ460
2SK2541



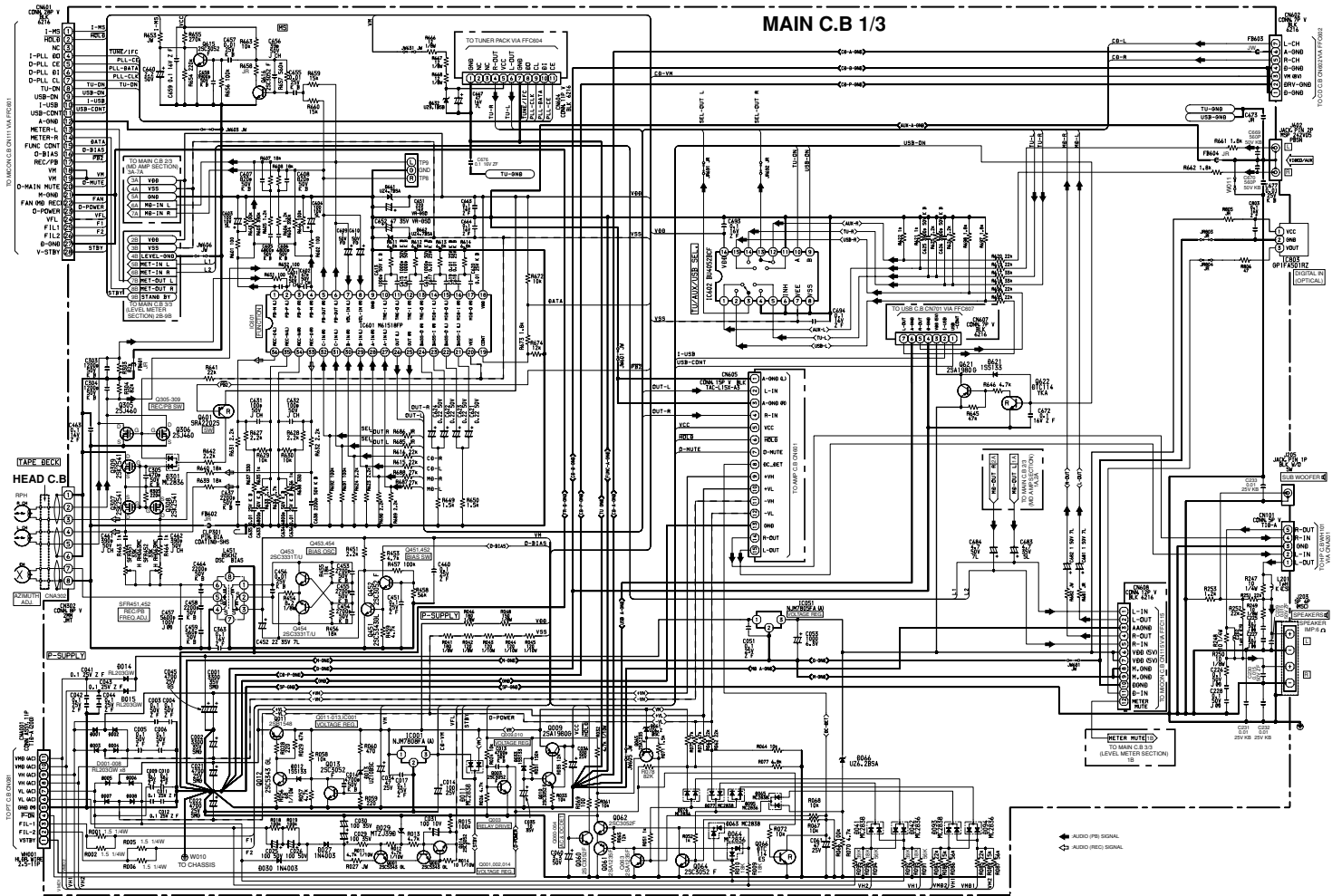
2SA1235F
2SC3052F
2SD1306NE07TL
DTA114YKA
DTA124XKA
DTC114EKA
DTC114TKA
DTC114YKA

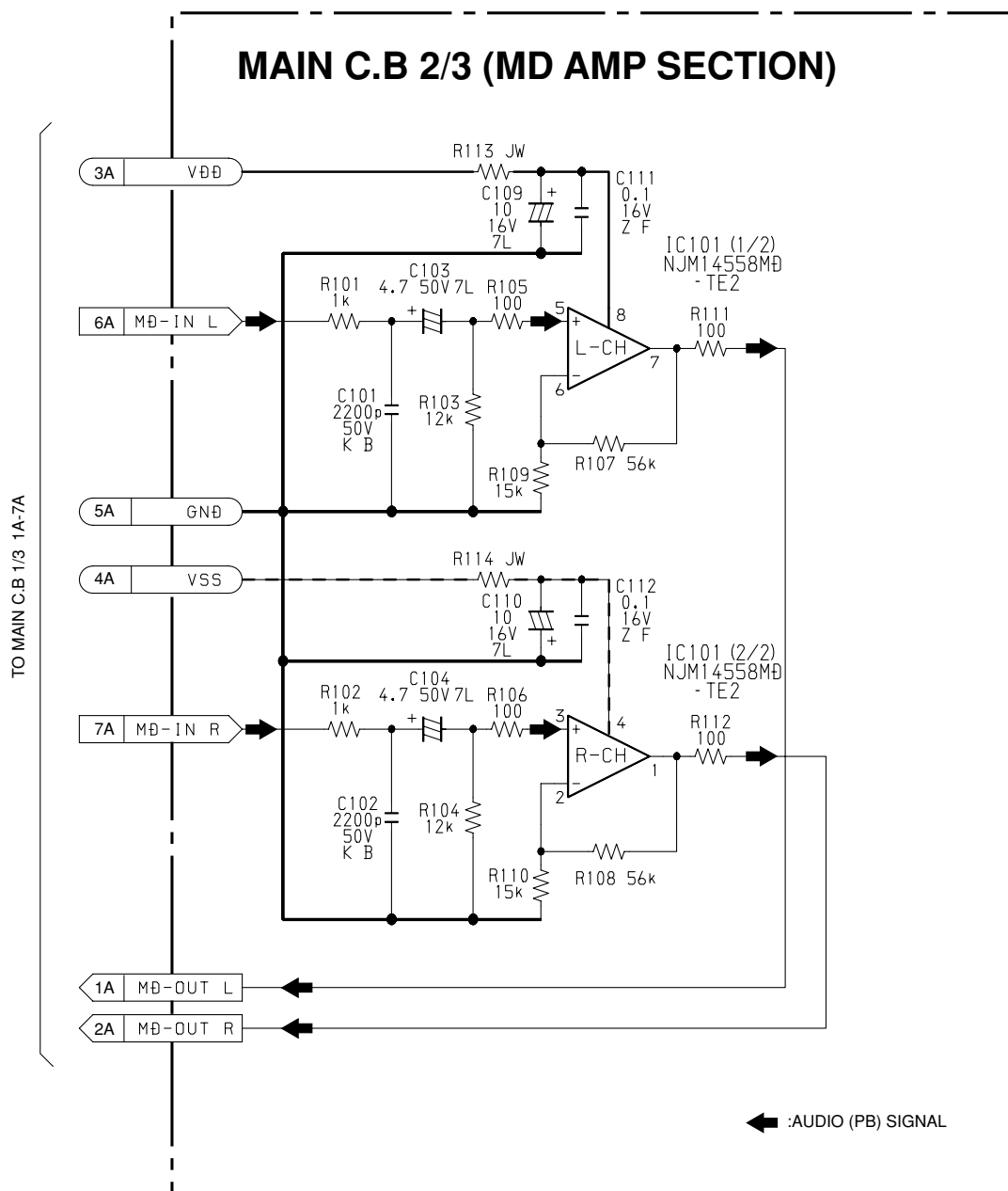
DTC124EKA
DTC124XKA
DTC144EKA
KRA102S
RT1N141C
SBT5401
SBT5551
SRA2202S

BLOCK DIAGRAM - 1/1 (LEVEL SECTION)

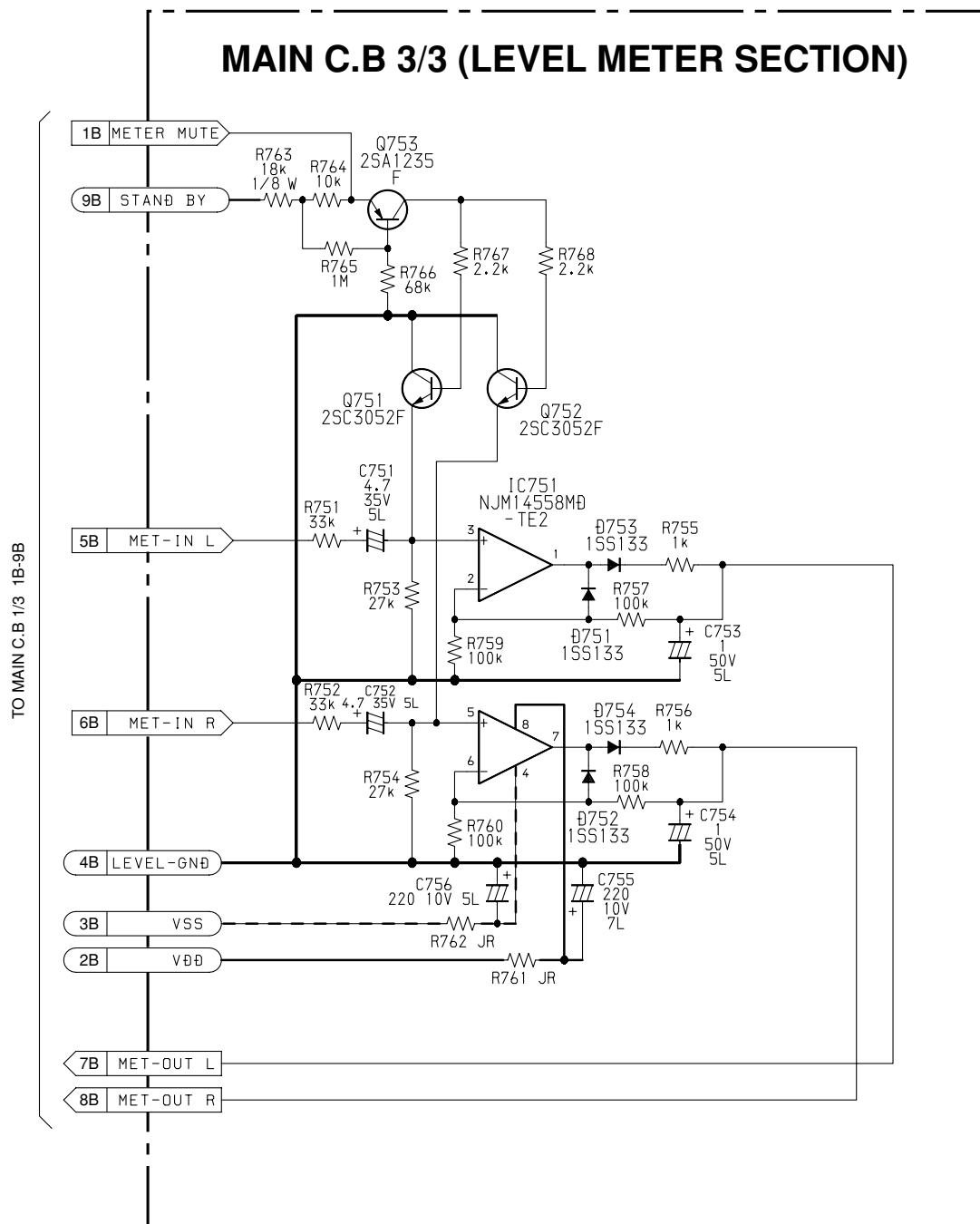


SCHEMATIC DIAGRAM - 1/10 (MAIN -1/3 SECTION)

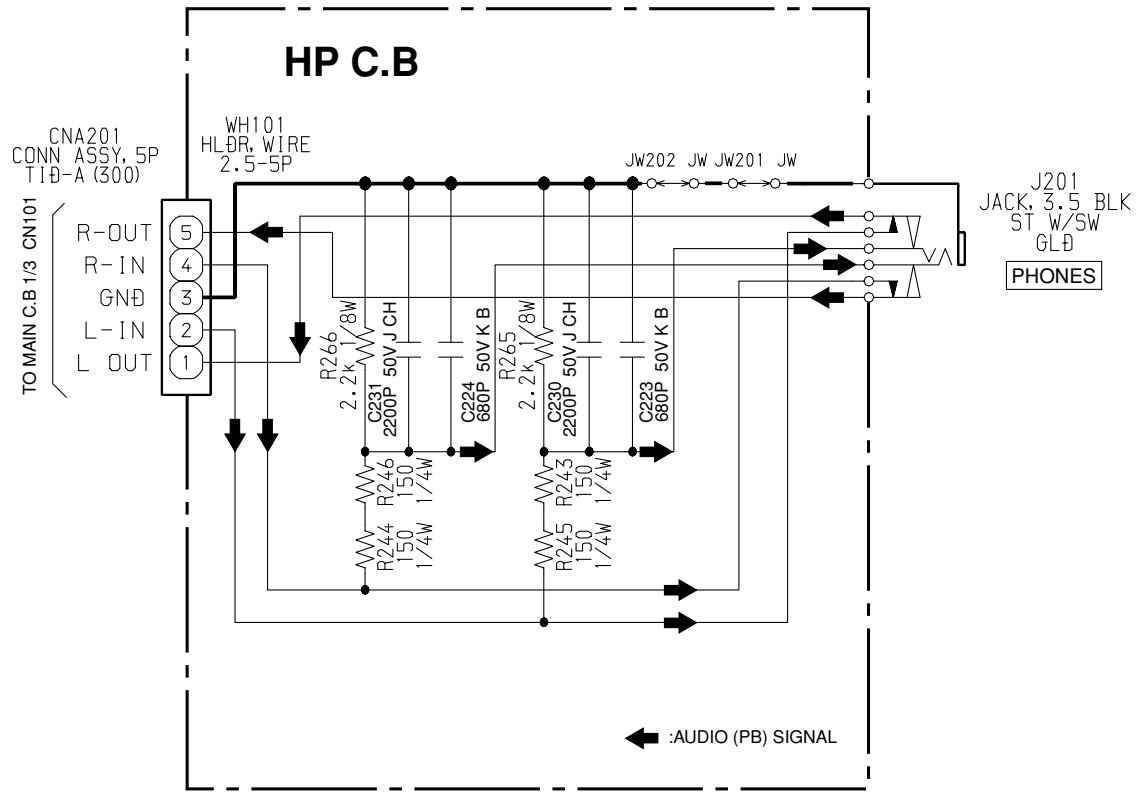




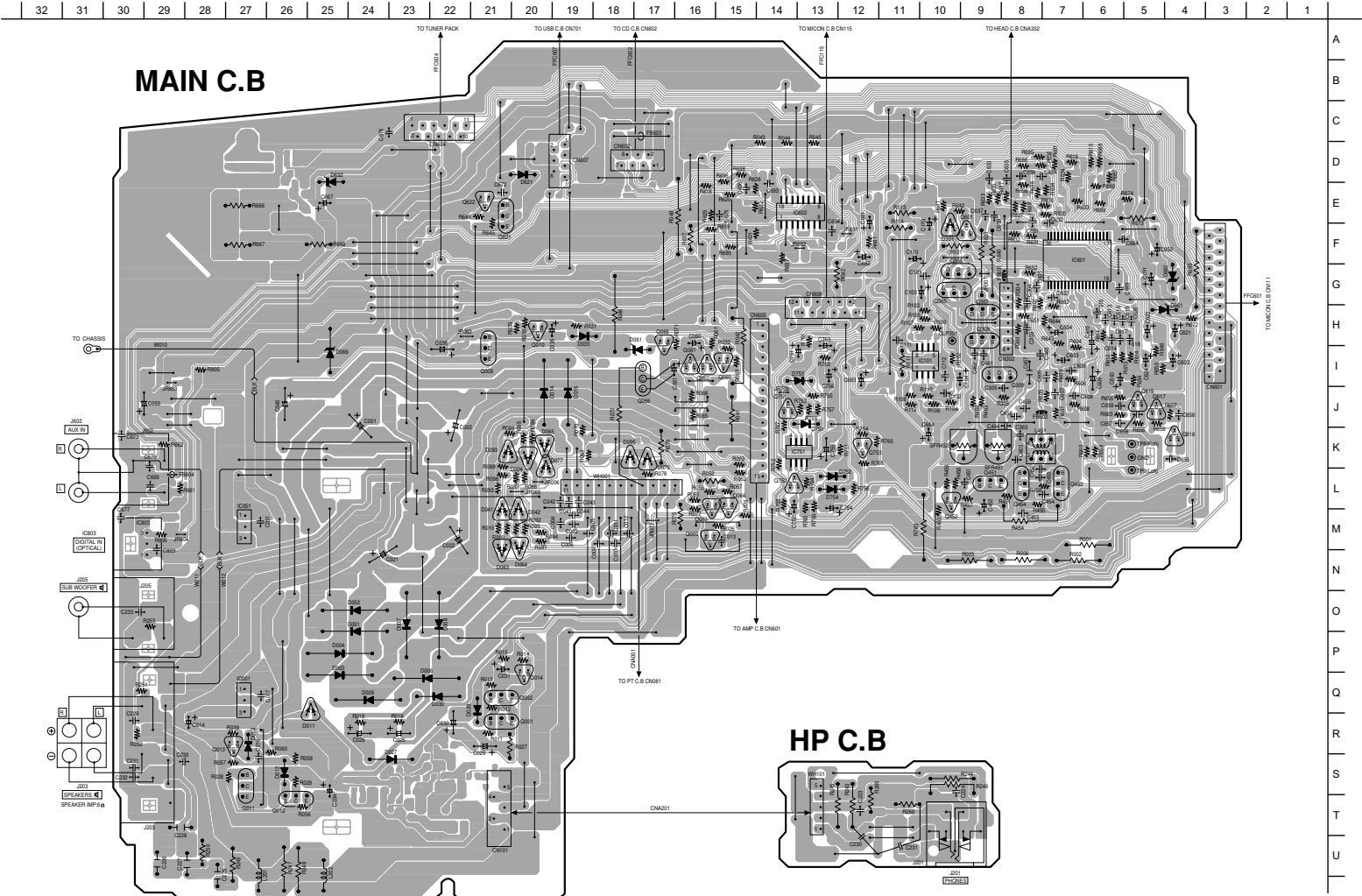
SCHEMATIC DIAGRAM -3/10 (MAIN-3/3 LEVEL METER SECTION)



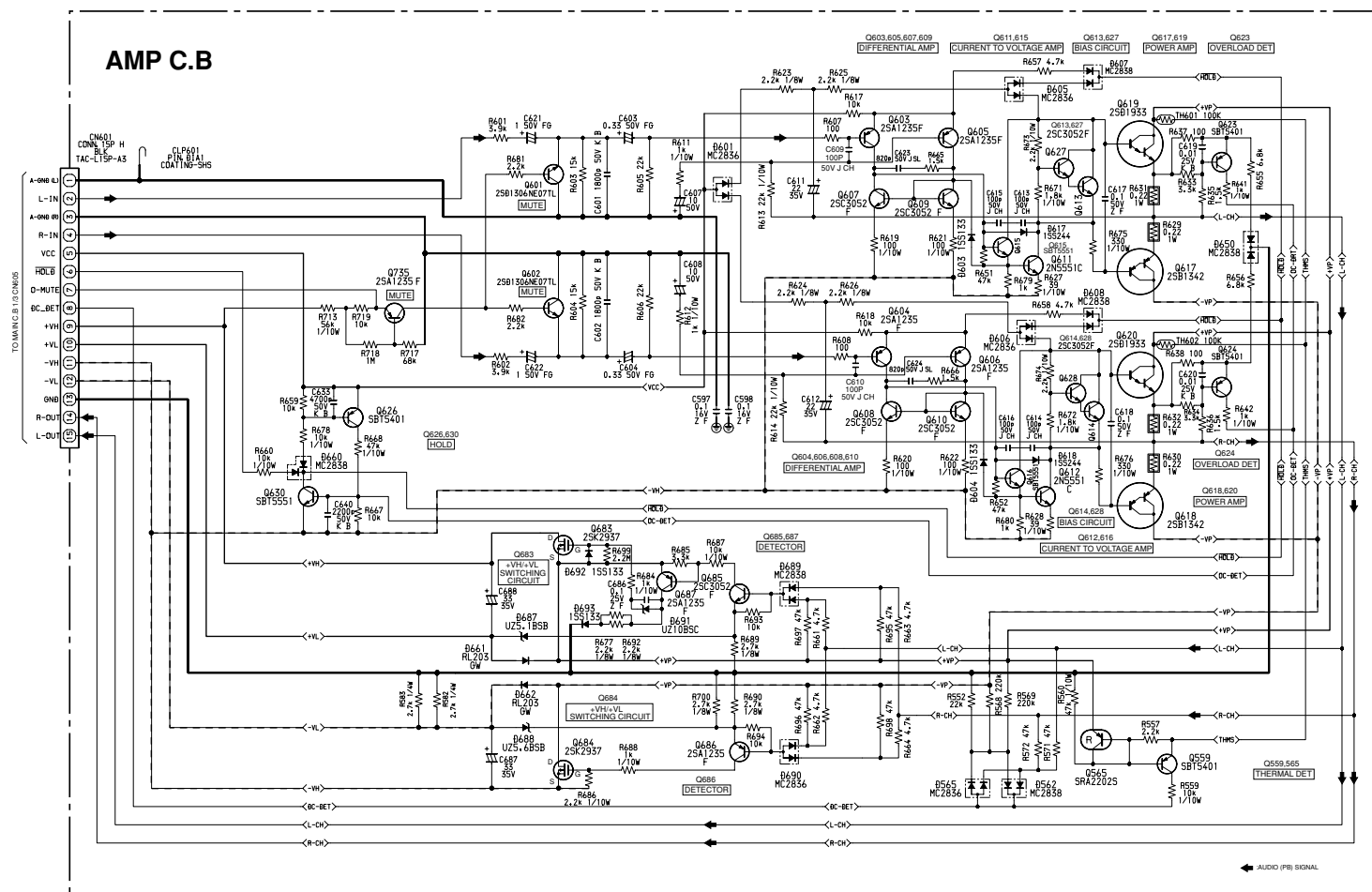
SCHEMATIC DIAGRAM -4/10 (HP SECTION)



WIRING - 1/8 (MAIN C.B./HP C.B.)



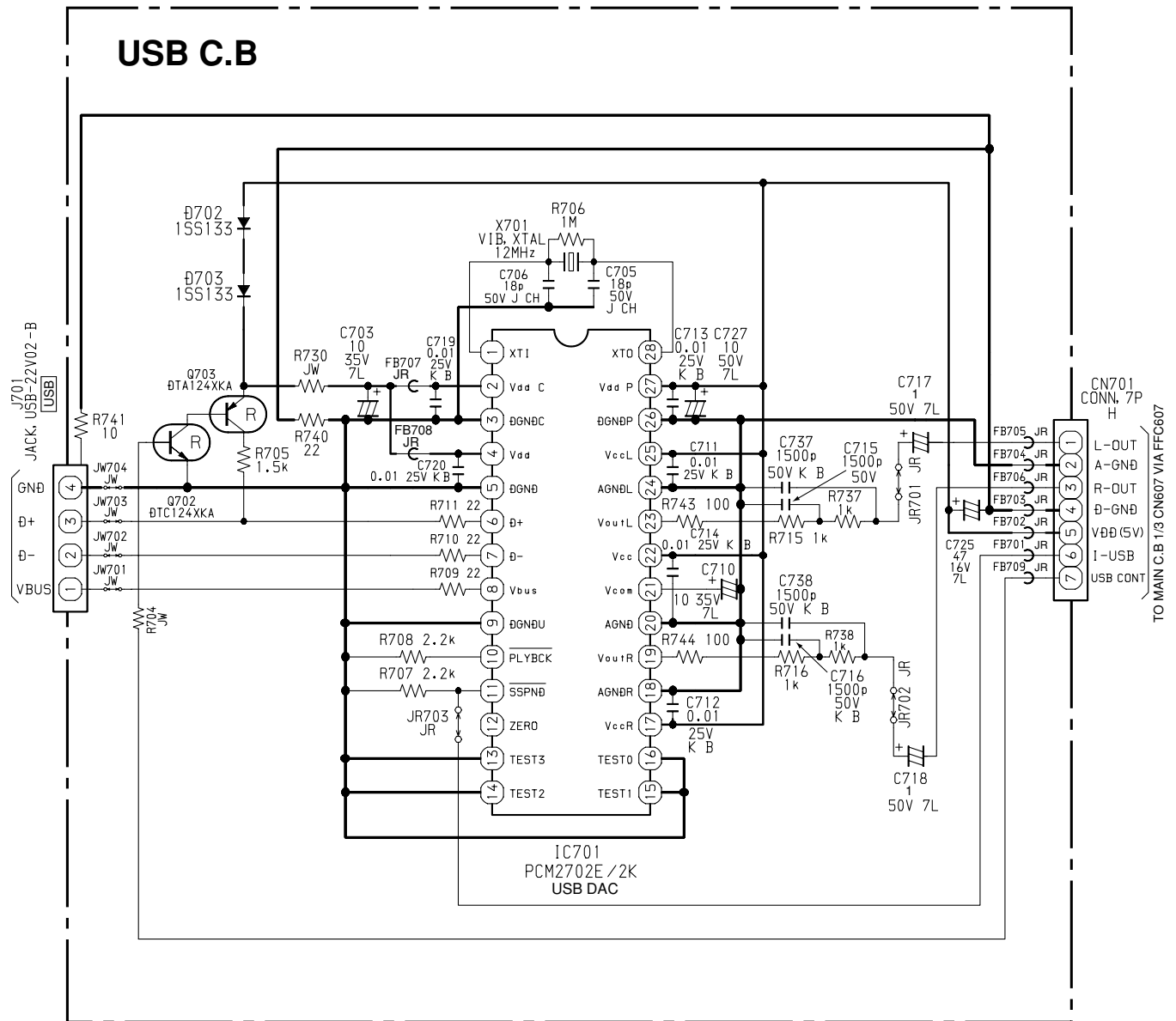
SCHEMATIC DIAGRAM - 5/10 (AMP SECTION)



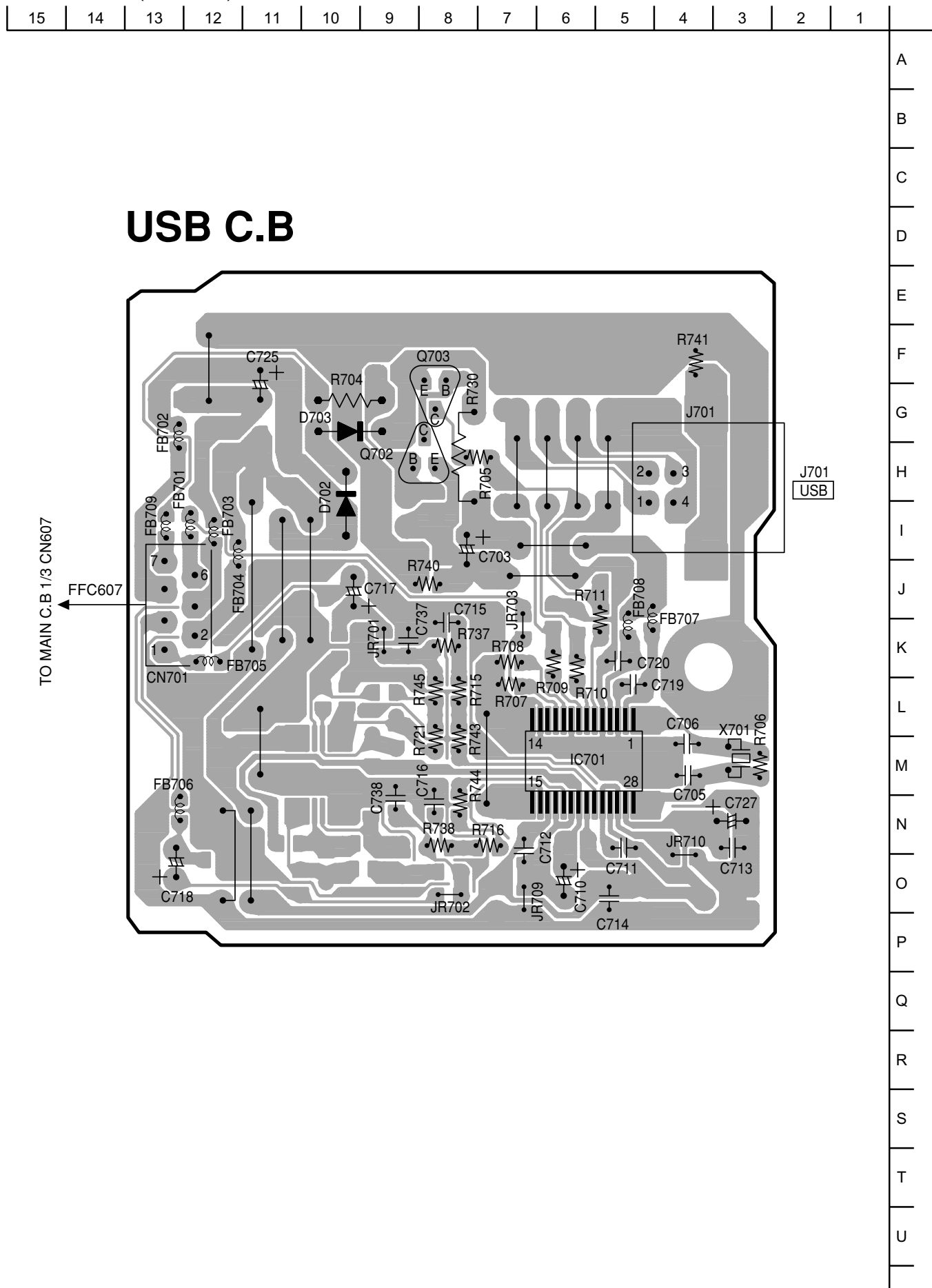
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U



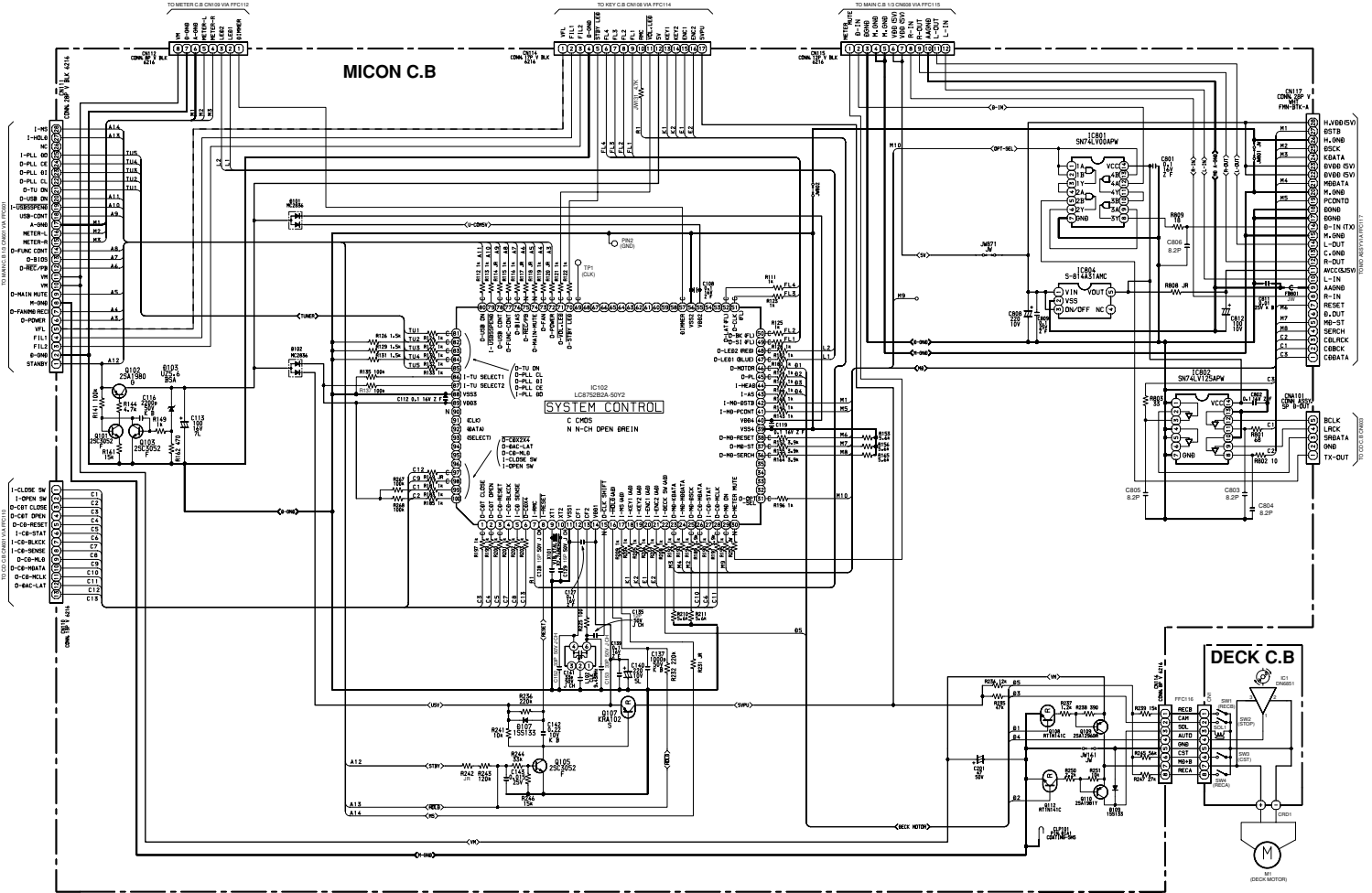
SCHEMATIC DIAGRAM -6/10 (USB SECTION)



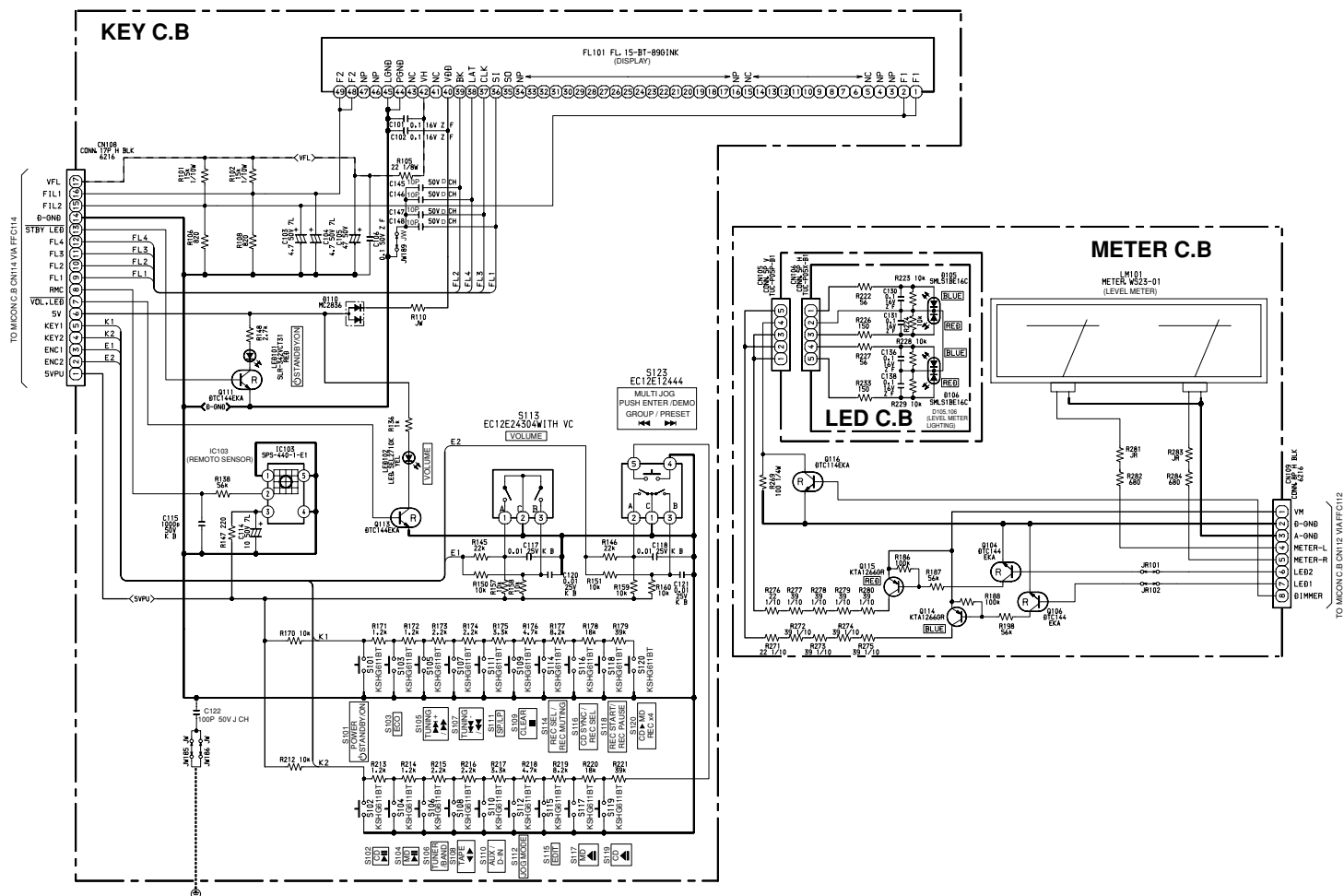
WIRING - 3/8 (USB C.B)

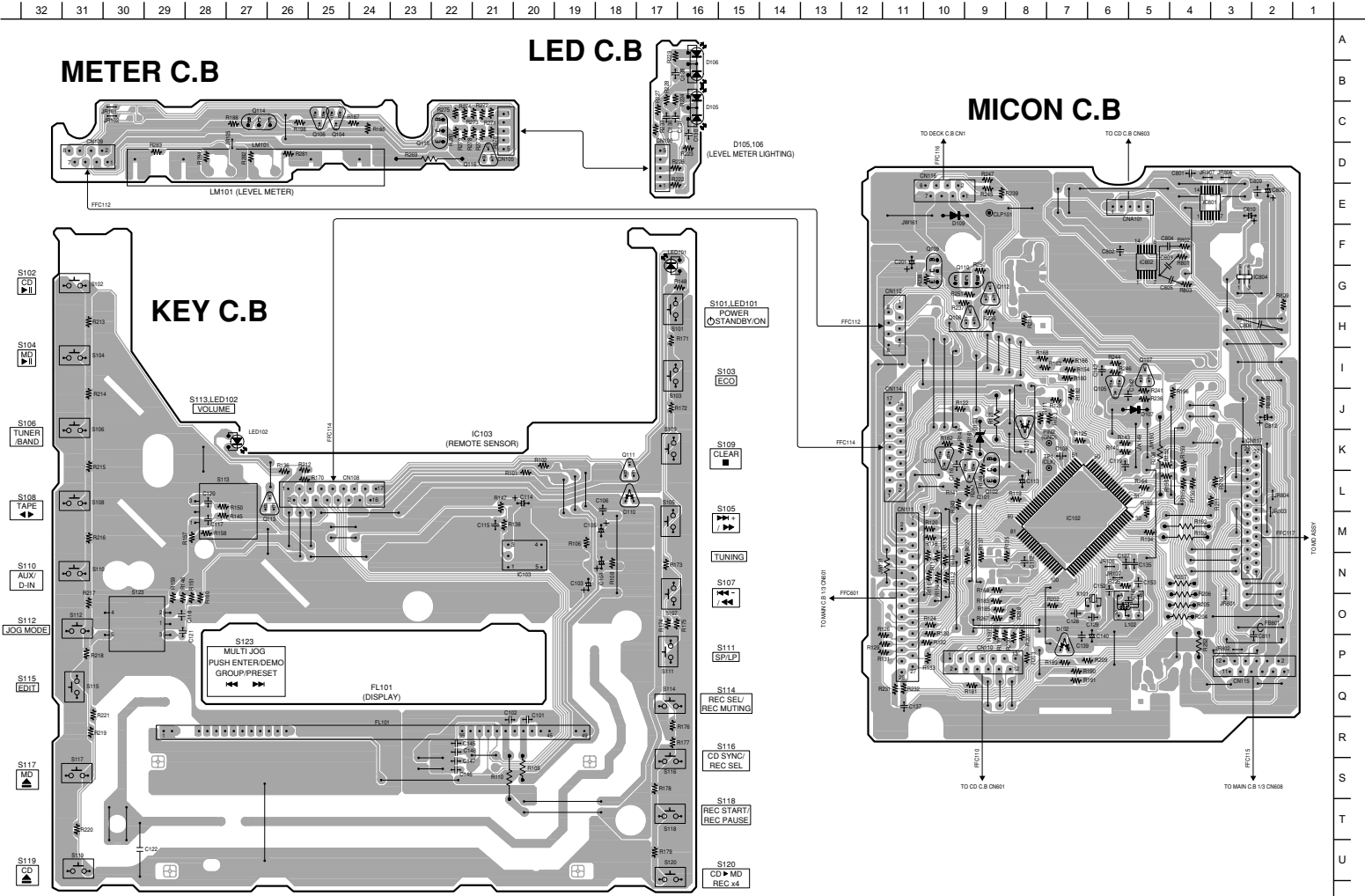


SCHEMATIC DIAGRAM - 7/10 (MICON/DECK SECTION)

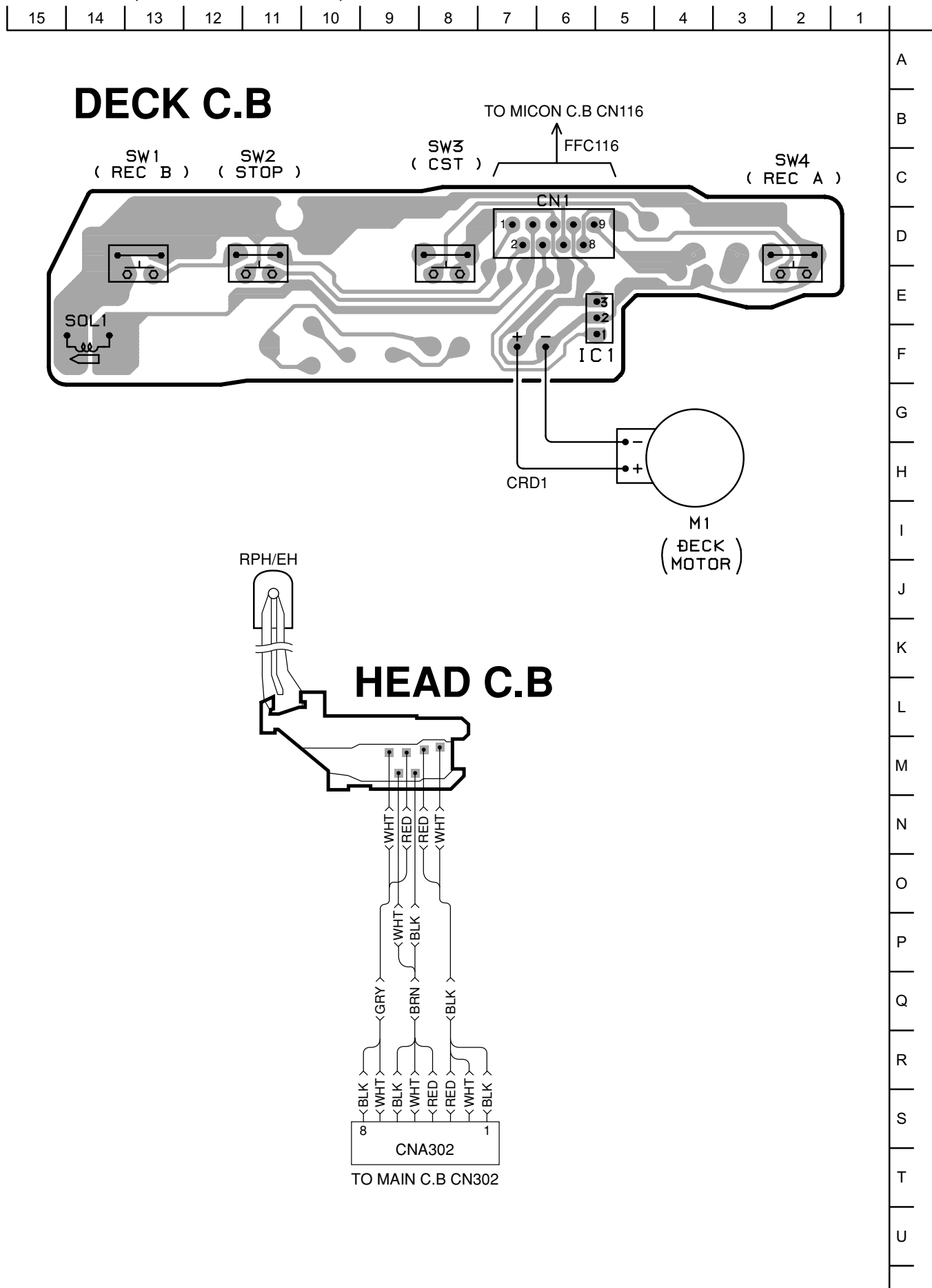


SCHEMATIC DIAGRAM - 8/10 (KEY/METER/LED SECTION)

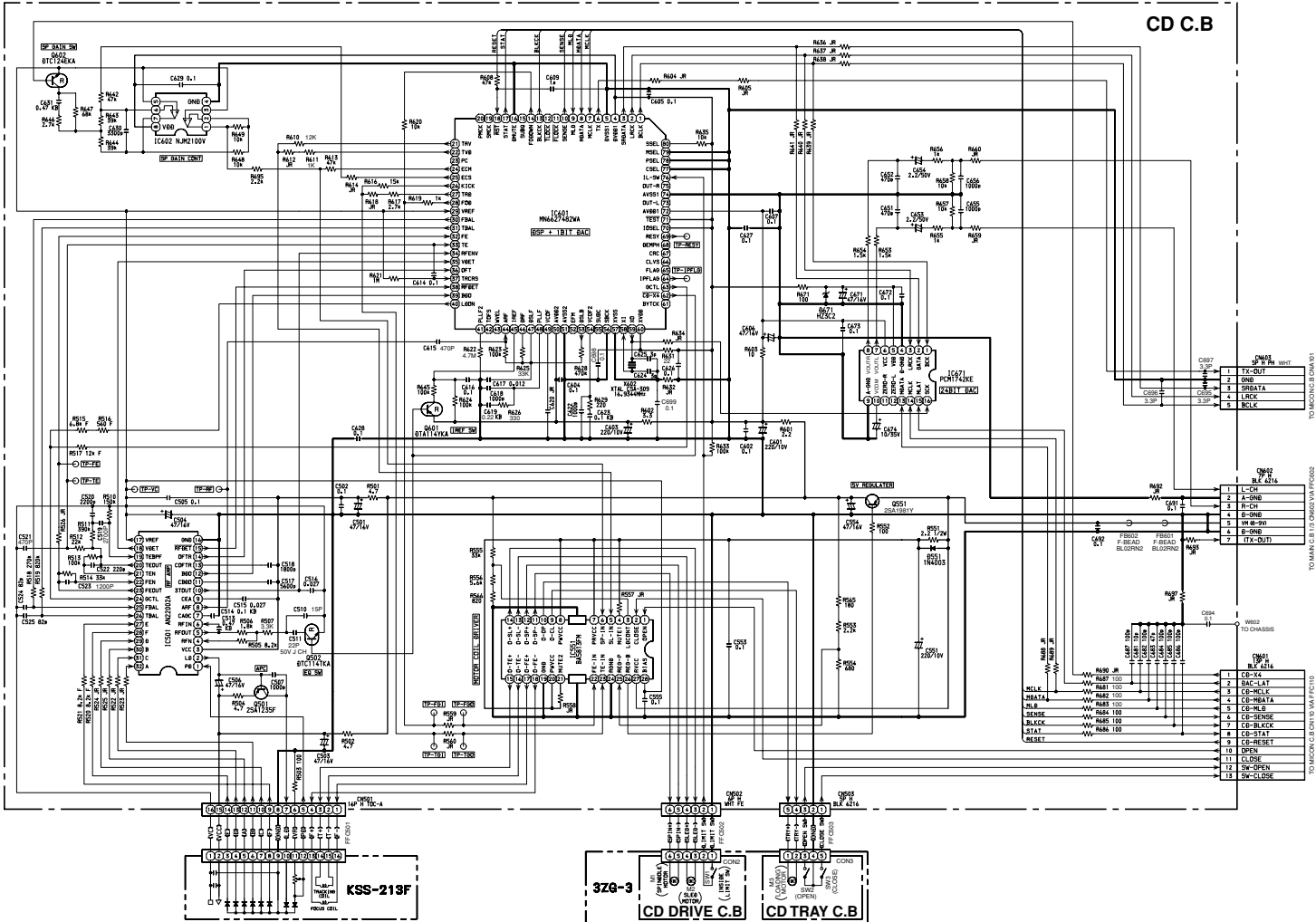




WIRING -5/8 (DECK C.B/HEAD C.B)



SCHEMATIC DIAGRAM - 9/10 (CD SECTION)

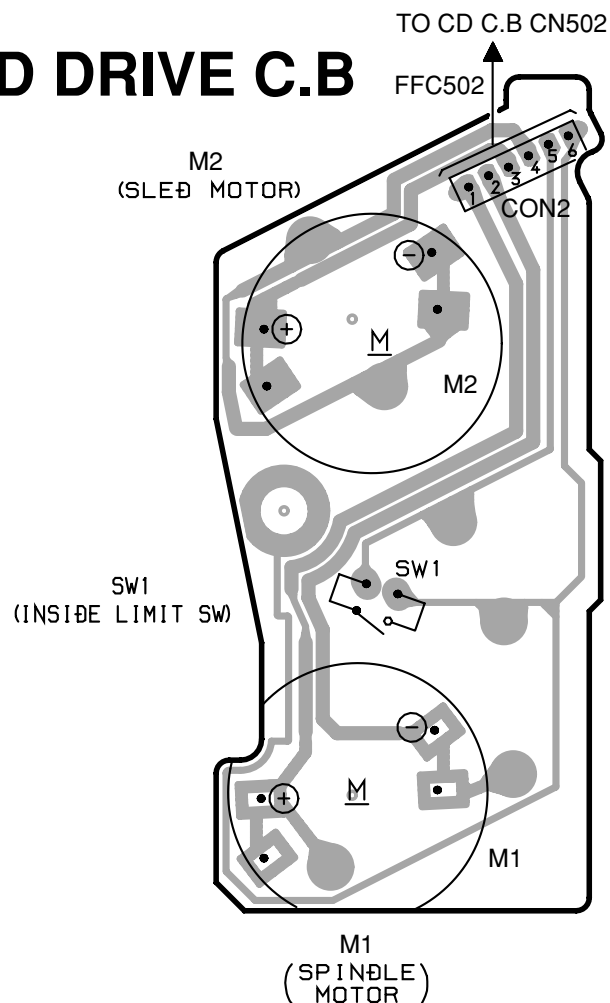


32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	---	---	---	---	---	---	---	---	--

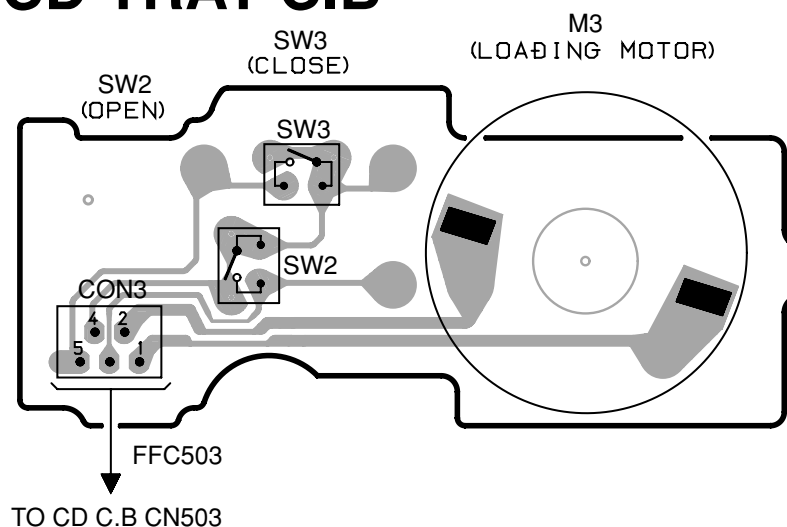


15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
----	----	----	----	----	----	---	---	---	---	---	---	---	---	---	--

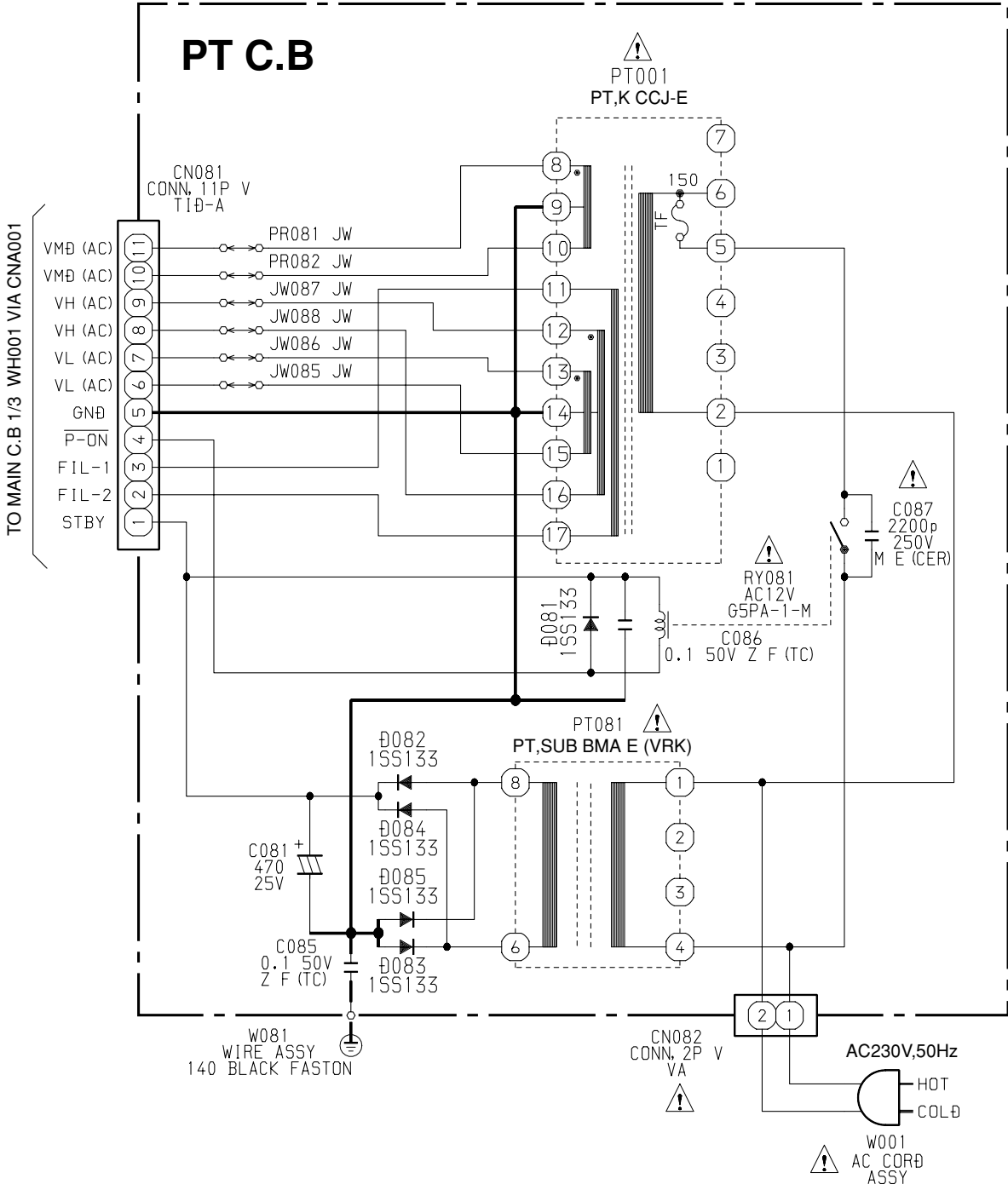
CD DRIVE C.B



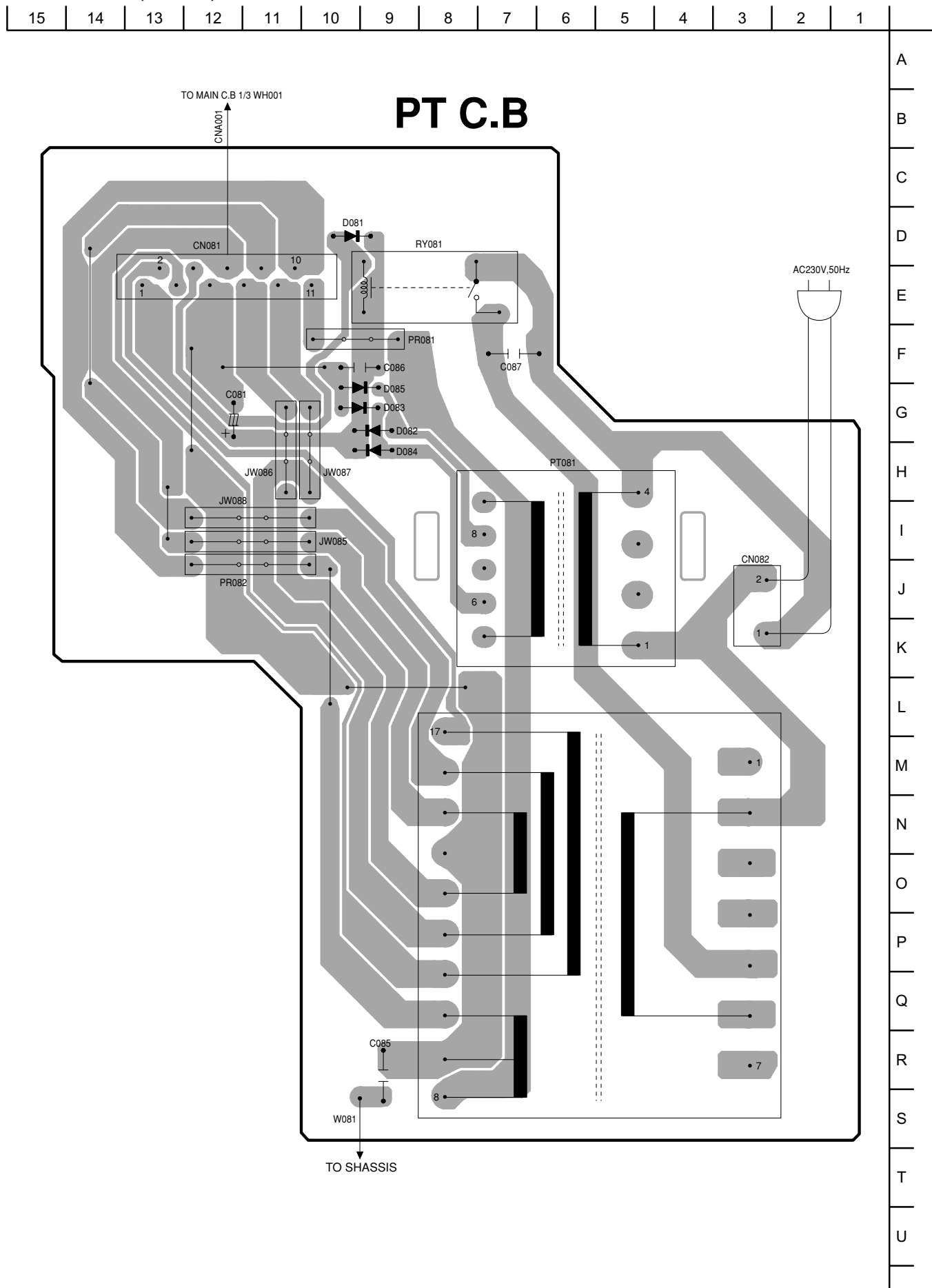
CD TRAY C.B



SCHEMATIC DIAGRAM -10/10 (PT SECTION)

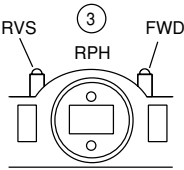
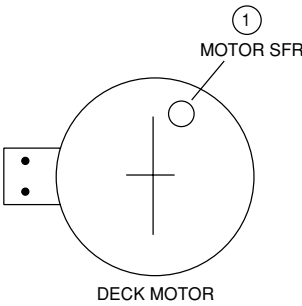
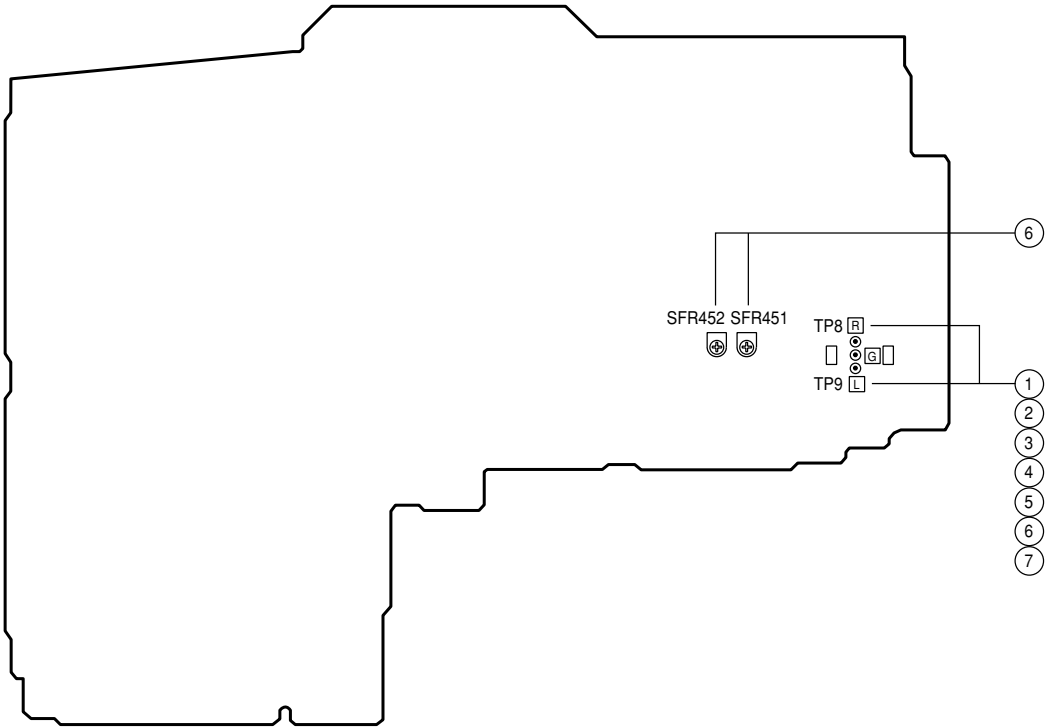


WIRING - 8/8 (PT C.B)



<DECK Section>

MAIN C.B (PATTERN SIDE)



ELECTRICAL ADJUSTMENT -2/5

<DECK SECTION>

Make the following preparations for DECK adjustment.

Preparations

- Measuring instruments: Audio signal oscillator/Attenuator/Wow-Flutter meter (frequency counter)/Oscilloscope/Millivoltmeter/Dummy resistance (6Ω)
- Test Tape: TTA-100 / TTA-330/ TTA-200 / TTA-602 (or equivalent test tape for play/record)

1. Tape Speed Adjustment and Check

Requirements

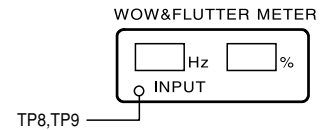
- * Measuring instruments: Wow-flutter meter (frequency counter)

Test tape: TTA-100 (3 kHz)

Test point: TP8 (Rch), TP9 (Lch)

Adjustment point: MOTOR SFR

- (1) Connect the TP8 and TP9 of the unit to the wow-flutter meter.
- (2) Insert the test tape (TTA-100) to DECK. Playback the middle part of the tape in the FWD direction, and adjust MOTOR SFR so that the level, $3,000 \text{ Hz} \pm 5 \text{ Hz}$ can be obtained.
- (3) Playback RVS, and check that the speed is less than $\pm 45 \text{ Hz}$ to the speed of FWD.



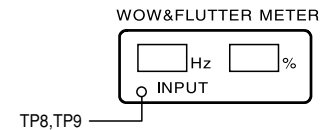
2. Wow-Flutter Check

- * Measuring instruments: Wow-flutter meter (frequency counter)

Test tape: TTA-100 (3 kHz)

Test point: TP8 (Rch), TP9 (Lch)

- (1) Connect the TP8 and TP9 of the unit to the wow-flutter meter.
- (2) Switch the wow-flutter setting from INDICATOR to JIS, and from a mode to W RMS (WTD).
- (3) Playback the middle part of the test tape (TTA-100), and check that the level is 0.25 % or below.



3. Head Azimuth Adjustment

Requirements

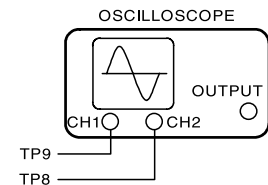
- * Measuring instrument: Oscilloscope

Test tape: TTA-330

Test point: TP8 (Rch), TP9 (Lch)

Adjustment point: Head azimuth adjustment screw

- (1) Connect the CH1 of the oscilloscope probe to TP9 (Lch) and the CH2 to TP8 (Rch).
- (2) Set the V mode of the oscilloscope to ADD.
- (3) Insert the test tape (TTA-330) to DECK 1. Playback the middle part of the tape in the FWD direction, and adjust the head azimuth adjustment screw so that the waveform reaches maximum when 8 kHz is played.
- (4) Apply the above steps to the side of RVS.
- (5) After adjustment, lock the screw by bonding (1620B).



4. Playback Frequency Check

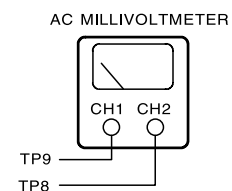
Requirements

- * Measuring instrument: Millivoltmeter

Test tape: TTA-330 (315 Hz / 8 kHz)

Test point: TP8 (Rch), TP9 (Lch)

- (1) Connect the CH1 of millivoltmeter to TP9 (Lch) and the CH2 to TP8 (Rch).
- (2) Insert the test tape (TTA-330) to DECK, and playback 315 Hz and 8 kHz.
- (3) Check that the 8 kHz level is ranged within $0 \pm 5 \text{ dB}$ compared to the output reference level of 315 Hz.



ELECTRICAL ADJUSTMENT -3/5

5. Playback Sensitivity Check

Requirements

- * Measuring instrument: Millivoltmeter
Test tape: TTA-200 (400 Hz)

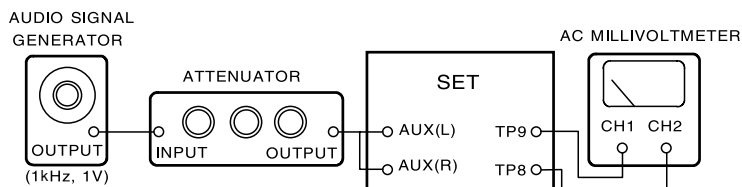
Test point: TP8 (Rch), TP9 (Lch)

- (1) Connect the CH1 of millivoltmeter to TP9 (Lch) and the CH2 to TP8 (Rch).
- (2) Insert the test tape (TTA-200) to DECK to playback.
- (3) Check that the output level is ranged within $145 \text{ mV} \pm 3 \text{ dB}$.

6. Playback/Record Frequency Response Adjustment

Requirements

- * Measuring instruments: Millivoltmeter
Audio signal oscillator (low-frequency oscillator)
Attenuator
Test tape: TTA-602 (LH)
Test point: TP8 (Rch), TP9 (Lch)
Input point: AUX (1 kHz / 8 kHz)
Adjustment point: SFR451 (Lch), SFR452 (Rch)



- (1) Connect the CH1 of millivoltmeter to TP9 (Lch) and the CH2 to TP8 (Rch).
- (2) Connect the output terminal of oscillator to attenuator, and then attenuator to AUX of the unit.
- (3) Insert the test tape (TTA-602) to DECK, and record the 1 kHz signal from AUX.
- (4) Adjust the attenuator so that the output levels of TP8 and TP9 become 17 mV.
- (5) Record 1 kHz and 8 kHz alternately.
- (6) Adjust SFR451 (Lch) and SFR452 (Rch) so that the playback output level of 8 kHz is ranged within $0 \pm 1 \text{ dB}$ compared to the playback output reference level of 1 kHz.

7. Playback/Record Sensitivity Check

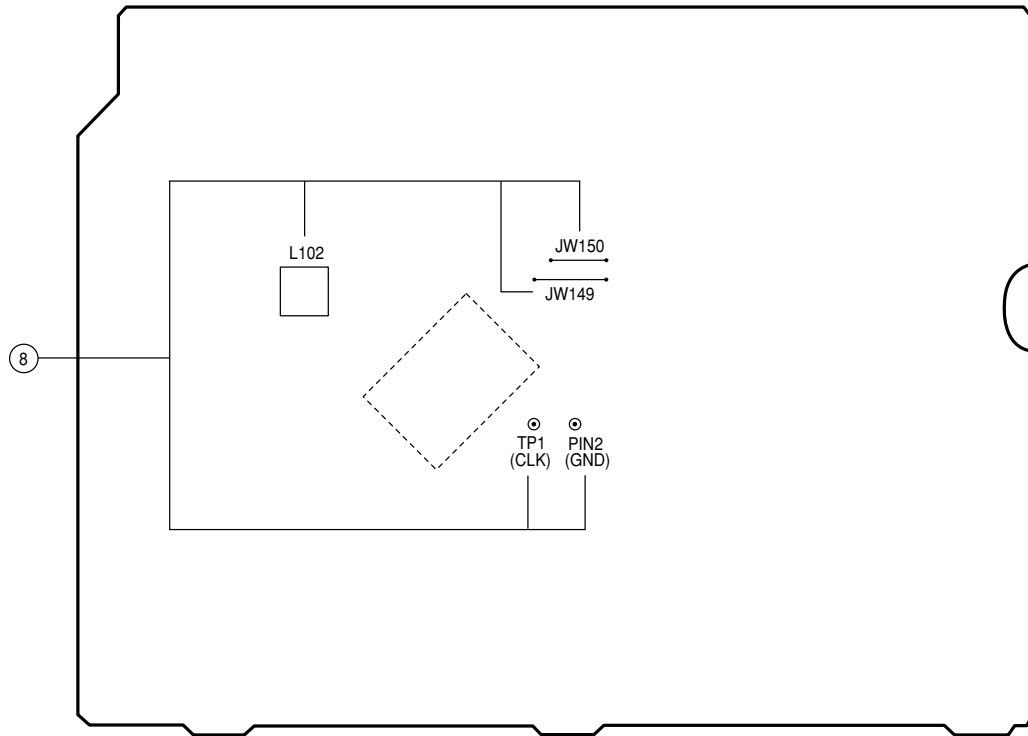
Requirements

- * Measuring instruments: Millivoltmeter
Audio signal oscillator (low-frequency oscillator)
Attenuator
Test tape: TTA-602 (LH)
Test point: TP8 (Rch), TP9 (Lch)
Input point: AUX (8 kHz)

- (1) Insert the test tape (TTA-602) to DECK, and record the 8 kHz signal from AUX.
- (2) Adjust the attenuator so that the output levels of TP8 and TP9 become 170 mV.
- (3) Playback 8 kHz, and check that the output level is ranged within $-1 \text{ dB} \pm 3.5 \text{ dB}$ compared to the output level during recording.

<FRONT Section>

MICON C.B (PARTS SIDE)



<FRONT SECTION>

8. Clock Adjustment

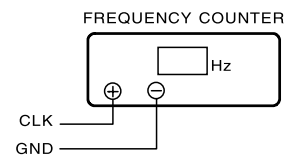
Requirement

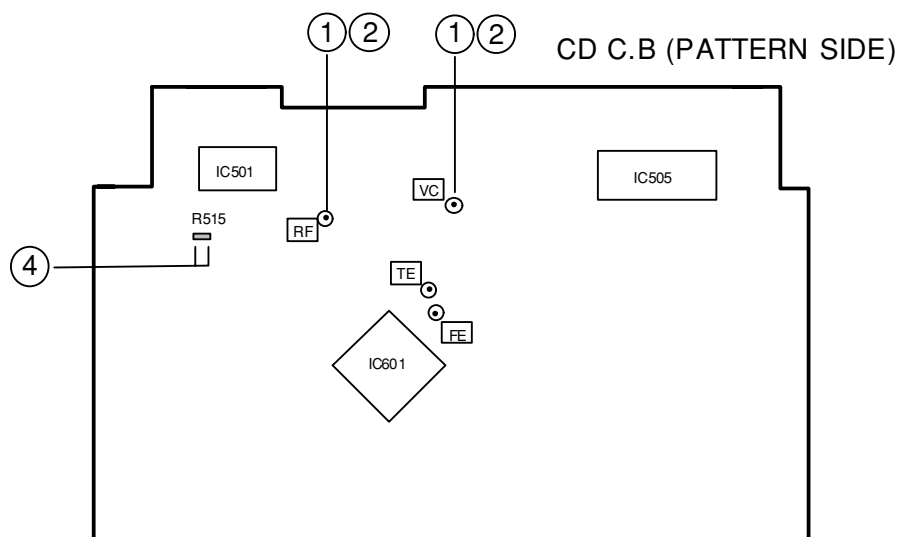
* Measuring instrument: Frequency counter

Test point: TP1 (CLK), PIN2 (GND)

Adjustment point: L102

- (1) While pressing and holding down the POWER button and the TUNER button, insert the AC plug.
- (2) Adjust L102 so that the frequency counter indicates 176.83 ± 1.59 Hz.
- (3) Draw out the code, and short-circuit JW149 and JW150 for about 2 seconds.





<CD AAdjustment>

- Adjust and check at test mode.
- Keep at a level CD Mechanism.
- Equipment

Measure: Oscilloscope (using probe 10:1)

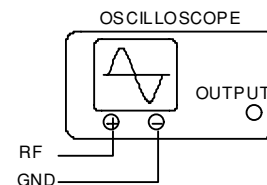
Digital Multimeter (using at DCV range)

Jitter Meter (KIKUSUI 6235)

Test Disc: TCD-782/ATD-001

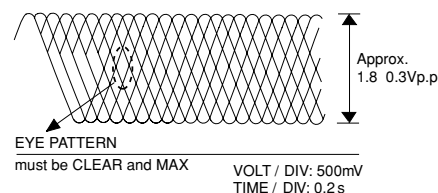
1. RF Waveform Check

- 1) Connect the Oscilloscope to Test Point (RF+) and (GND).
- 2) Play second track of TCD-782.
- 3) Check that the amplitude of RF waveform is maximum, and that the lozenge of center appear clearly.



2. Jitter Check

- 1) Keeping on connecting Oscilloscope to 2, connect the output pin of Oscilloscope to the input pin of Jitter Meter.
- 2) Tune the knob of Oscilloscope voltage range at less than 500 mV.
- 3) Play second track of TCD-782.
- 4) Check that the display of Jitter Meter is as less than 28.0 nS.



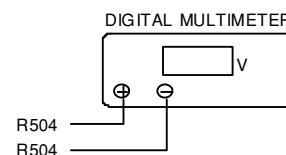
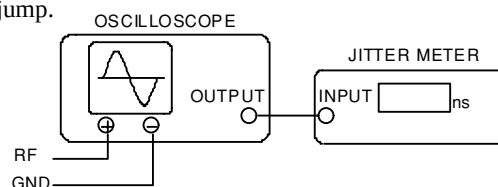
3. Play Ability Check

- 1) Play track 3, 8, 13 of ATD-001, and check playing makes any noise or sound jump.

4. Lasor Current Check

* Don't do this check except if the Lasor is fault.

- 1) Connect the Multimeter to both side of R504 (4.7Ω)
- 2) Play TCD-782, and check the DC voltage value of the Multimeter.
- 3) Check that the Lasor current ($I_{op} = \text{DC voltage value divided by } R504 (4.7\Omega)$) is less than 80 mA.



CD TEST MODE -1/1

1. Starting CD Test Mode

While pressing and holding down the CD FUNCTION button, insert the AC plug to outlet.
When test mode starts, the message, CD TEST appears on the display, and all indicators light.

2. Exiting CD Test Mode

Press the POWER button or remove the AC plug from outlet.

3. Function of CD Test Mode

No	Mode	Function Key	Display	Movement	Check
1	Start Mode		All indicators light	• All FL indicators light	• FL check • Microcomputer check
2	Search Mode	STOP button	READING	• LD constantly light • Focus search continuous movement *1 • Spindle motor continuous kick	• APC circuit check • Laser current electricity measurement • Focus search waveform check • Focus error waveform check
3	Play Mode	PLAY/PAUSE button	Normal	• Normal playback • If TOC READ is unavailable, focus search is continued. • CLV error is ignored.	• Each servo circuit check • RF waveform check
4	Traverse Mode	PLAY/PAUSE button	Normal	• Tracking servo OFF/ON Each time PAUSE button is pressed, the tracking servo repeats turning OFF/ON.	• Tracking balance check
5	Sled mode	FF button	CD TEST	• PU moves to the innermost position. At the same time, lens is kicked toward outer position.	• Sled circuit check • Tracking circuit check • Mechanism movement check • PU check
		RWD button	CD TEST	• PU moves to the outermost position. At the same time, lens is kicked toward outer position.	

* 1 ... When Focus Search operates continuously more than 10 minutes, the protection circuit is activated due to heat generation of the driver IC.
In this case, turn off the power. After cooling down, restart the machine.

* 2 ... Be careful not to damage the gear because the sled motor rotates while the FF or RWD button is being pressed even if the pickup is located in the innermost track or the outermost track.

GRID ASSIGNMENT



PIN NO.	44444444444433333333	1111111111
	9876543210987654~	6543210987654321
CONNECTION	FFNNNNNNVVVLCSS	NNNNNNNNNNNNNNNNFF
	22PPDDDDCHCKTKIO	NCICICICICICICICPP1

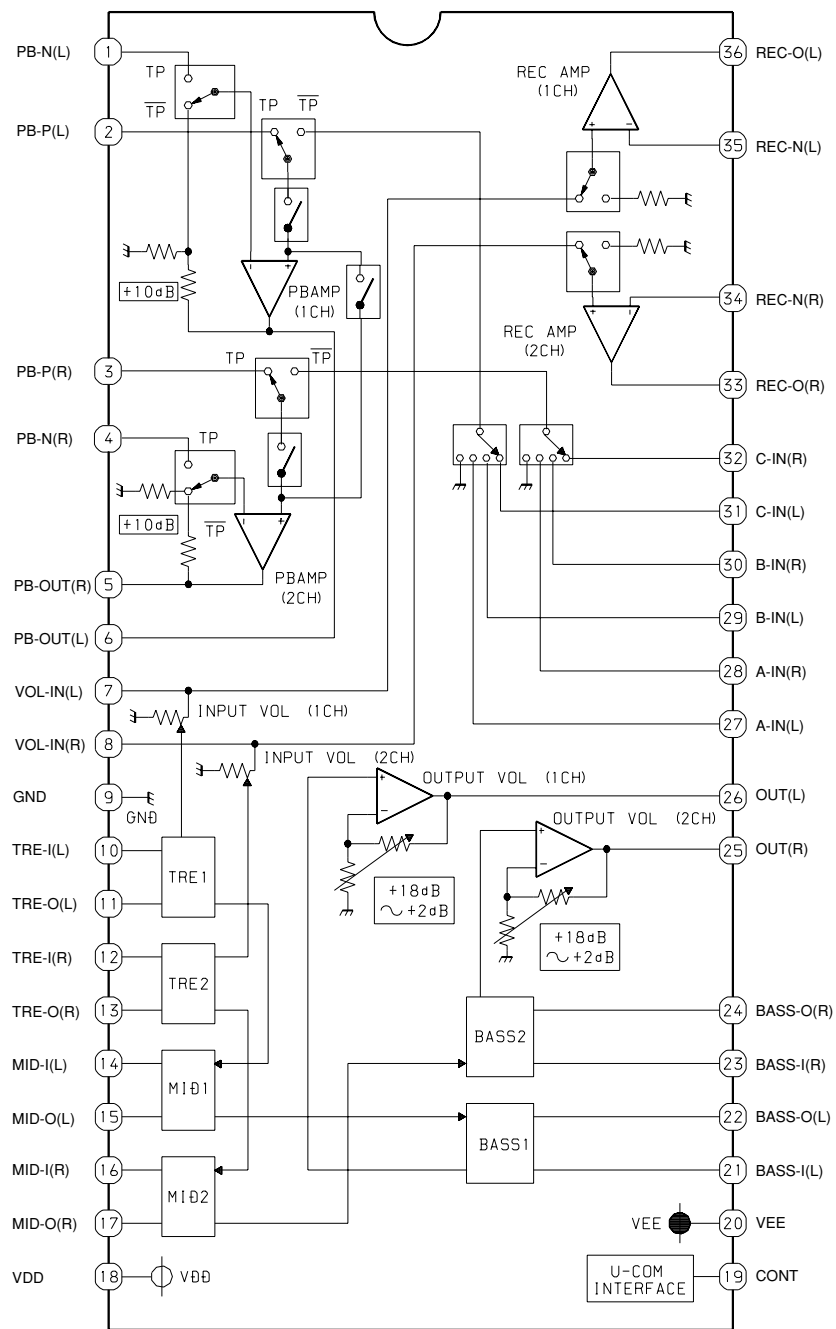
NOTE	1) F1, F2 ---- Filament	8) VDD ---- Logic Voltage Supply pin
	2) NP ---- No pin	9) BK ---- Driver Output Blanking
	3) NC ---- No connection	10) LAT ---- Latch Control Input
	(NC pin should be electrically	11) CLK ---- Shift Register Clock
	connected to PC board)	12) S0 ---- Serial Data Input
	4) DL ---- Datum Line	13) S1 ---- Serial Data Output (unit in mm)
	5) LGND ---- Logic GND pin	(to be open, if don't use)
	6) PGND ---- Power GND pin	
	(PGND and LGND are internally connected)	
	7) VH ---- High Voltage Supply pin	

ANODE CONNECTION

	1G-12G13G and 14G	f15G and
P1	-	-
P2	-	-
P3	-	-
P4	-	-
P5	-	-
P6	-	-
P7	-	-
P8	-	-
P9	-	-
P10	-	-
P11	-	-
P12	-	-
P13	-	-
P14	-	-
P15	-	-
P16	-	-
P17	-	-
P18	-	-
P19	-	-
P20	-	-
P21	-	-
P22	-	-
P23	-	-
P24	-	-
P25	-	-
P26	-	-
P27	-	-
P28	-	-
P29	-	-
P30	-	-
P31	-	-
P32	-	-
P33	-	-
P34	-	-
P35	-	-
P36	-	-
P37	-	-
P38	-	-
P39	-	-
P40	-	-
P41	-	-
P42	-	-
P43	-	-
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P48	-	-
P49	-	-
P50	-	-

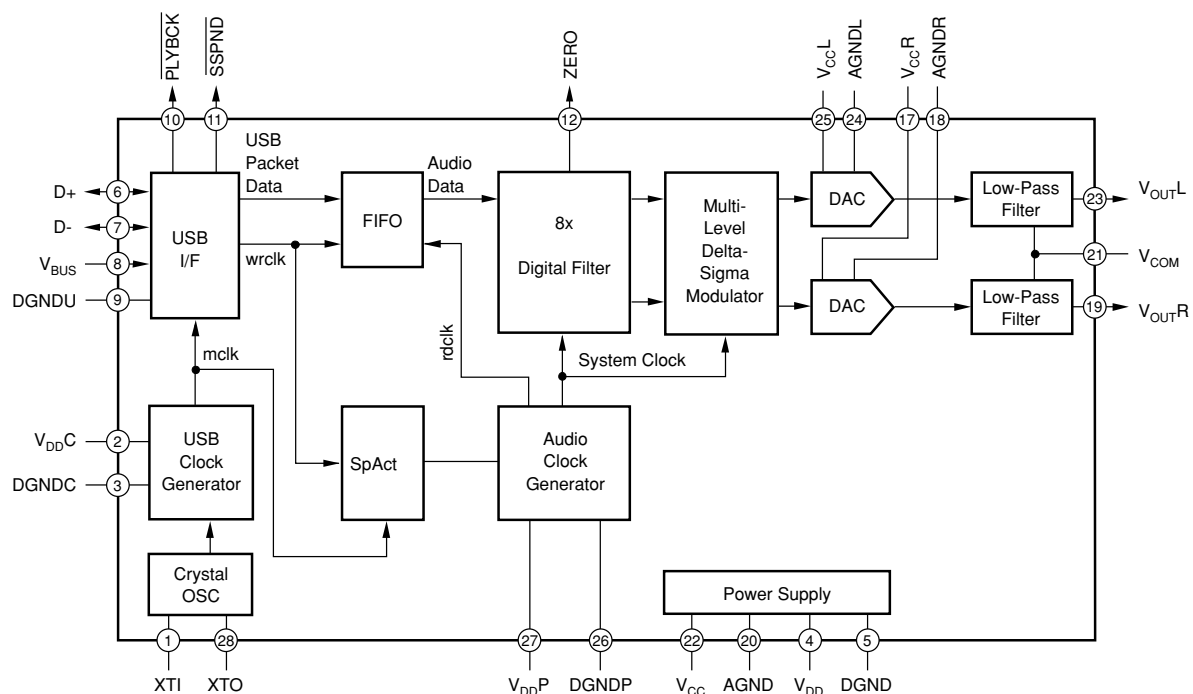
IC BLOCK DIAGRAM -1/3

IC, M61518FP

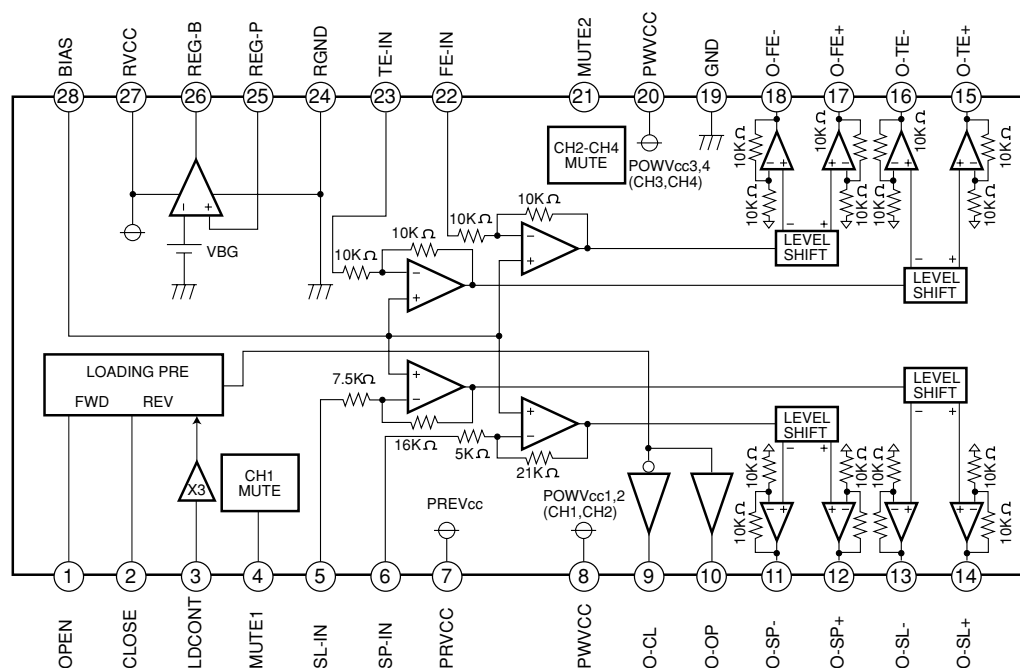


IC BLOCK DIAGRAM -2/3

IC, PCM2702E/2K

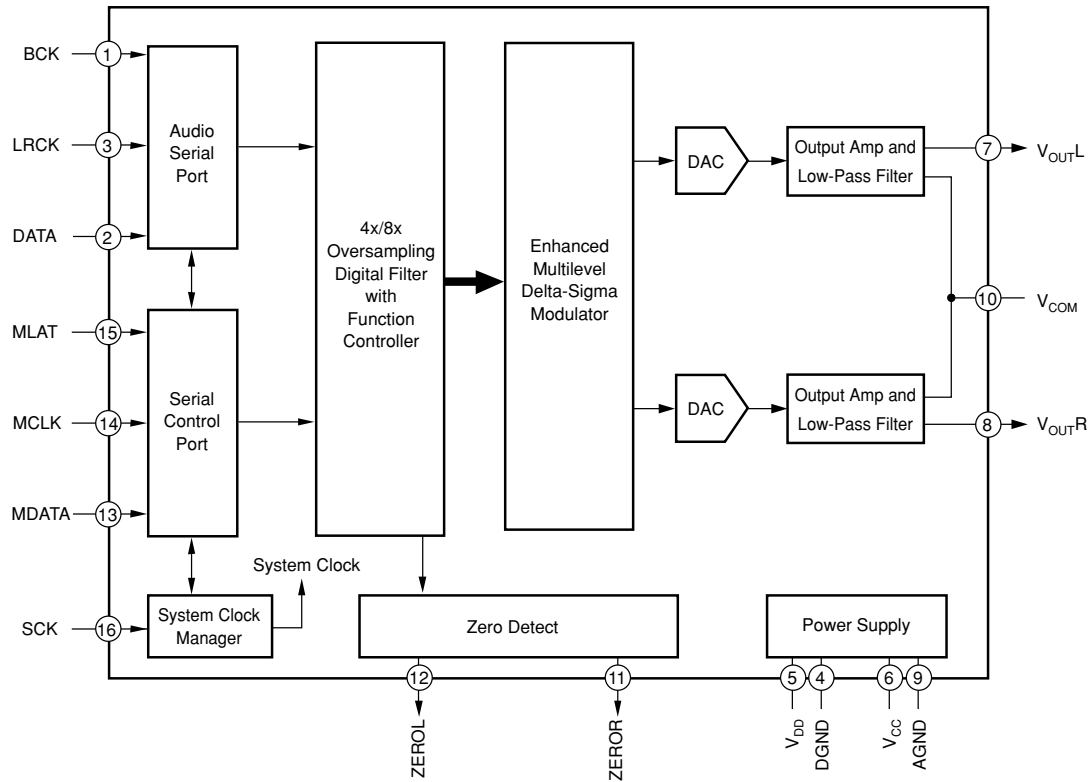


IC, BA5813FM

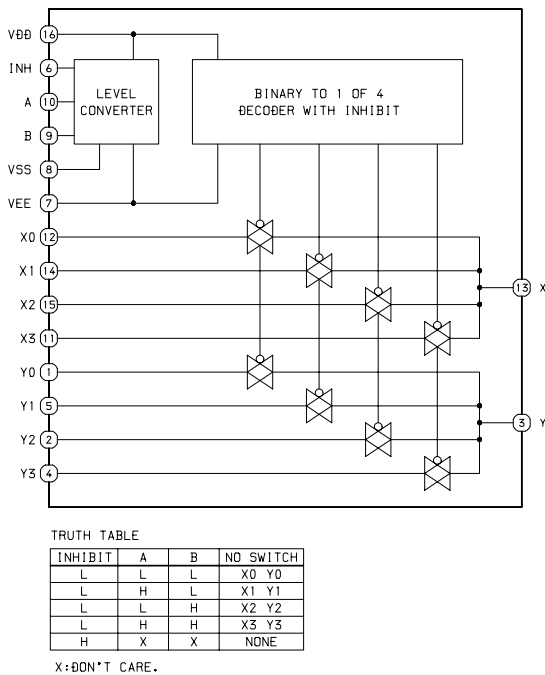


IC BLOCK DIAGRAM -3/3

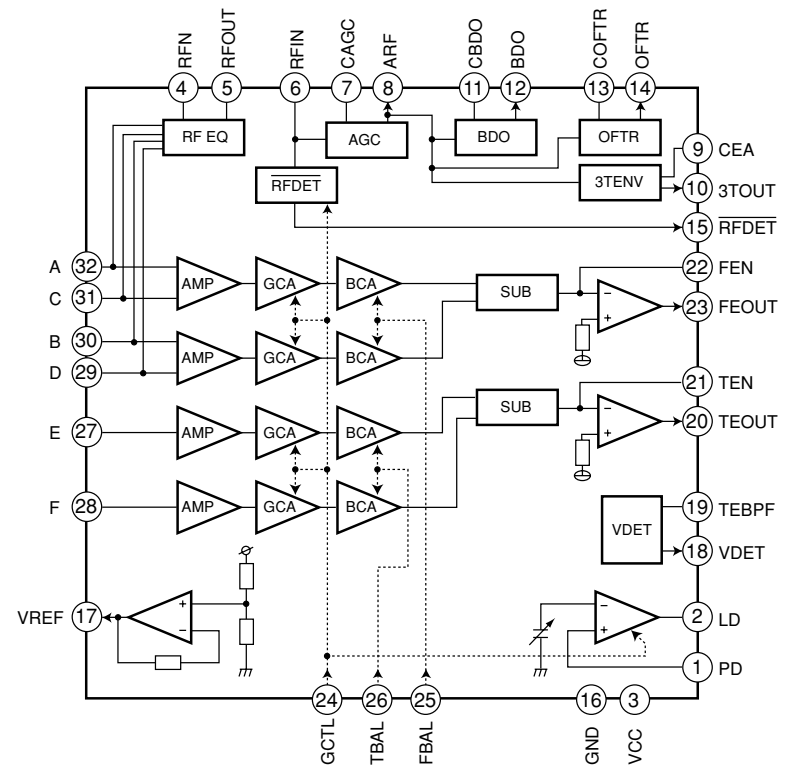
IC, PCM1742KE



IC, BU4052BCF



IC, AN22002A



IC DESCRIPTION -1/2 (LC8752B2A-50Y2) -1/3

Pin No.	Pin Name	I/O	Description
1	O-CDT CLOSE	O	CD tray close output
2	O-CDT OPEN	O	CD tray open output
3	O-CD-RESET	O	CD reset output
4	I-CD-BLKCK	I	CD sub-code clock input
5	I-CD-SENSE	I	CD sense input
6	$\overline{\text{O-CDX4}}$	–	Not used
7	I-RMC	I	Remote control sensor data input
8	$\overline{\text{I-RESET}}$	I	Reset input signal
9	XT1	I	Crystal connect signal
10	XT2	O	Crystal connect signal
11	VSS1	–	Ground
12	CF1	I	Input signal of LC oscillator
13	CF2	O	Output signal of LC oscillator
14	VDD1	–	Power supply
15	$\overline{\text{O-CLK SHIFT}}$	O	Microcomputer clock shift switching
16	$\overline{\text{I-HOLD(AD)}}$	I	HOLD voltage input
17	I-MS(AD)	I	Signal level input for TAPE music sensor
18	I-KEY1(AD)	I	Input tact key 1
19	I-KEY2(AD)	I	Input tact key 2
20	I-ENC1(AD)	I	Volume control input
21	I-ENC2(AD)	I	JOG control input
22	I-DECK SW(AD)	I	Detection in TAPE recording tub
23	O-MD-KDATA	O	MD command data output
24	I-MD-MDDATA	I	MD data input
25	O-MD-DSCK	O	MD command clock output
26	O-CD-MDATA	O	CD command data output/data output for DAC
27	I-CD-STAT	I	CD status input
28	O-CD-MCLK	O	CD command clock output/Clock output for DAC
29	O-MD ON	O	MD power supply ON/OFF control output
30	O-METER MUTE	O	METER mute ON/OFF control output
31	O-OPT-SEL	O	Switching output for MD digital input
32	NC	–	Not connected
33	NC	–	Not connected
34	NC	–	Not connected
35	NC	–	Not connected
36	O-MD-SERCH	O	MD search signal output
37	O-MD-ST	O	MD start output for ID
38	O-MD-RESET	O	MD reset output
39	VSS4	–	Ground
40	VDD4	–	Power supply
41	I-MD-PCONT	I	Detection in abnormal MD power supply
42	I-MD-DSTB	I	MD data strobe input

IC DESCRIPTION -1/2 (LC8752B2A-50Y2) -2/3

Pin No.	Pin Name	I/O	Description
43	I-AS	I	Pulse input for TAPE counter
44	I-HEAD	I	Input of detection in TAPE head position
45	O-PL	O	TAPE plunger control output
46	O-MOTOR	O	TAPE motor power supply ON/OFF control output
47	O-LED1(BLUE)	O	FL back-light control output
48	O-LED2(RED)	O	FL back-light control output
49	O-SI(FL)	O	FL serial data output
50	O-BK(FL)	O	FL driver ranking output
51	O-CLK(FL)	O	FL shift register clock output
52	O-LAT(FL)	O	FL latch control output
53	NC	–	Not connected
54	NC	–	Not connected
55	VDD2	–	Power supply
56	VSS2	–	Ground
57	DIMMER	O	FL back-light dimmer switching output
58	NC	–	Not connected
59	NC	–	Not connected
60	NC	–	Not connected
61	NC	–	Not connected
62	NC	–	Not connected
63	NC	–	Not connected
64	NC	–	Not connected
65	NC	–	Not connected
66	NC	–	Not connected
67	NC	–	Not connected
68	NC	–	Not connected
69	NC	–	Not connected
70	$\overline{\text{O-STBY LED}}$	O	Stand-by LED ON/OFF control output
71	$\overline{\text{O-VOL. LED}}$	O	Volume LED ON/OFF control output
72	O-POWER	O	System power supply ON/OFF control output
73	O-FAN	O	Not used
74	O-MAIN-MUTE	O	Main mute ON/OFF control output
75	O-REC/PB	O	TAPE record/play switching control output
76	O-BIAS	O	TAPE recording bias ON/OFF control output
77	O-FUNC-CONT	O	Data output of function IC
78	O-USB CONT	O	Pull-up ON/OFF control output for USB D + terminal
79	$\overline{\text{I-USBSPEND}}$	I	Detection in USB suspension input
80	O-USB ON	O	USB power supply ON/OFF control output
81	O-TU ON	O	TUNER power supply ON/OFF control output
82	O-PLL CL	O	TUNER clock output
83	O-PLL DI	O	TUNER data input
84	O-PLL CE	O	TUNER chip enable output

IC DESCRIPTION -1/2 (LC8752B2A-50Y2) -3/3

Pin No.	Pin Name	I/O	Description
85	O-PLL DO	O	TUNER data output
86	I-TU SELECT1	I	Detection in TUNER force
87	I-TU SELECT2	I	Detection in TUNER force
88	VSS3	–	Ground
89	VDD3	–	Power supply
90	NC	–	Not connected
91	(CLK)	–	Not connected
92	(DATA)	–	Not connected
93	(SELECT)	–	Not connected
94	NC	–	Not connected
95	NC	–	Not connected
96	$\overline{\text{O-CDX2X4}}$	–	Not used
97	O-DAC-LAT	O	CD DAC latch output
98	O-CD-MLD	O	CD command latch output
99	I-CLOSE SW	I	Detection in CD tray close SW
100	I-OPEN SW	I	Detection in CD tray open SW

IC DESCRIPTION -2/2 (MN6627482WA) -1/2

Pin No.	Pin Name	I/O	Description
1	BCLK	O	Bit clock output for SRDATA
2	LRCK	O	Distinction L and R signal output
3	SRDATA	O	Serial data output
4	DVDD1	I	Power supply for digital circuit
5	DVSS1	I	GND for digital circuit
6	TX	O	Digital audio interface output signal
7	MCLK	I	Microcomputer command clock input (Data is latched at starting edge)
8	MDATA	I	Microcomputer command data input
9	MLD	I	Microcomputer command load signal input. Load at "L".
10	SENSE	O	Sense signal output (OFT,FESL,NACEND,NAJEND,SFG)
11	$\overline{\text{FLOCK}}$	—	Not connected
12	$\overline{\text{TLOCK}}$	—	Not connected
13	BLKCK	O	Sub-code block clock signal (fBLKCK=75Hz)
14	FODOWN	O	Focus down output
15	SUBQ	—	Not connected
16	DMUTE	I	Muting input. Muted at "H".
17	STAT	O	Status signal (CRC, STCNT, CLVS, TTSTOP, JCLVS, SQOK, FLAG6, SENSE/FLOCK/ TLOCK, Rotation speed data, FCLV, SUBQ, SYFLG)
18	$\overline{\text{RST}}$	I	Reset input signal. (Reset at "L")
19	SMCK	—	Not connected
20	PMCK	—	Not connected
21	TRV	O	Traverse compulsion sending output. 3-State.
22	TVD	O	Traverse drive output
23	PC	—	Not connected
24	ECM	O	Spindle motor drive signal (Compulsion mode output)3-State.
25	ECS	O	Spindle motor drive signal (Servo signal error output)
26	KICK	O	Kick pulse output. 3-State.
27	TRD	O	Tracking drive output
28	FOD	O	Focus drive output
29	VREF	I	DA output part (TVD,ECS,TRD,FOD,FBAL,TBAL,TOFS) Reference voltage
30	FBAL	O	Focus balance adjustment output
31	TBAL	O	Tracking balance adjustment output
32	FE	I	Focus error signal input (Analog input)
33	TE	I	Tracking error signal input (Analog input)
34	RFENV	I	RF envelope signal input (Analog input)
35	VDET	I	Vibration detection signal input. Detection at "L".
36	OFT	I	Off track signal input. Off track at "H".
37	TRCRS	I	Track cross signal input (Analog input)
38	$\overline{\text{RFDET}}$	I	RF detection signal input. Detection at "L".
39	BDO	I	Drop out signal input. Drop out at "H".
40	LDON	O	Laser ON signal output. ON at "H".
41	PLL2	I/O	Terminal for switching for PLL roop filter character

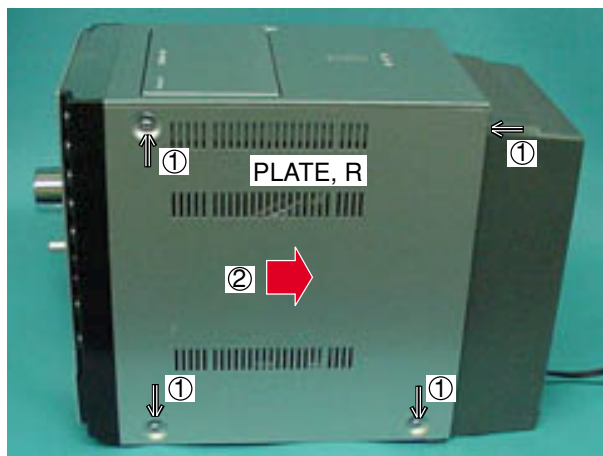
IC DESCRIPTION -2/2 (MN6627482WA) -2/2

Pin No.	Pin Name	I/O	Description
42	TOFS	–	Not connected
43	WVEL	–	Not connected
44	ARF	I	RF signal input
45	IREF	I	Standard current input terminal
46	DRF	I	Bias singal for DSL
47	DSL F	I/O	Roop filter signal for DSL
48	PLL F	I/O	Roop filter signal for PLL
49	VCO F	I/O	Roop filter signal for VCO
50	AVDD2	I	Power supply for analog circuit (for output parts of DSL,PLL,DA and for AD)
51	AVSS2	I	GND for analog circuit (for output parts of DSL,PLL,DA and for AD)
52	EFM	–	Not connected
53	DSL B	O	DSL balance output
54	VCO F2	I/O	Loop filter terminal for VCO which creates digital servo 33.8688MHz
55	SUBC	–	Not connected
56	SBCK	I	Clock output for sub-code serial output. Clock input for reading TEXT data at CD-TEXT 1 mode.
57	XVSS	I	GND for oscillation circuit
58	XI	I	Oscillation circuit input terminal
59	XO	O	Oscillation circuit output terminal
60	XVDD	I	Power supply for oscillation circuit
61	BYTCK	–	Not connected
62	$\overline{\text{CD-X4}}$	O	Output L at CD 4 x speed
63	GCTL	O	Gain control output. RW mode at "H".
64	IPFLAG	–	Not connected
65	FLAG	–	Not connected
66	CLVS	–	Not connected
67	CRC	–	Not connected
68	DEMPH	–	Not connected
69	RESY	–	Not connected
70	IOSEL	I	Switching mode signal
71	$\overline{\text{TEST}}$	I	Test terminal. Normal at "H".
72	AVDD1	I	Power supply for analog circuit. (For audio output part (for combining Lch and Rch)
73	OUT-L	O	Lch audio output
74	AVSS1	I	GND for analog circuit (for audio output part (for combining Lch and Rch)
75	OUT-R	O	Rch audio output
76	IL-SW	I	Switch for detecting inside limit
77	CSEL	I	Ocillation frequency specified terminal. Ocillation frequency is 16.9344MHz at "L".
78	PSEL	I	Test terminal when "H" is IOSEL. (Normally at "L")
79	MSEL	I	SMCK terminal output when "H" is IOSEL. Switching frequency terminal. SMCK=4.2336MHz at "L".
80	SSEL	I	SUBQ terminal output when "H" is IOSEL. Switching mode terminal. Using mode of Q-code buffer at "H".

DISASSEMBLY -1/5

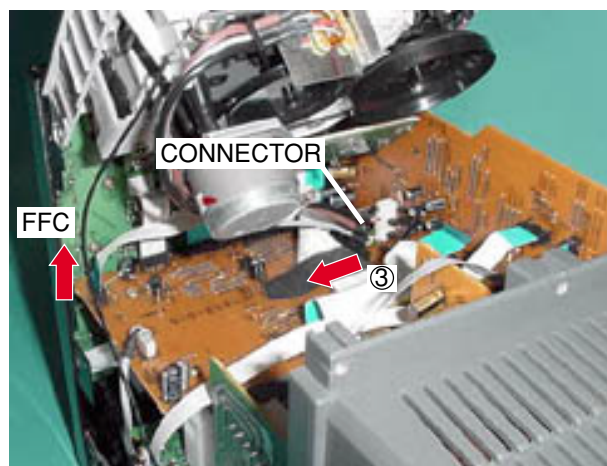
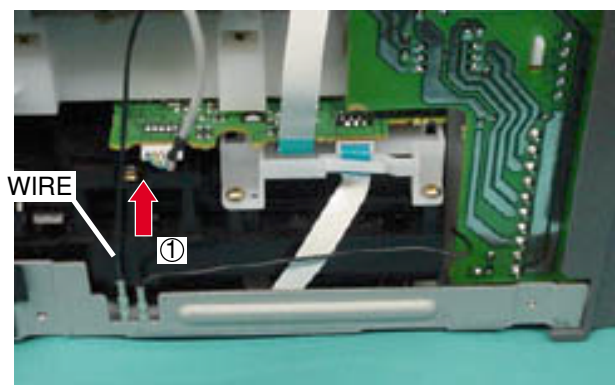
1. PLATE, L/R

- 1) Release 4 screws (BVT2+3-8 SILVER) of PLATE, R.
- 2) Remove PLATE, R with sliding to rear side.
- 3) Remove PLATE,L with same way.



2. PANEL, TOP ASSY (DECK MECHANISM)

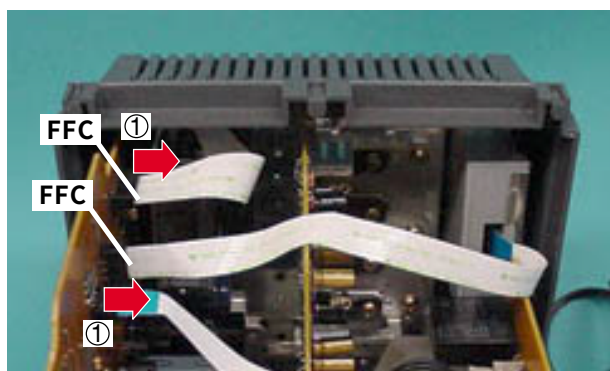
- 1) Remove the wirer of DECK.
- 2) Release one screw (BVT2+3-8 SILVER) of PANEL, TOP ASSY.
- 3) Lift the rear side of PANEL, TOP ASSY, and remove the connector and FFC.



DISASSEMBLY -2/5

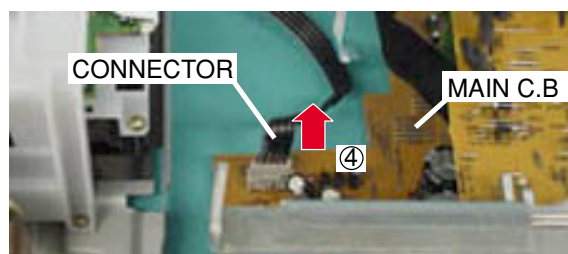
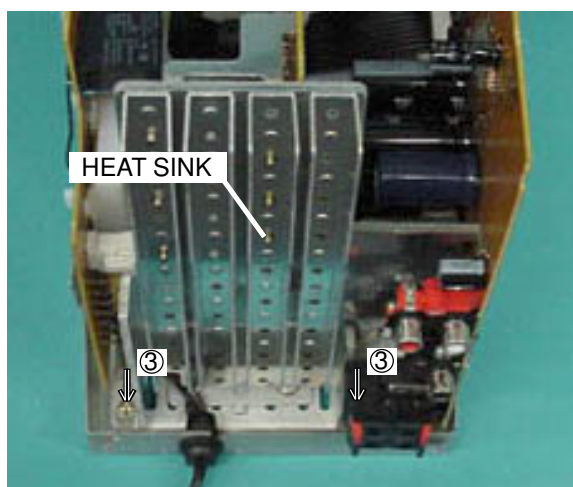
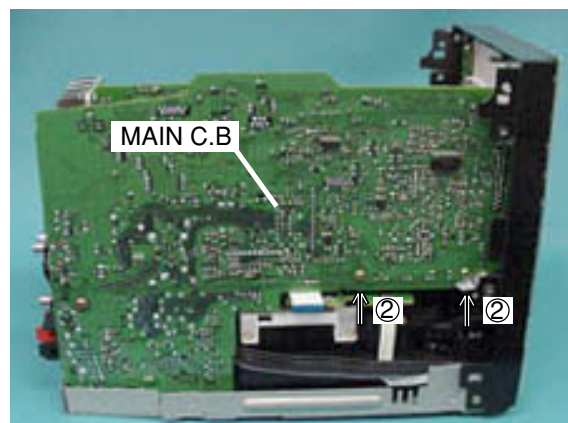
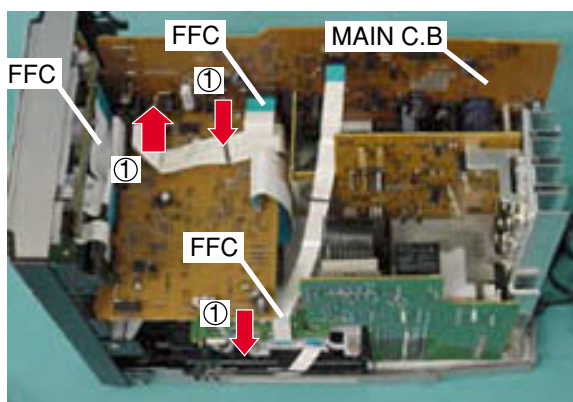
3. CABI, REAR ASSY

- 1) Remove TUNER PACK and FFC of USB UNIT.
- 2) Release 8 screws (BVT2+3-8 BLACK) of CABI, REAR ASSY.



4. MAIN C.B

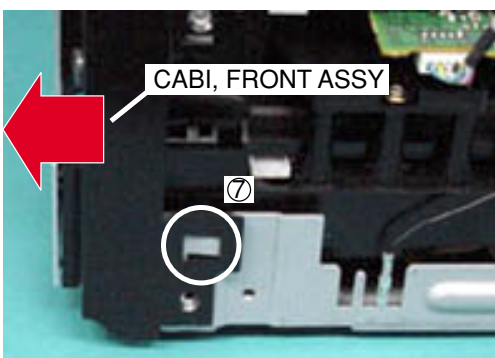
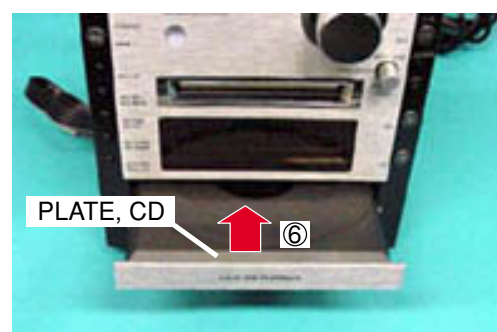
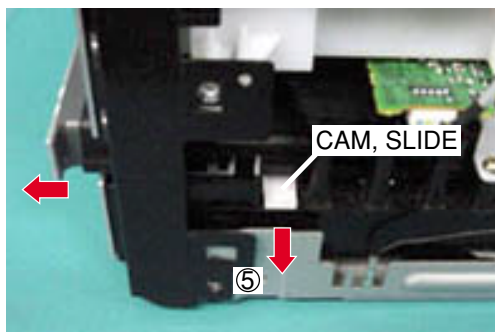
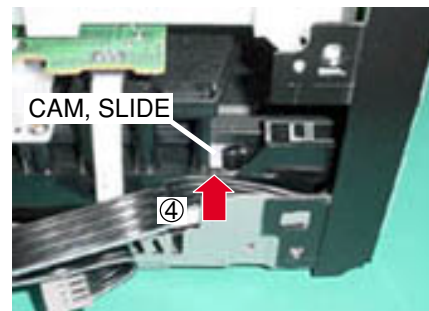
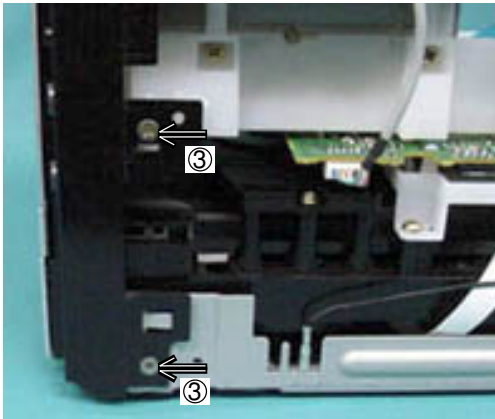
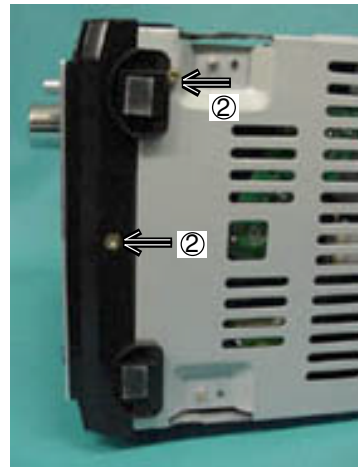
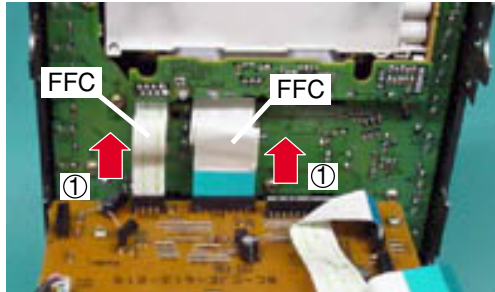
- 1) Remove 3 FFCs and one connector of MAIN C.B.
- 2) Release 2 screws (BVT2+3-10) of MAIN C.B.
- 3) Release 2 screws (BVIT3B+3-8) of heat sink.
- 4) Remove MAIN C.B, and remove the connector of HP C.B.



DISASSEMBLY -3/5

5. CABI, FRONT ASSY

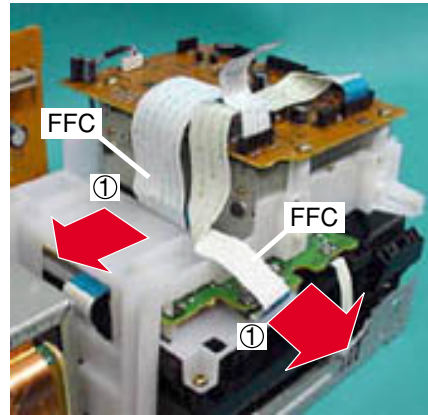
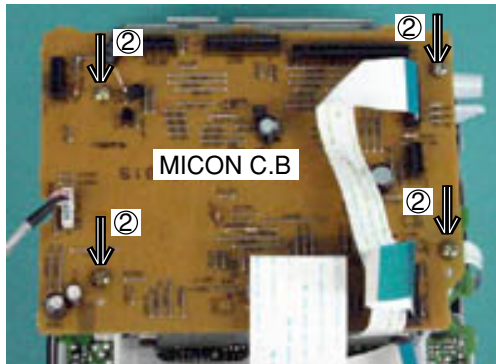
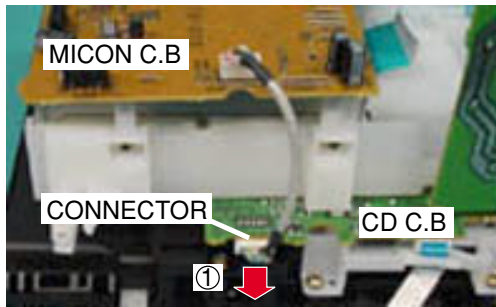
- 1) Remove 2 FFCs of CABI, FRONT ASSY.
- 2) Release 2 screws (QT2+3-10, BVT2+3-6) from the bottom of CABI, FRONT ASSY.
- 3) Release 4 screws (QT2+3-6) from the side of CABI, FRONT ASSY.
- 4) Push CAM,SLIDE to the left side of CD Mechanism.
- 5) Pull CAM,SLIDE from the right side of CD Mechanism, and then CD tray appears.
- 6) Remove PLATE,CD of CD tray, and return CD tray.
- 7) Remove CABI, FRONT ASSY with opening tabs of the both side.



DISASSEMBLY -4/5

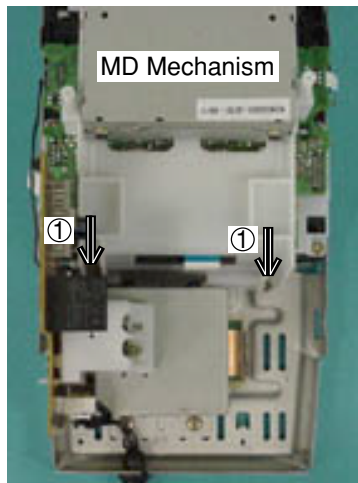
6. MICON C.B

- 1) Remove FFC of MD Mechanism and FFC of CD C.B, and remove connector.
- 2) Release 4 screws (BVT2+3-10) of MICON C.B.



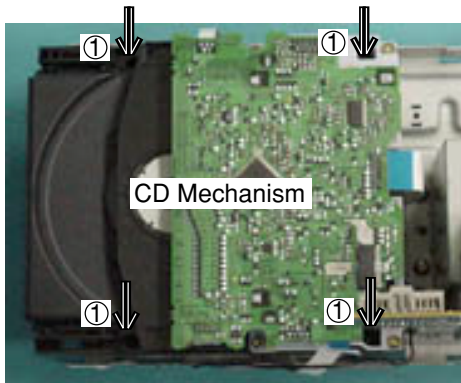
7. MD MECHANISM

- 1) Release 2 screws (BVTT+3-8) of CHAS, MD.



8. CD MECHANISM

- 1) Release 4 screws (BVIT3B+3-8) of CD Mechanism.

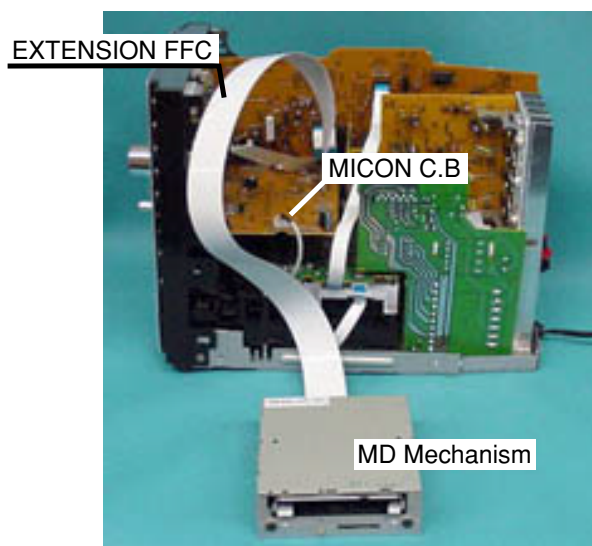


DISASSEMBLY -5/5

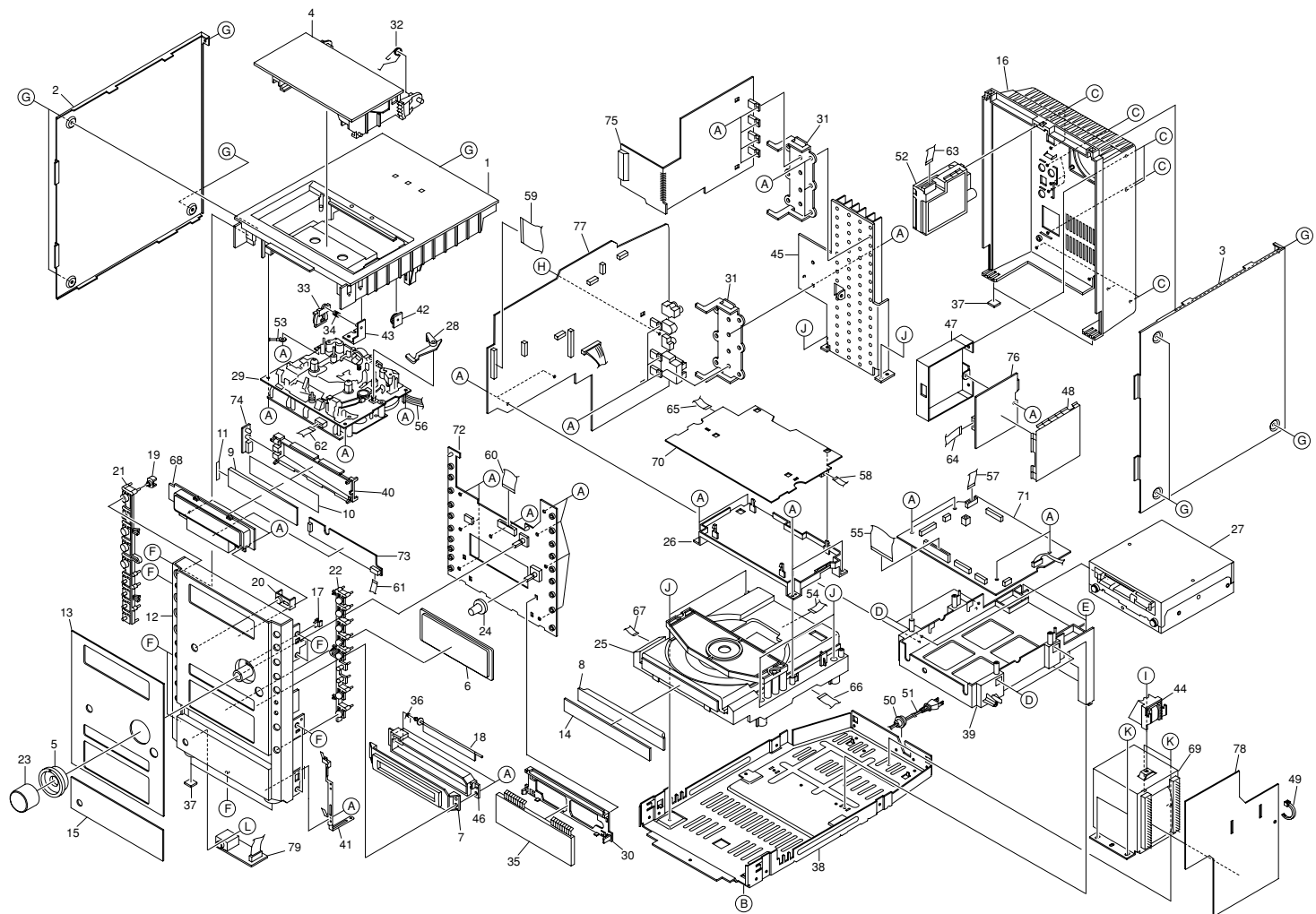
9. SERVICE POSITION OF MDMECHANISM

- 1) Remove MD MEHCANISM with referring to the disassembly procedure form 1 to 4 and from 6 to 7.
- 2) Set up with keeping MD MECHANISM is removed.
- 3) Connect MICON C.B to MD MECHANISM with extension FFC.

Parts No. : SV-J00-130-010 FF-CABLE, 28P 1.00 500



MECHANICAL EXPLODED VIEW -1/1



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.

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

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
	O	MC1001	8C-CJE-003-010	PANEL, TOP	a
	O	MC1002	8C-CJE-004-010	PANEL, L	a
	O	MC1003	8C-CJE-005-010	PANEL, R	a
	O	MC1004	8C-CJE-006-010	BOX, CASS	a
	O	MC1005	8C-CJE-013-010	RING, VOL	a
	O	MC1006	8C-CJE-017-010	WINDOW, LOWER	a
	O	MC1007	8C-CJE-018-010	PANEL, MD	a
	O	MC1008	8C-CJE-020-010	PANEL, CD	a
	O	MC1009	8C-CJE-023-010	LENS, METER	a
	X	MC1010	8C-CJE-024-010	SH, METER TOP	a
	X	MC1011	8C-CJE-025-010	SH, METER BOTTOM	a
	O	MC1012	8C-CJE-001-010	CABI, FR	a
	O	MC1013	8C-CJE-009-010	PLATE, FR	a
	O	MC1014	8C-CJE-010-010	PLATE, CD	a
	O	MC1015	8C-CJE-011-010	PLATE, LOWER	a
	O	MC1016	8C-CJE-043-010	CABI, REAR K	a
	O	MC1017	8C-CJE-014-010	REFLECTOR, VOL	a
	O	MC1018	8C-CJE-019-010	PLATE, MD	a
	O	MC1019	8C-CJE-021-010	REFLECTOR, POWER	a
	O	MC1020	8C-CJE-022-010	REFLECTOR, SENSOR	a
					XR-FD55 CEK
	O	MC1021	8C-CJE-007-010	KEY, PLAY	a
	O	MC1022	8C-CJE-008-010	KEY, FUNC	a
	O	MC1023	8C-CJE-012-010	KNOB, RTRY VOL	a
	O	MC1024	8C-CJE-015-010	KNOB, RTRY JOG	a
	X	MC1025	M8-3ZG-38P-070	3ZG-3 E14NC	a
	X	MC1026	8C-CJE-217-010	HLDR, PWB CD	a
	X	MC1027	M8-CZK-890-070	MDM-16Q	a
	O	MC1028	82-ZM1-263-110	LVR, EJECT L	a
	X	MC1029	M8-BZM-192-170	BZM-1 AR2NC	a
	X	MC1030	8C-CJE-203-010	GUIDE, FL	a
	X	MC1031	8C-CJE-208-010	HLDR, TR	a
	O	MC1032	82-NF5-218-010	SPR-T, EJECT 1 (SIN)	a
	O	MC1033	82-NF5-229-010	PLATE, LOCK (*)	a
	O	MC1034	86-NF9-224-010	SPR-C, LOCK	a
	O	MC1035	8C-CJE-609-010	FL, 15-BT-89GINK	a
	O	MC1036	87-NB8-210-010	SPR-T, FLAP	a
	X	MC1037	8B-NF9-204-010	CUSH, 11-8.5-2	a
	X	MC1038	8C-CJE-201-010	CHAS, MAIN	a
	O	MC1039	8C-CJE-202-010	CHAS, MD	a
	X	MC1040	8C-CJE-209-010	HLDR, LENS METER	a
					XR-FD55 CEK
	O	MC1041	8C-CJE-218-010	SPR-P, GND FR	a
	O	MC1042	8Z-NF6-210-010	DMPR, 150 N	a
	O	MC1043	87-NF4-216-010	HLDR, LOCK 1	a
	X	MC1044	8C-CJE-204-010	HLDR, PWB PT	a
	X	MC1045	8C-CJE-205-010	HT-SINK, MAIN ASSY	a
	X	MC1045a	8C-CJE-206-010	HT-SINK, MAIN	a
	X	MC1045b	8C-CJE-207-010	HT-SINK, FIN	a
	X	MC1046	8C-CJE-210-010	HLDR, FLAP MD	a
	X	MC1047	8C-CJE-212-010	SHLD-CASE, USB A	a
	X	MC1048	8C-CJE-213-010	SHLD-CASE, USB B	a
	X	MC1049	87-069-033-010	CABLE, TIE	a
	O	MC1050	87-085-185-010	BUSHING, AC CORD (E) CM-22B	a
	O	MC1051	87-A80-202-110	AC CORD ASSY, EKH BLK VH	a
!	O	MC1052	8C-CJE-665-010	TU UNIT, E TFCF1E112A	a
	X	MC1053	8A-MTM-651-010	WIRE ASSY, 160 BLK F-LUG	a
	O	MC1054	8C-CJE-604-010	FF-CABLE, 16P 1.0 125MM CD	a
	O	MC1055	8C-CJE-605-010	FF-CABLE, 28P 1MM 100MM	a
	O	MC1056	8C-CJE-607-010	CONN ASSY, 8P PH CASS	a
	O	MC1057	8C-CJE-641-010	FF-CABLE, 12P 1.25 50MM MICON	a
	O	MC1058	8C-CJE-642-010	FF-CABLE, 7P 1.25 200MM CD-MAI	a
					XR-FD55 CEK
	O	MC1059	8C-CJE-643-010	FF-CABLE, 28P 1.25 90MM MAIN	a
	O	MC1060	8C-CJE-644-010	FF-CABLE, 17P 1.25 65MM KEY	a
	O	MC1061	8C-CJE-645-010	FF-CABLE, 8P 1.25 60MM METER	a
	O	MC1062	8C-CJE-646-010	FF-CABLE, 8P 1.25 90MM DECK	a
	O	MC1063	8C-CJE-647-010	FF-CABLE, 11P 1.25 90MM TUNER	a
	O	MC1064	8C-CJE-648-010	FF-CABLE, 7P 1.25 170MM USB	a
	O	MC1065	8C-CJE-649-010	FF-CABLE, 13P 1.25 220MM CD	a
	O	MC1066	8C-CJE-650-010	FF-CABLE, 6P 1.25 105MM SPINDL	a
	O	MC1067	8C-CJE-651-010	FF-CABLE, 5P 1.25 120MM TRAY	a
	O	MC1068	8C-CJE-625-010	METER, WS23-01	a
!	O	MC1069	8C-CJE-666-010	PT, K CCJ-E	a
	X	MC1070	8C-CJE-621-010	PWB, CD 1 4M	a
	X	MC1071	8C-CJE-612-110	PWB, MICON	a
	X	MC1072	8C-CJE-613-110	PWB, KEY	a
	X	MC1073	8C-CJE-614-110	PWB, METER	a
	X	MC1074	8C-CJE-615-110	PWB, LED	a
	X	MC1075	8C-CJE-616-110	PWB, AMP	a
	X	MC1076	8C-CJE-617-110	PWB, USB	a
	X	MC1077	8C-CJE-632-010	PWB, MAIN	a
	X	MC1078	8C-CJE-633-010	PWB, PT	a

MECHANICAL PARTS LIST -2/2

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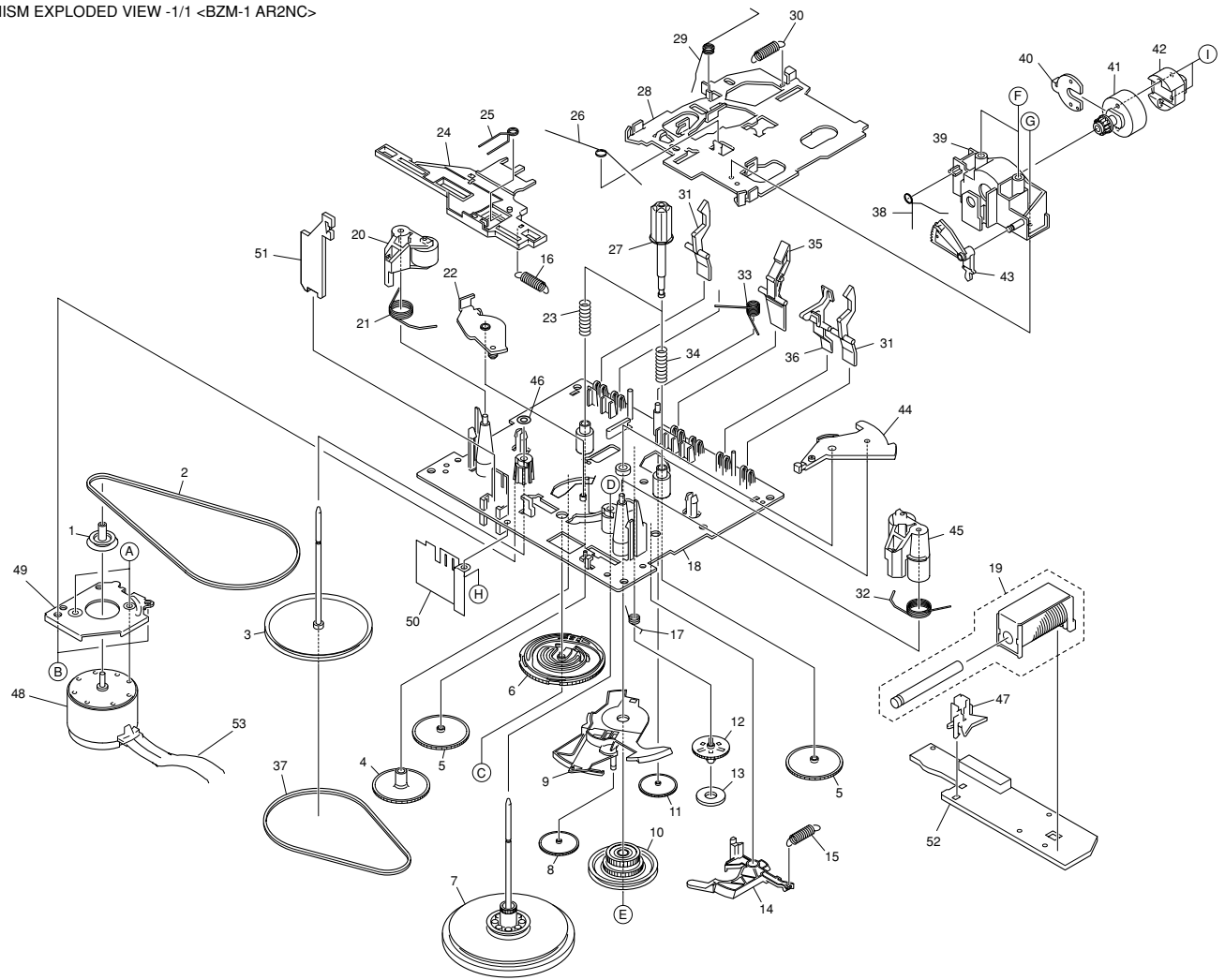
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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
	X	MC1079	8C-CJE-634-010	PWB, HP	a
	O	MC1A	87-067-703-010	BVT2+3-10 W/O SLOT	a
	O	MC1B	87-067-584-010	BVT2+3-6 W/O SLOT	a
	O	MC1C	87-067-660-010	BVT2+3-8 W/O SLOT BLK	a
	O	MC1D	87-067-689-010	BVTT+3-8	a
	O	MC1E	87-B10-316-010	BVIT3B+3-10 R W/O	a
	O	MC1F	87-721-096-410	QT2+3-10 W/O SLOT	a
	O	MC1G	87-B10-230-010	BVT2+3-10 W/O SLOT SILVER CR	a
	O	MC1H	87-NF4-224-010	S-SCREW, IT3B+3-8 CU	a
	O	MC1I	87-067-579-010	BVT2+3-8 W/O SLOT	a
	O	MC1J	87-B10-315-010	BVIT3B+3-8 R W/O	a
	O	MC1K	87-B10-318-010	BVIT3C+4-8 R W/O	a
	O	MC1L	88-AR1-217-010	S-SCREW, BFT2+3-8	a

COLOR NAME TABLE -1/1

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 <BZM-1 AR2NC>



TAPE MECHANISM PARTS LIST -1/2 <BZM-1 AR2NC>

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					BZM-1 AR2NC
	O	ST1001	82-ZM1-271-010	PULLEY,MOT ZZM-1	a
	O	ST1002	82-ZM1-354-010	BELT,SBU MAIN2 EPDM	a
	O	ST1003	82-ZM1-354-010	FLY-WHL ASSY,L	a
	X	ST1003a	82-ZM1-348-110	FLY-WHL,L W	a
	X	ST1003b	82-ZM1-236-010	CAPSTAN,2-41.5	a
	O	ST1004	82-ZM1-226-010	GEAR,REW	a
	O	ST1005	82-ZM1-216-510	GEAR,REEL	a
	O	ST1006	82-ZM1-221-310	GEAR,CAM	a
	O	ST1007	82-ZM1-237-610	FLY-WHL ASSY,R	a
	X	ST1007a	82-ZM1-349-110	FLY-WHL,R W	a
	X	ST1007b	82-ZM1-239-010	CAPSTAN,2.2-41.7	a
	O	ST1008	82-ZM1-225-210	GEAR,FR	a
	O	ST1009	82-ZM1-224-410	LVR,FR	a
	O	ST1010	82-ZM3-333-310	SLIP DISK ASSY 2	a
	X	ST1010a	82-ZM3-332-310	PULLEY,FR 2	a
	X	ST1010b	82-ZM1-230-110	GEAR,TAKE UP	a
	X	ST1010c	82-ZM1-231-010	CLR,SLIP	a
	X	ST1010d	82-ZM1-232-010	FELT,DIA 8.4-13-1	a
	X	ST1010e	82-ZM1-233-110	SPR-C,SLIP	a
	O	ST1011	82-ZM1-223-010	GEAR,PLAY	a
					BZM-1 AR2NC
	O	ST1012	82-ZM1-220-210	GEAR,IDLER	a
	O	ST1013	82-ZM3-616-010	RING MAGNET 4	a
	O	ST1014	82-ZM1-227-310	LVR,TRIG	a
	O	ST1015	82-ZM1-305-210	SPR-E,TRIG 2	a
	O	ST1016	82-ZM1-255-310	SPR-E,LVR DIR	a
	O	ST1017	82-ZM1-322-010	SPR-T,FR 60	a
	O	ST1018	82-ZM1-358-110	CHAS ASSY,FPC	a
	X	ST1018a	82-ZM1-359-110	CHAS ASSY,O/S FPC	a
	X	ST1018b	82-ZM1-360-110	CHAS,FPC	a
	X	ST1018c	82-ZM1-317-210	OILLESS-BRG 2.2RN	a
	X	ST1018d	82-ZM1-318-210	OILLESS-BRG 2LN	a
	O	ST1019	82-ZM3-628-010	SOL ASSY,23 SO	a
	X	ST1019a	82-ZM3-629-010	HLDR,BOBBIN SOL SO	a
	X	ST1019b	82-ZM3-630-010	YOKE,SOL SO	a
	X	ST1019c	82-ZM3-631-010	SHAFT,CORE SOL SO	a
	X	ST1019d	82-ZM3-632-010	SHAFT,PLUNGER SOL SO	a
	X	ST1019e	82-ZM3-633-010	TERMINAL,SOL SO	a
	O	ST1020	82-ZM1-363-010	LEVER,ASSY PINCH LD	a
	X	ST1020a	82-ZM1-357-010	LEVER,PINCH L D	a
	X	ST1020b	82-ZM1-361-010	ROLLER,ASSY YD	a
					BZM-1 AR2NC
	X	ST1020c	82-ZM1-355-010	CLR,ROLLER 3	a
	X	ST1020d	82-ZM3-347-010	ROLLER,RUBBER Y	a
	O	ST1021	82-ZM1-258-210	SPR-T,PINCH L	a
	O	ST1022	82-ZM1-333-210	PLATE,LINK2	a
	O	ST1023	82-ZM1-244-510	SPR-C,BT	a
	O	ST1024	82-ZM1-266-310	LVR,DIR	a
	O	ST1025	82-ZM1-214-010	SPR-T,DIR	a
	O	ST1026	82-ZM1-269-210	SPR-T,BRG	a
	O	ST1027	82-ZM1-217-410	REEL,TABLE	a
	O	ST1028	82-ZM1-206-910	CHAS,HEAD	a
	O	ST1029	82-ZM1-219-110	SPR-T,LINK	a
	O	ST1030	82-ZM1-218-010	SPR-E,HB	a
	O	ST1031	82-ZM1-240-110	LVR,REC	a
	O	ST1032	82-ZM1-259-310	SPR-T,PINCH R	a
	O	ST1033	82-ZM1-257-010	SPR-T,CAS	a
	O	ST1034	82-ZM1-285-410	SPR-C,BT L	a
	O	ST1035	82-ZM1-242-010	LVR,CAS	a
	O	ST1036	82-ZM1-243-010	LVR,STOP	a
	O	ST1037	82-ZM1-338-110	BELT,FR 4	a
	O	ST1038	82-ZM3-353-010	SPR-T,HEAD 2	a
					BZM-1 AR2NC
	O	ST1039	82-ZM1-207-910	GUIDE,TAPE	a
	O	ST1040	82-ZM1-314-110	PLATE,HEAD	a
	O	ST1041	82-ZM1-208-310	HLDR,HEAD	a
	O	ST1042	87-A92-197-010	HEAD,RPH HADKH5666A FPC	a
	X	ST1042a	85-ZM3-602-010	PWB,FLEX A	a
	O	ST1043	82-ZM1-210-110	GEAR,H T	a
	O	ST1044	82-ZM1-222-310	LVR,PLAY	a
	O	ST1045	82-ZM1-362-010	LEVER,ASSY PINCH RD	a
	X	ST1045a	82-ZM1-356-010	LEVER,PINCH R D	a
	O	ST1046	82-ZM1-288-010	SH,1.63-3.2-0.5 SLT	a
	X	ST1047	82-ZM1-245-210	HLDR,IC	a
	O	ST1048	87-A91-825-010	MOT,M09Y/Z	a
	O	ST1049	8B-ZM1-202-110	HLDR,MOTOR 2	a
	X	ST1050	85-ZM3-201-210	PLATE,SHLD M3	a
	X	ST1051	8B-ZM1-603-010	PWB,HEAD FPC	a
	X	ST1052	8B-ZM1-602-010	PWB,MAIN FPC	a
	O	ST1053	8B-ZM1-604-010	RBN-CORD,2P -55MM	a
	O	ST1A	87-251-070-410	U+2.6-3	a
	O	ST1B	87-741-073-410	UT2+2.6-6 W/O SLOT	a
	O	ST1C	87-B10-008-010	W-P,2.08-8-0.4 SLIT	a

TAPE MECHANISM PARTS LIST -2/2 <BZM-1 AR2NC>

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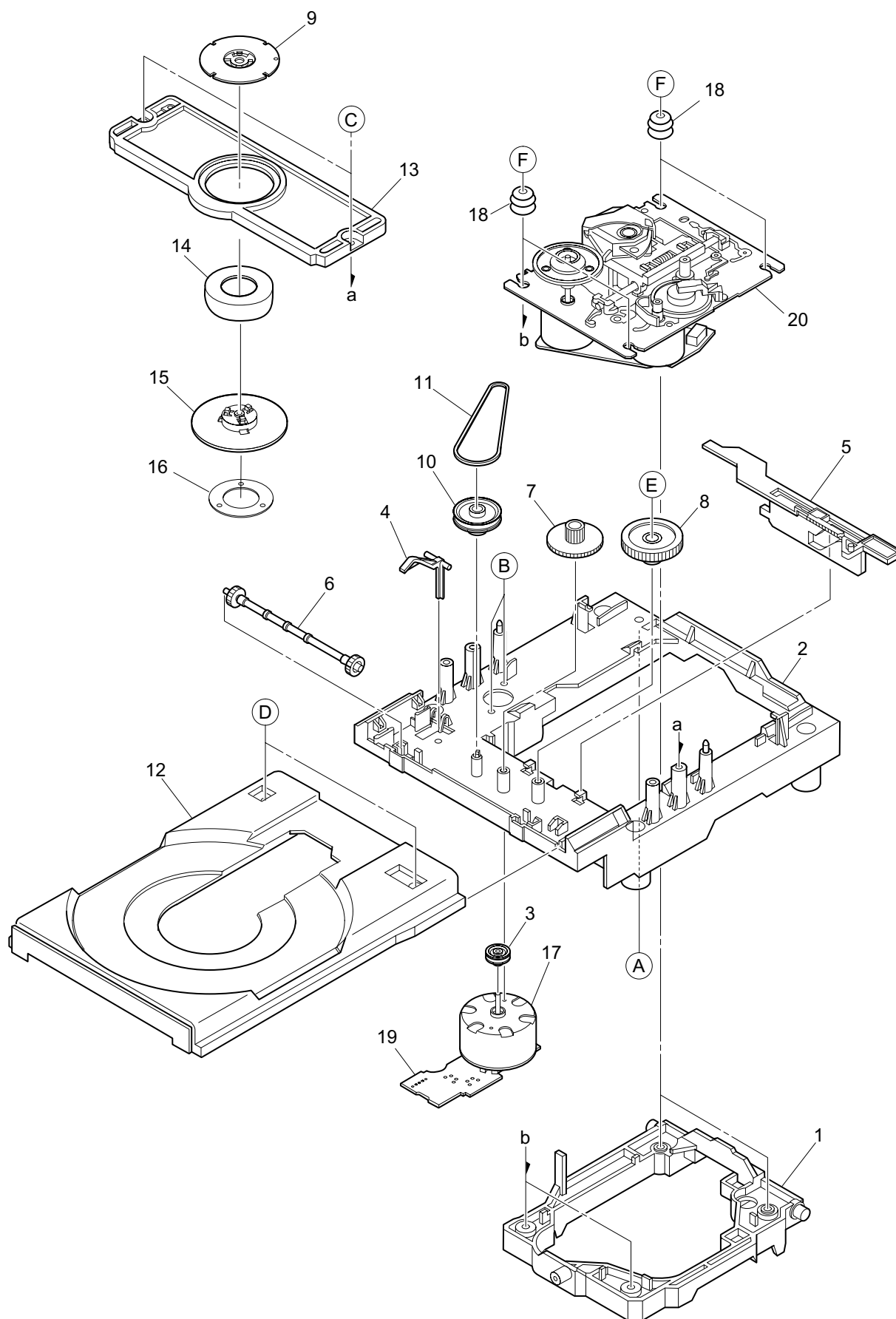
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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					BZM-1
					AR2NC
	O	ST1D	80-ZM6-243-010	SH 1.75-3.6-0.5 SLT	a
	O	ST1E	82-ZM3-334-010	PW, 2.16-6-0.4	a
	O	ST1F	86-ZM4-206-110	S-SCREW, AZIMUTH L	a
	O	ST1G	85-ZM3-202-010	S-SCREW, TG	a
	O	ST1H	82-ZM3-222-010	S-SCREW, SHILD PLATE	a
	O	ST1I	80-ZM6-207-010	V+1.6-7	a

CD MECHANISM EXPLODED VIEW -1/2 <3ZG-3 E14NC>



CD MECHANISM PARTS LIST -1/2 <3ZG-3 E14NC>

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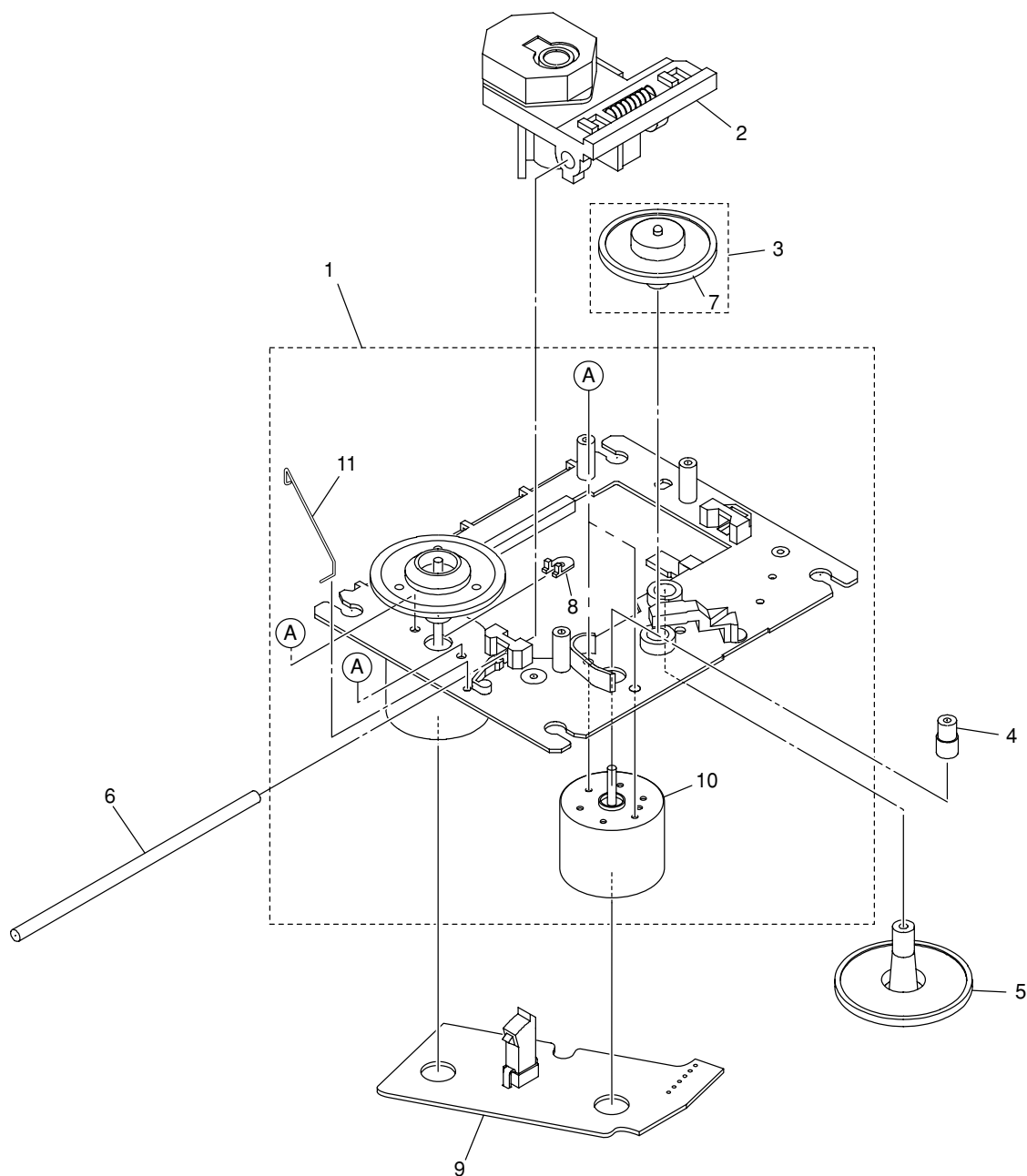
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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					3ZG-3 E14NC
	O	SC1001	83-ZG3-224-510	HLDR M2	a
	O	SC1002	83-ZG3-237-110	CHAS,L6 R	a
	O	SC1003	83-ZG3-208-010	PULLEY,MOTOR	a
	O	SC1004	83-ZG3-213-010	LVR,SW	a
	O	SC1005	83-ZG3-209-810	CAM,SLIDE	a
	O	SC1006	83-ZG3-207-010	GEAR,TRAY	a
	O	SC1007	83-ZG3-204-210	GEAR,C	a
	O	SC1008	83-ZG3-205-010	GEAR,D	a
	O	SC1009	83-ZG3-211-010	PLATE,DISC	a
	O	SC1010	83-ZG3-220-210	GEAR,PULLEY 2	a
	O	SC1011	83-ZG3-214-010	BELT,L	a
	O	SC1012	83-ZG3-231-310	TRAY,CD 3	a
	O	SC1013	83-ZG3-236-010	HLDR,CHUCK 3	a
	O	SC1014	83-ZG3-604-010	RING,MAG 2	a
	O	SC1015	86-ZG1-238-010	HLDR,MAGNET 6ZG N	a
	O	SC1016	86-ZG1-239-110	PLATE,DISC PC	a
	O	SC1017	87-045-305-010	MOT,RF-500TB	a
	O	SC1018	83-ZG3-225-010	CUSH-G,MAIN A	a
	X	SC1019	83-ZG3-603-010	PWB,LOAD-A 27M	a
	X	SC1020	M8-CZG-891-070	CZG-8 YA1NC	a
					3ZG-3 E14NC
	O	SC1A	87-067-945-110	VFT2+3-12 (F10)	a
	O	SC1B	87-251-071-410	U+2.6-4	a
	O	SC1C	83-ZG3-235-010	VFT2+2.6-8	a
	O	SC1D	87-352-075-210	VT2+2.6-10	a
	O	SC1E	83-ZG3-217-010	S-SCREW,GEAR D	a
	O	SC1F	81-ZG1-254-010	S-SCREW,MECH HLDR	a

CD MECHANISM EXPLODED VIEW -2/2 <CZG-8 YA1NC>



CD MECHANISM PARTS LIST -1/1 <CZG-8 YA1NC>

! =  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.

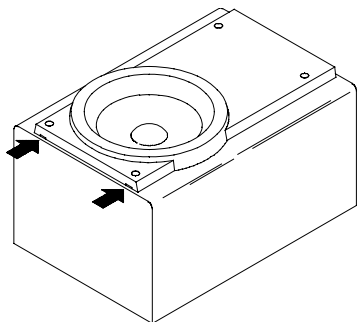
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					CZG-8 YA1NC
	O	SC1001	83-ZG2-243-31C	CHAS ASSY, SHT	a
	X	SC1001a	83-ZG2-244-210	CHAS, SHT	a
	O	SC1001b	8C-ZG8-201-01C	TURN TABLE, D1	a
	O	SC1001c	83-ZG2-241-21K	PLATE, C2	a
	O	SC1002	87-A92-037-01C	PICKUP, PXR-104X-BP-0101	a
	O	SC1003	83-ZG2-235-01M	GEAR, A3	a
	O	SC1004	83-ZG2-236-01M	GEAR, MOTOR 3	a
	O	SC1005	83-ZG2-205-21M	GEAR, B	a
	O	SC1006	83-ZG2-253-11J	SHAFT, SLIDE 5	a
	X	SC1007	8C-ZG8-202-01J	SH, RUBBER	a
	O	SC1008	8C-ZG8-210-01C	CLR, SPINDLE	a
	X	SC1009	83-ZG2-609-01M	PWB, DRIVE-G 21M	a
	O	SC1010	87-A92-491-01C	MOT, RF-320EH43	a
	O	SC1011	8C-ZG8-203-01C	SPR-T, SPINDLE	a
	O	SC1A	87-261-032-21G	V+2-3	a

GENERAL SPEAKER DISASSEMBLY INSTRUCTIONS (FOR REFERENCE) -1/1

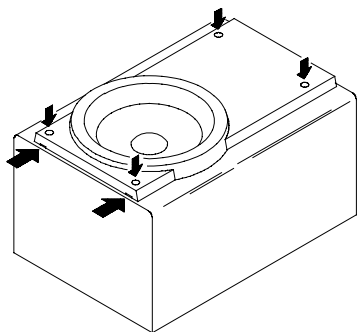
Type.1

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.



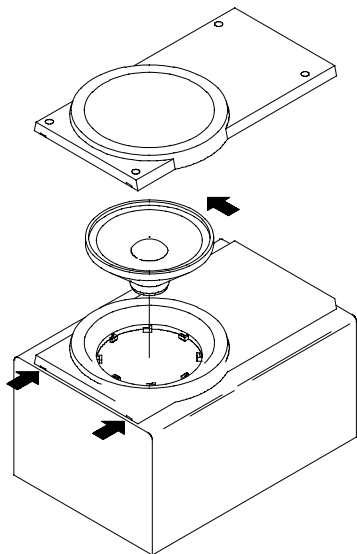
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole 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.

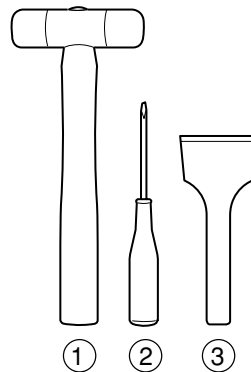


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise 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.

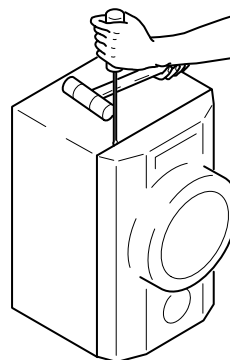


Fig-1

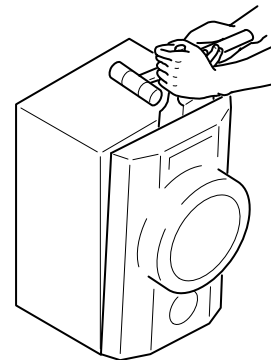


Fig-2

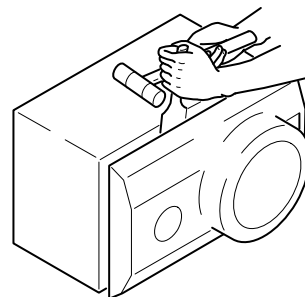


Fig-3

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 -1/1 <SX-LFD55>

! = ⚠ 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
					SX-SLFD55 YMC
	X	SP1001	8C-CPE-851-010	CTN, ASSY TTC	a
	X	SP1002	8C-CPE-029-010	BADGE, AIWA 25 NEW	a
	X	SP1003	8C-CP2-013-010	BOSS, CATCHER	a
	X	SP1004	8C-CPE-002-010	CABI, M	a
	O	SP1005	8C-CPE-033-010	CORD, SPKR 2.5M	a
	X	SP1006	8C-CPE-013-010	FASTENER, CL	a
	O	SP1007	8C-CPE-027-010	GRILLE, FRAME ASSY K	a
	X	SP1008	8C-CPE-028-010	GRILLE, FRAME K	a
	X	SP1009	8C-CPE-031-010	LBL, SPEC K L	a
	X	SP1010	8C-CPE-032-010	LBL, SPEC K R	a
	X	SP1011	8C-CPE-030-010	NET, K	a
	O	SP1012	8C-CPE-023-010	PANEL, FR ASSY L K	a
	O	SP1013	8C-CPE-025-010	PANEL, FR ASSY R K	a
	X	SP1014	8C-CPE-024-010	PANEL, FR L K	a
	X	SP1015	8C-CPE-026-010	PANEL, FR R K	a
	X	SP1016	8C-CPE-005-010	PANEL, TW	a
	X	SP1017	8C-CPE-007-010	RING, W	a
	X	SP1018	8C-CPE-006-010	SH, TW	a
	O	SP1019	8C-DS1-604-010	SPKR, TW 25 (SX-SLTC80)	a
	O	SP1020	8C-CPE-602-010	SPKR, W 120 25/4	a
					SX-SLFD55 YMC
	O	SP1021	8C-CPE-611-010	TERMINAL, ASSY K	a
	X	SP1022	8B-CPX-001-110	TUBE, 40	a

OTHER PARTS LIST -1/3

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C = Components marked

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					XR-FD55 CEK
	X		87-B40-057-010	BAG, PP 0.03-150-200	a
	X		87-B40-095-010	BAG, PV 0.04-500-550 PL	a
	X		8C-CJE-851-010	CUSHION, FRONT C	a
	X		8C-CJE-852-010	CUSHION, REAR C	a
	X		93-324-066-010	SH, FOAMED-MAT 0.31-500-300	a
	X		87-063-173-010	CLOTH, N9295B BLK 30-10-0.35	a
	X		87-B40-281-010	LBL, BAR-CODE A 35X8	a
	X		8C-CJE-027-010	LBL, SPEC KC	a
	X		8C-CJE-215-010	SH, ADH CD	a
	X		8C-CJE-214-010	SH, ADH FR	a
	X		8C-CJE-216-010	SH, ADH LOWER	a
	X		8C-CJE-221-010	SH, GND FR W/ADH	a

OTHER PARTS LIST -2/3 <BZM-1 AR2NC>

! =  SAFETY PARTS
C = Components marked

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
					BZM-1 AR2NC
	X		M8-BZM-192-170	BZM-1 AR2NC	a
	X		82-ZM1-596-010	BAG, PV 0.04-190-240	a
	X		82-ZM1-855-010	CUSHION, BOTTOM 6NC	a

OTHER PARTS LIST -3/3 <3ZG-3 E14NC>

! =  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.

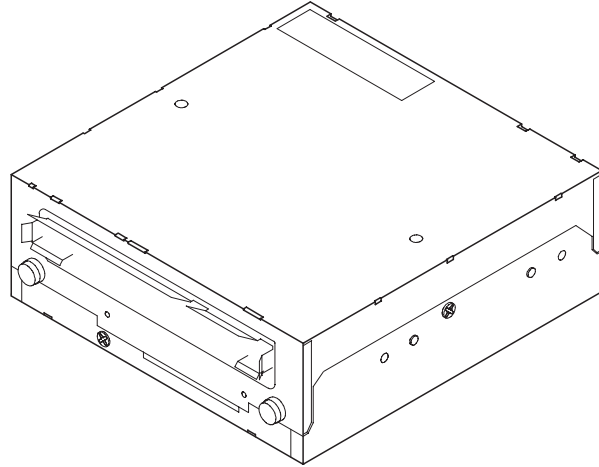
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.

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
					3ZG-3 E14NC
	X		83-ZG3-599-010	BAG, PV ANTI 390X265	a
	X		83-ZG3-857-010	CTN, PRINTED E1NC	a
	X		83-ZG3-858-010	CUSHION, BOTTOM NC	a
	X		83-ZG3-859-010	CUSHION, TOP NC	a
	X		81-MX4-700-010	SHIELD CORE, MOT S	a

MD-MECHANISM

(MDM-16QA)



SERVICE MANUAL

MD MECHANISM

BASIC MD MECHANISM : MDM-16QA

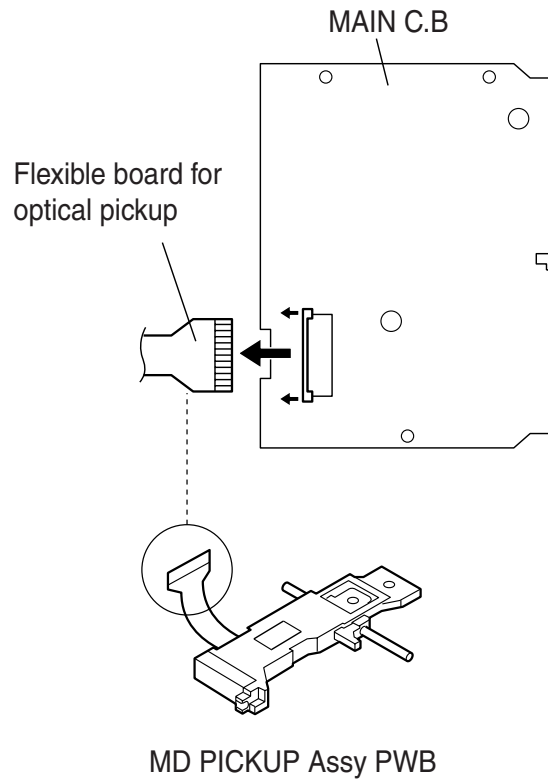


PROTECTION EYES FROM LASER BEAM DURING SERVICING -1/1

Precaution to replace Optical block

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 pulling out the flexible board for optical pickup from the connector, cover the tip of flexible board with conductive aluminum foil, etc., in order to prevent static electricity from damaging the pickup.



■ Disassembly

Cautions before disassembly:

When disassembling this unit and reassembling it after repair, be careful of the following to ensure safety and reliable performance:

1. Remove the mini-disc from this unit.
2. Take great care not to use screws of greater lengths when installing MD mechanism block (screws that secure components to be installed in MD block mechanism chassis): A longer screw will contact the optical pickup, which could result in no operation.
3. During repair, take great care with static electricity, which could damage the integrated circuits, etc.

■ Flow of disassembly and required tools

(Number): Shows the reference number in disassembly diagram and parts list

Step	Item	Tool	Caution
------	------	------	---------

(1) Procedure up to pickup removal

1) Removing COVER, BOTTOM (26) (Fig. 2-1)

①	Remove 3 screws (37).	Screwdriver	
②	Remove COVER, BOTTOM (26).		



2) Removing main circuit board (Fig. 2-1)

①	Disconnect 13 lead wires from the main circuit board.	Soldering iron	
②	Disconnect the flexible board.		After pulling out the flexible board of pickup from the connector, cover the tip of flexible board with conductive aluminum foil, etc., in order to prevent static electricity from damaging the pickup.
③	Remove 3 screws (38).	Screwdriver	
④	Remove the main circuit board.		



3) Removing PLATE, EARTH (3) (Fig. 2-1)

①	Remove 3 screws (37).	Screwdriver	
②	Remove PLATE, EARTH (3).		The insulator (27) will be freed: Take care not to lose it.



4) Removing COVER, TOP (25) (Fig. 2-1)

①	Remove SPRING, EARTH (15) from COVER, TOP (25).	Tweezers	
②	Remove COVER, TOP (25).		



5) Removing HEAD (28) (Fig. 3-3)

①	Remove screw (33).	Screwdriver	
②	Remove HEAD (28).		



6) Removing MD Base (5) (Fig. 3-4)

①	Remove screw (36) that secures ANGLE, F/M (1).	Screwdriver	
②	Remove screw (32) holding the pickup, and then remove SPRING, GRIP (13) and GRIP RACK (18).	Screwdriver	
③	Remove 3 screws (35).	Screwdriver	
④	Remove the MD BASE (5) ASSY.		



7) Removing pickup (29) (Fig. 3-4)

①	Remove SHAFT, PICK GUIDE (23) from ANGLE, F/M (1), and then remove the pickup (29).		Be careful not to damage the gears of FEED MOTOR (M901) and DRIVE SCREW (22).
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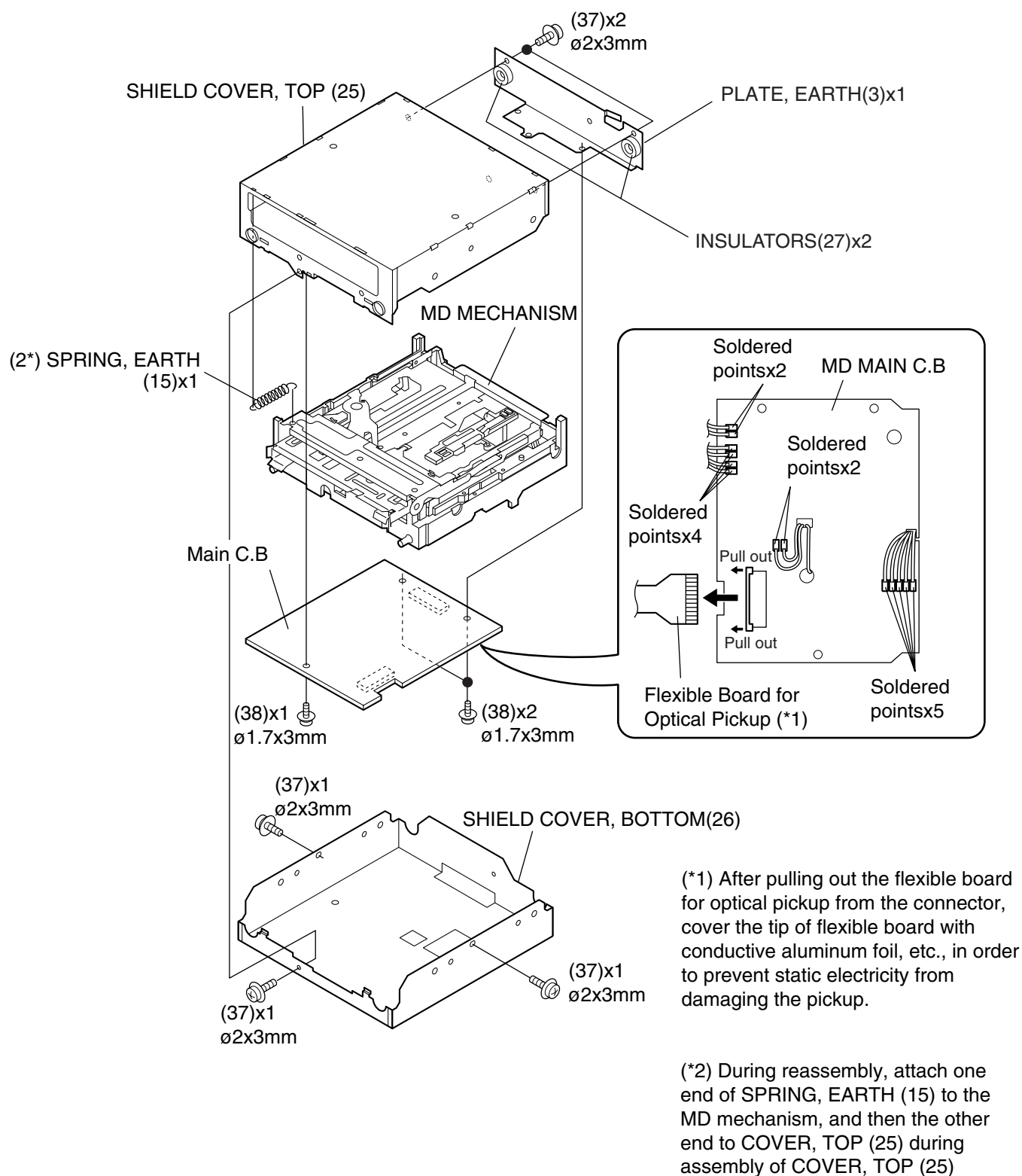


Fig.2 - 1

DISASSEMBLY INSTRUCTIONS -3/3

Step	Item	Tool	Caution
------	------	------	---------

(2) Procedure up to spindle motor removal

1) Removing SPINDLE MOTOR (M903) (Fig. 3-1)

① Remove 3 screws (34).	Screwdriver	
② Remove SPINDLE MOTOR (M903).		

(3) Procedure up to loading motor removal

1) Removing LOADING MOTOR (M902) (Fig. 3-2)

① Remove screw (36) holding ANGLE, LD MOTOR (2).	Screwdriver	
② Remove the ANGLE, LD MOTOR (2) ASSY.		Be careful not to damage the gear of GEAR, MIDDLE (20).
③ Remove SHAFT, LD GEAR (24), and then GEAR, LOADING (21).		Be careful not to damage the gears of LOADING MOTOR (M902) and GEAR, LOADING (21).
④ Remove 2 screws (31), and then remove ANGLE, LD MOTOR (2).	Screwdriver	

(4) Procedure up to feed motor removal

1) Removing MD BASE (5) (Fig. 3-4)

① Remove screw (36) holding ANGLE, F/M (1).	Screwdriver	
② Remove 3 screws (35).	Screwdriver	
③ Remove the MD BASE (5) ASSY.		



2) Removing FEED MOTOR (M901) (Fig. 3-4)

① Remove the FEED MOTOR (M901) ASSY.		Be careful not to damage the gears of FEED MOTOR (M901) and DRIVE SCREW (22).
② Remove 2 screws (30).	Screwdriver	
③ Remove ANGLE, F/M (1).		

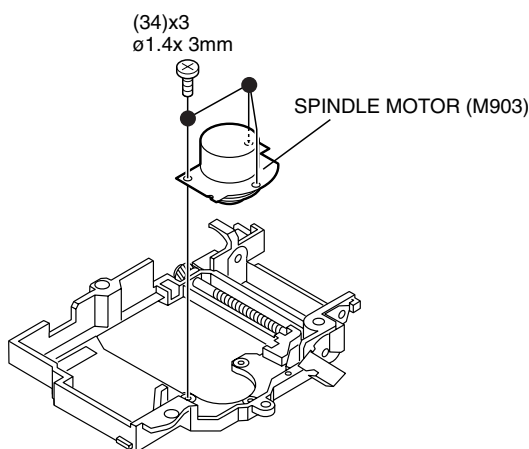


Fig.3 - 1

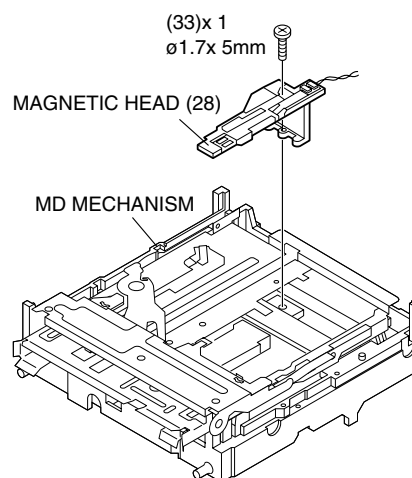


Fig.3 - 3

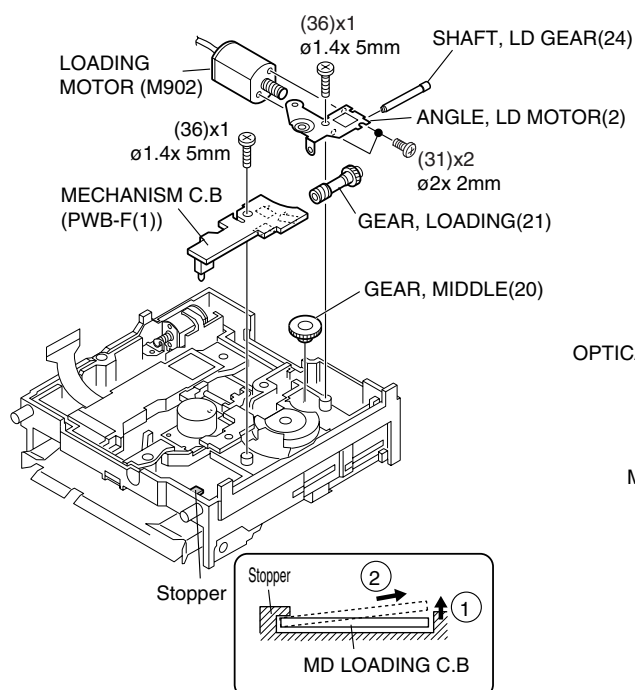


Fig.3 - 2

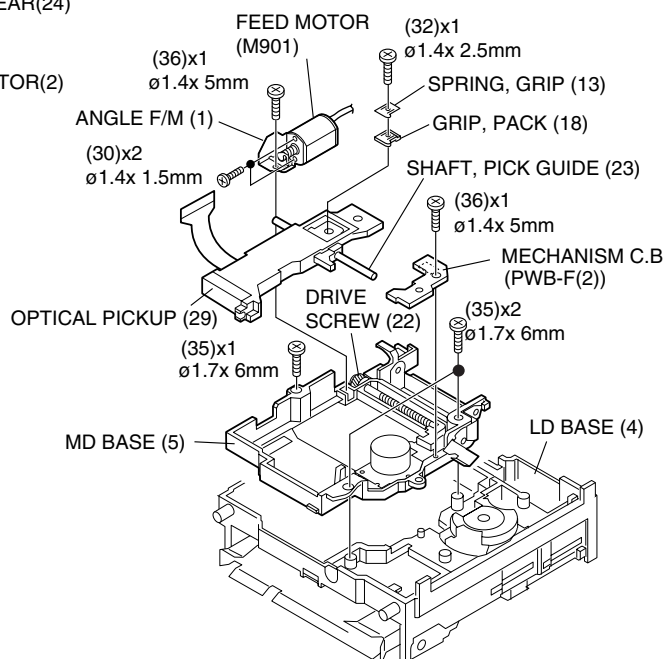


Fig.3 - 4

ELECTRICAL PARTS LIST -1/4

! = ⚠ SAFETY PARTS
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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
MDM-16QA					
LEAD IN	O	CW 1934	S1-245-120-671	WIRE, LEAD QCNWN1963AWZZ	a
LEAD IN	O	CW 1935	S1-245-120-672	WIRE, LEAD QCNWN1964AWZZ	a
LEAD IN	O	SW 1936	S1-245-300-079	SW, PUCH QSW-P0016AWZZ	a
LOADING	O	CW 1931	S1-245-120-675	WIRE, LEAD QCNWN2126AWZZ	a
LOADING	O	CW 1932	S1-245-120-674	WIRE, LEAD QCNWN2125AWZZ	a
LOADING	O	CW 1933	S1-245-120-673	WIRE, LEAD QCNWN2124AWZZ	a
LOADING	O	SW 1930	S1-245-300-052	SW, PUCH QSW-P0011AWZZ	a
LOADING	O	SW 1932	S1-245-300-051	SW, PUCH QSW-M0007AWZZ	a
LOADING	O	SW 1933	S1-245-300-051	SW, PUCH QSW-M0007AWZZ	a
LOADING	O	SW 1934	S1-245-300-051	SW, PUCH QSW-M0007AWZZ	a
MDM-16QA					
MAIN	X C	1100	S1-245-900-039	CAP, 4.7-10	a
MAIN	X C	1101	S1-415-950-019	CAP, 1-6.3	a
MAIN	X C	1107	S1-305-950-393	CAP, 0.022-16	a
MAIN	X C	1110	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1111	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1112	S1-305-930-566	CAP, 5PF-50	a
MAIN	X C	1113	S1-415-950-019	CAP, 1-6.3	a
MAIN	X C	1114	S1-305-950-396	CAP, 0.033-16	a
MAIN	X C	1115	S1-305-950-396	CAP, 0.033-16	a
MAIN	X C	1116	S1-245-950-043	CAP, 1-10	a
MDM-16QA					
MAIN	X C	1117	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1118	S1-245-950-041	CAP, 0.47-10	a
MAIN	X C	1119	S1-245-950-041	CAP, 0.47-10	a
MAIN	X C	1121	S1-445-950-033	CAP, 0.22-10	a
MAIN	X C	1122	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1123	S1-245-950-023	CAP, 0.1-16	a
MAIN	X C	1124	S1-245-950-023	CAP, 0.1-16	a
MAIN	X C	1125	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1200	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1201	S1-245-900-038	CAP, 10-10	a
MDM-16QA					
MAIN	X C	1202	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1203	S1-415-950-019	CAP, 1-6.3	a
MAIN	X C	1205	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1206	S1-305-950-316	CAP, 0.01-16	a
MAIN	X C	1207	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1208	S1-425-930-060	CAP, 18PF-50	a
MAIN	X C	1209	S1-305-930-557	CAP, 15PF-50	a
MAIN	X C	1210	S1-305-930-558	CAP, 22PF-50	a
MAIN	X C	1211	S1-425-950-096	CAP, 0.1-25	a
MAIN	X C	1230	S1-245-950-043	CAP, 1-10	a
MDM-16QA					
MAIN	X C	1241	S1-305-950-338	CAP, 0.001-50	a
MAIN	X C	1260	S1-425-950-096	CAP, 0.1-25	a
MAIN	X C	1261	S1-185-930-010	CAP, 220PF-50	a
MAIN	X C	1262	S1-185-930-010	CAP, 220PF-50	a
MAIN	X C	1263	S1-185-930-010	CAP, 220PF-50	a
MAIN	X C	1264	S1-185-930-010	CAP, 220PF-50	a
MAIN	X C	1265	S1-185-930-010	CAP, 220PF-50	a
MAIN	X C	1266	S1-305-930-558	CAP, 22PF-50	a
MAIN	X C	1270	S1-425-930-083	CAP, 330PF-50	a
MAIN	X C	1300	S1-305-930-530	CAP, 100PF-50	a
MDM-16QA					
MAIN	X C	1301	S1-305-950-393	CAP, 0.022-16	a
MAIN	X C	1302	S1-245-900-038	CAP, 10-10	a
MAIN	X C	1303	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1304	S1-185-930-010	CAP, 220PF-50	a
MAIN	X C	1305	S1-305-930-593	CAP, 82PF-50	a
MAIN	X C	1340	S1-305-930-530	CAP, 100PF-50	a
MAIN	X C	1403	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1404	S1-305-950-316	CAP, 0.01-16	a
MAIN	X C	1407	S1-425-950-096	CAP, 0.1-25	a
MAIN	X C	1408	S1-245-930-020	CAP, 680PF-50	a
MDM-16QA					
MAIN	X C	1409	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1503	S1-425-950-096	CAP, 0.1-25	a
MAIN	X C	1504	S1-305-930-530	CAP, 100PF-50	a
MAIN	X C	1508	S1-305-930-530	CAP, 100PF-50	a
MAIN	X C	1510	S1-305-930-530	CAP, 100PF-50	a
MAIN	X C	1512	S1-305-930-530	CAP, 100PF-50	a
MAIN	X C	1530	S1-305-930-530	CAP, 100PF-50	a
MAIN	X C	1534	S1-305-930-561	CAP, 47PF-50	a
MAIN	X C	1536	S1-305-930-561	CAP, 47PF-50	a
MAIN	X C	1538	S1-305-930-530	CAP, 100PF-50	a
MDM-16QA					
MAIN	X C	1540	S1-305-930-553	CAP, 150PF-50	a
MAIN	X C	1563	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1602	S1-025-930-012	CAP, 470PF-50	a
MAIN	X C	1603	S1-245-930-020	CAP, 680PF-50	a
MAIN	X C	1606	S1-245-900-038	CAP, 10-10	a
MAIN	X C	1607	S1-245-950-043	CAP, 1-10	a
MAIN	X C	1610	S1-245-900-039	CAP, 4.7-10	a
MAIN	X C	1611	S1-305-950-332	CAP, 0.0047-50	a
MAIN	X C	1613	S1-305-950-316	CAP, 0.01-16	a
MAIN	X C	1616	S1-245-940-005	CAP, E 100-10	a

ELECTRICAL PARTS LIST -2/4

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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
MDM-16QA					
MAIN	X C	1619	S1-305-950-316	CAP, 0.01-16	a
MAIN	X C	1633	S1-305-950-397	CAP, 0.047-16	a
MAIN	X C	1655	S1-445-950-004	CAP, 0.01-50	a
MAIN	X C	1700	S1-425-940-037	CAP, E 47-4	a
MAIN	X C	1703	S1-415-950-019	CAP, 1-6.3	a
MAIN	X C	1704	S1-425-940-037	CAP, E 47-4	a
MAIN	X C	1706	S1-415-950-019	CAP, 1-6.3	a
MAIN	X C	1708	S1-415-950-019	CAP, 1-6.3	a
MAIN	X C	1715	S1-415-950-019	CAP, 1-6.3	a
MAIN	X C	1716	S1-425-940-037	CAP, E 47-4	a
MAIN	X C	1720	S1-425-930-083	CAP, 330PF-50	a
MAIN	X C	1721	S1-425-930-083	CAP, 330PF-50	a
MAIN	X C	1801	S1-245-900-038	CAP, 10-10	a
MAIN	X C	1802	S1-245-900-038	CAP, 10-10	a
MAIN	X C	1806	S1-245-950-043	CAP, 1-10	a
MAIN	O CN	1101	S1-245-100-262	CONN, 28P	a
MAIN	O CN	1501	S1-245-100-253	CONN, 28P	a
MAIN	O CW	0901	S1-245-120-676	WIRE, LEAD QCNWN2127AWZZ	a
MAIN	O CW	0902	S1-245-120-677	WIRE, LEAD QCNWN2128AWZZ	a
MAIN	O CW	0903	S1-245-120-678	WIRE, LEAD QCNWN2129AWZZ	a
MDM-16QA					
MAIN	O CW	0904	S1-245-120-679	WIRE, LEAD QCNWN2130AWZZ	a
MAIN	O D	1300	S1-245-700-038	DIODE, SBE803	a
MAIN	O FFC	1501	- - -	FLAT CABLE, 28P L=80mm	a
MAIN	O FL	1501	S1-246-210-011	FL, RFILN0002AWZZ	a
MAIN	O FL	1507	S1-246-210-012	FL, RFILN0003AWZZ	a
MAIN	O FL	1509	S1-246-210-012	FL, RFILN0003AWZZ	a
MAIN	O FL	1512	S1-246-210-012	FL, RFILN0003AWZZ	a
MAIN	O FL	1518	S1-246-210-012	FL, RFILN0003AWZZ	a
MAIN	O FL	1520	S1-246-210-012	FL, RFILN0003AWZZ	a
MAIN	O FL	1523	S1-245-730-930	FL, RFILN0008AWZZ	a
MAIN	O FL	1524	S1-245-730-930	FL, RFILN0008AWZZ	a
MAIN	O FL	1525	S1-245-730-930	FL, RFILN0008AWZZ	a
MAIN	S IC	1101	S1-245-730-614	IC, IR3R58M	a
MAIN	S IC	1201	S1-245-730-783	IC, LR37816A	a
MAIN	S IC	1202	S1-245-730-869	IC, IX2960AF	a
MAIN	S IC	1300	S1-245-730-472	IC, 74ACT02T	a
MAIN	S IC	1301	S1-245-761-129	IC, MCH6616	a
MAIN	S IC	1302	S1-245-730-582	IC, CPH5608	a
MAIN	S IC	1401	S1-245-730-930	IC, IX0520AW	a
MAIN	S IC	1402	S1-245-730-884	IC, C24WC02U	a
MDM-16QA					
MAIN	S IC	1601	S1-245-730-885	IC, M56788AFP	a
MAIN	S IC	1701	S1-245-730-629	IC, UDA1345TS	a
MAIN	S IC	1801	S1-245-730-367	IC, XC62EP32	a
MAIN	S IC	1802	S1-245-730-693	IC, XC62FP26P	a
MAIN	O L	1100	S1-245-850-026	COIL, 0.47UH	a
MAIN	O L	1101	S1-245-850-024	COIL, 10UH	a
MAIN	O L	1200	S1-245-850-025	COIL, 4.7UH	a
MAIN	O L	1201	S1-245-850-026	COIL, 0.47UH	a
MAIN	O L	1202	S1-245-850-026	COIL, 0.47UH	a
MAIN	O L	1300	S1-246-140-033	CHOKE COIL, 47UH	a
MAIN	O Q	1631	S1-245-761-145	TR, 2SC3928AR	a
MAIN	O Q	1804	S1-245-760-098	TR, 2SB1205	a
MAIN	O Q	1808	S1-245-761-171	TR, 2SC4681	a
MAIN	X R	1101	S1-185-810-057	RES, 1-1/16W	a
MAIN	X R	1102	S1-305-810-909	RES, 10K-1/16W	a
MAIN	X R	1105	S1-425-810-154	RES, 1.2K-1/16W	a
MAIN	X R	1110	S1-245-810-165	RES, 680K-1/16W	a
MAIN	X R	1111	S1-415-810-003	RES, 100K-1/16W	a
MAIN	X R	1112	S1-415-810-003	RES, 100K-1/16W	a
MAIN	X R	1113	S1-245-810-165	RES, 680K-1/16W	a
MDM-16QA					
MAIN	X R	1114	S1-305-810-911	RES, 12K-1/16W	a
MAIN	X R	1115	S1-245-810-005	RES, 330K-1/16W	a
MAIN	X R	1116	S1-245-810-009	RES, 47K-1/16W	a
MAIN	X R	1117	S1-245-810-009	RES, 47K-1/16W	a
MAIN	X R	1118	S1-245-810-005	RES, 330K-1/16W	a
MAIN	X R	1119	S1-305-810-920	RES, 220K-1/16W	a
MAIN	X R	1120	S1-305-811-001	RES, 560K-1/16W	a
MAIN	X R	1121	S1-305-810-910	RES, 100K-1/16W	a
MAIN	X R	1122	S1-305-810-911	RES, 12K-1/16W	a
MAIN	X R	1123	S1-305-810-911	RES, 12K-1/16W	a
MAIN	X R	1124	S1-305-810-919	RES, 2.2K-1/16W	a
MAIN	X R	1125	S1-305-810-919	RES, 2.2K-1/16W	a
MAIN	X R	1201	S1-415-810-006	RES, 56K-1/16W	a
MAIN	X R	1203	S1-415-810-003	RES, 100K-1/16W	a
MAIN	X R	1205	S1-305-810-951	RES, 68K-1/16W	a
MAIN	X R	1207	S1-305-810-992	RES, 39K-1/16W	a
MAIN	X R	1209	S1-305-810-907	RES, 100-1/16W	a
MAIN	X R	1210	S1-305-810-918	RES, 220-1/16W	a
MAIN	X R	1211	S1-305-810-918	RES, 220-1/16W	a
MAIN	X R	1212	S1-305-810-994	RES, 47-1/16W	a

ELECTRICAL PARTS LIST -3/4

! = ⚠ SAFETY PARTS
C = Components marked

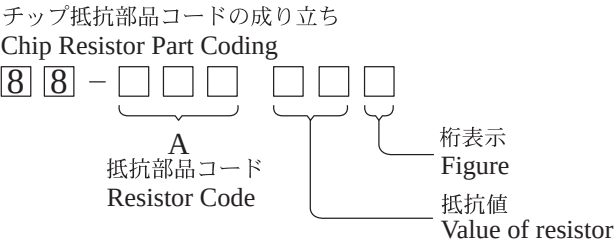
All components used on this model at the production line are shown in this service manual.
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UNIT-NAME	! C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
MDM-16QA					
MAIN	X R	1215	S1-305-810-944	RES,1M-1/16W	a
MAIN	X R	1217	S1-305-810-949	RES,150-1/16W	a
MAIN	X R	1230	S1-245-810-007	RES,10K-1/16W	a
MAIN	X R	1231	S1-245-810-007	RES,10K-1/16W	a
MAIN	X R	1232	S1-245-810-192	RES,47-1/16W	a
MAIN	X R	1238	S1-305-810-934	RES,0-0.8	a
MAIN	X R	1261	S1-245-810-193	RES,27K-1/16W	a
MAIN	X R	1265	S1-305-810-989	RES,27K-1/16W	a
MAIN	X R	1266	S1-305-810-989	RES,27K-1/16W	a
MAIN	X R	1300	S1-245-810-013	RES,1.8-1/16W	a
MAIN	X R	1301	S1-305-811-011	RES,8.2-1/16W	a
MAIN	X R	1401	S1-305-810-990	RES,2.7K-1/16W	a
MAIN	X R	1402	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1403	S1-305-810-977	RES,680-1/16W	a
MAIN	X R	1404	S1-305-810-948	RES,1.5K-1/16W	a
MAIN	X R	1413	S1-305-810-934	RES,0-0.8	a
MAIN	X R	1414	S1-305-810-920	RES,220K-1/16W	a
MAIN	X R	1415	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1420	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1429	S1-305-810-909	RES,10K-1/16W	a
MDM-16QA					
MAIN	X R	1430	S1-305-810-909	RES,10K-1/16W	a
MAIN	X R	1435	S1-305-810-909	RES,10K-1/16W	a
MAIN	X R	1437	S1-305-810-909	RES,10K-1/16W	a
MAIN	X R	1441	S1-305-810-937	RES,47K-1/16W	a
MAIN	X R	1443	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1450	S1-305-810-934	RES,0-0.8	a
MAIN	X R	1460	S1-305-810-990	RES,2.7K-1/16W	a
MAIN	X R	1463	S1-305-810-990	RES,2.7K-1/16W	a
MAIN	X R	1464	S1-305-810-995	RES,10-1/16W	a
MAIN	X R	1515	S1-305-810-918	RES,220-1/16W	a
MAIN	X R	1516	S1-305-810-918	RES,220-1/16W	a
MAIN	X R	1517	S1-305-810-994	RES,47-1/16W	a
MAIN	X R	1518	S1-305-810-994	RES,47-1/16W	a
MAIN	X R	1521	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1529	S1-305-810-918	RES,220-1/16W	a
MAIN	X R	1530	S1-305-810-934	RES,0-0.8	a
MAIN	X R	1532	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1533	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1534	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1535	S1-305-810-908	RES,1K-1/16W	a
MDM-16QA					
MAIN	X R	1536	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1537	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1538	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1540	S1-305-810-908	RES,1K-1/16W	a
MAIN	X R	1601	S1-245-810-014	RES,12K-1/16W	a
MAIN	X R	1605	S1-245-810-014	RES,12K-1/16W	a
MAIN	X R	1612	S1-305-810-928	RES,56K-1/16W	a
MAIN	X R	1614	S1-305-810-923	RES,33K-1/16W	a
MAIN	X R	1616	S1-305-810-911	RES,12K-1/16W	a
MAIN	X R	1618	S1-305-810-950	RES,22K-1/16W	a
MAIN	X R	1621	S1-305-810-929	RES,6.8K-1/16W	a
MAIN	X R	1622	S1-305-810-950	RES,22K-1/16W	a
MAIN	X R	1623	S1-305-810-950	RES,22K-1/16W	a
MAIN	X R	1624	S1-305-810-929	RES,6.8K-1/16W	a
MAIN	X R	1631	S1-305-810-996	RES,300K-1/16W	a
MAIN	X R	1633	S1-305-810-951	RES,68K-1/16W	a
MAIN	X R	1634	S1-305-810-910	RES,100K-1/16W	a
MAIN	X R	1701	S1-305-810-937	RES,47K-1/16W	a
MAIN	X R	1702	S1-305-810-923	RES,33K-1/16W	a
MAIN	X R	1703	S1-425-810-337	RES,12-1/16W	a
MDM-16QA					
MAIN	X R	1706	S1-305-810-995	RES,10-1/16W	a
MAIN	X R	1716	S1-305-810-910	RES,100K-1/16W	a
MAIN	X R	1800	S1-305-810-934	RES,0-0.8	a
MAIN	X R	1802	S1-305-810-928	RES,56K-1/16W	a
MAIN	X R	1803	S1-305-810-923	RES,33K-1/16W	a
MAIN	X R	1804	S1-305-810-924	RES,390-1/16W	a
MAIN	X R	1806	S1-425-810-138	RES,1-1/8W	a
MAIN	X R	1807	S1-305-810-989	RES,27K-1/16W	a
MAIN	X R	1808	S1-425-810-138	RES,1-1/8W	a
MAIN	X R	1809	S1-425-810-138	RES,1-1/8W	a
MAIN	X R	1811	S1-425-810-138	RES,1-1/8W	a
MAIN	X R	1816	S1-305-810-917	RES,22-1/16W	a
MAIN	O XL	1201	S1-246-160-018	X' TAL, 33.8688MHz	a

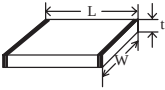
ELECTRICAL PARTS LIST -4/4

- 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.

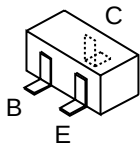
○チップ抵抗部品コード／CHIP RESISTOR PART CODE



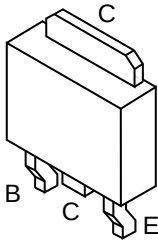
チップ抵抗
Chip resistor

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

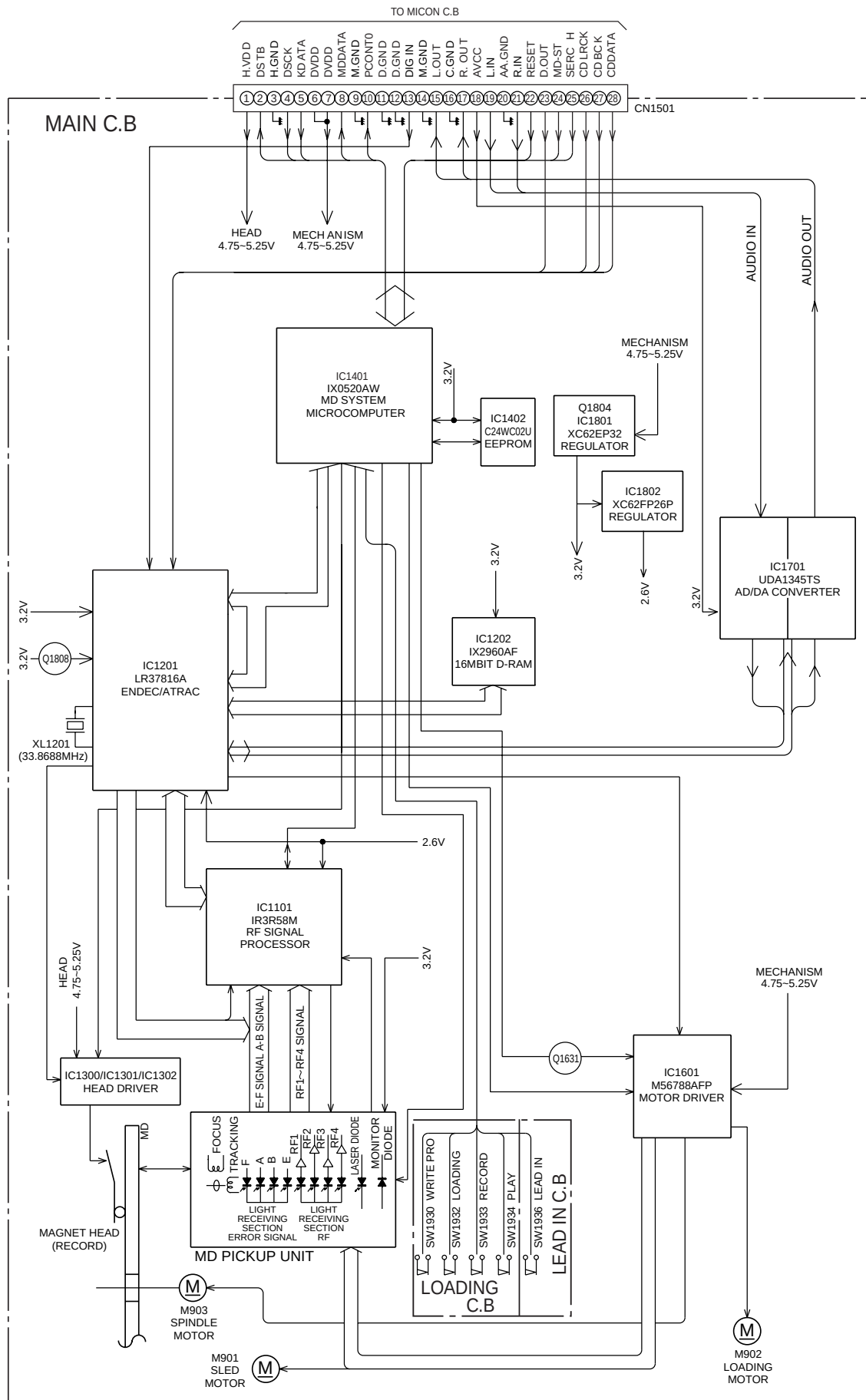


2SC3928

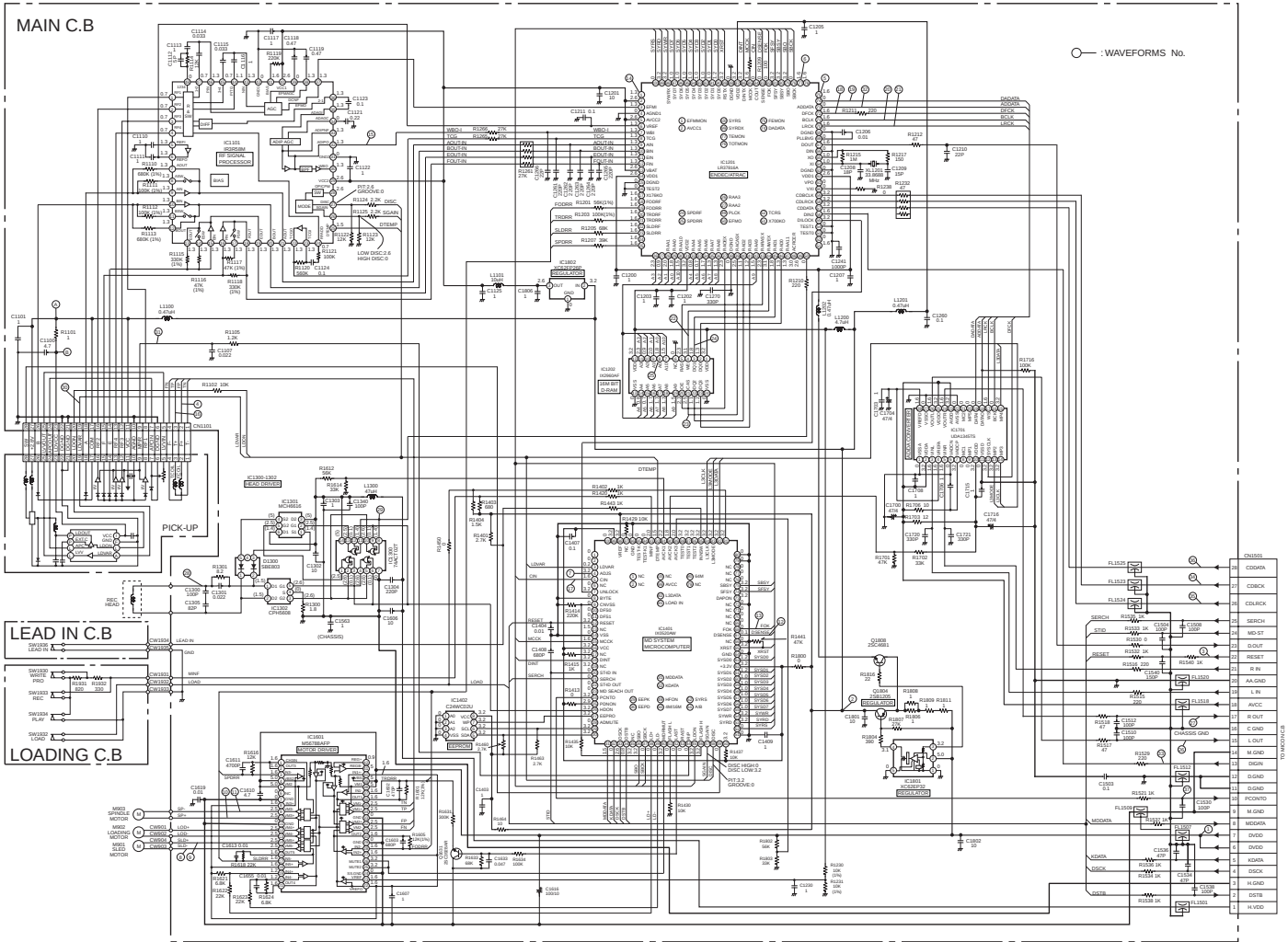


2SB1205
2SC4681

BLOCK DIAGRAM -1/1



SCHEMATIC DIAGRAM -1/1



MAIN C.B. (Top view)

MAIN C.B. (Bottom view)

SHARP F0859A

To MICON C.B.

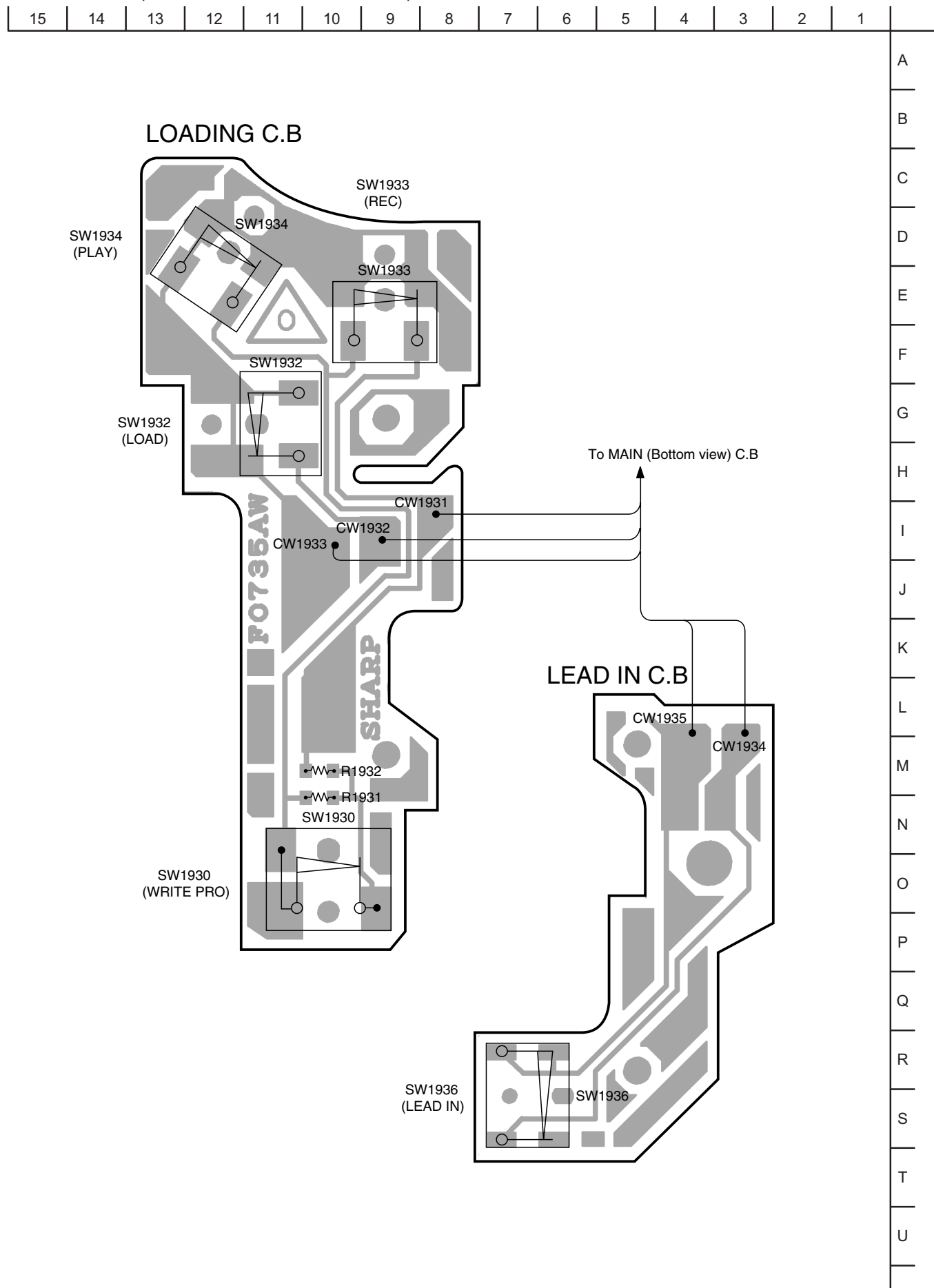
To PICK-UP ASSY

To LEAD IN C.B.

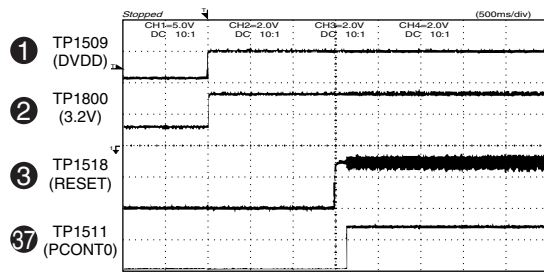
COMPONENT DESIGNATIONS:

- C1001, C1002, C1003, C1004, C1005, C1006, C1007, C1008, C1009, C1010, C1011, C1012, C1013, C1014, C1015, C1016, C1017, C1018, C1019, C1020, C1021, C1022, C1023, C1024, C1025, C1026, C1027, C1028, C1029, C1030, C1031, C1032, C1033, C1034, C1035, C1036, C1037, C1038, C1039, C1040, C1041, C1042, C1043, C1044, C1045, C1046, C1047, C1048, C1049, C1050, C1051, C1052, C1053, C1054, C1055, C1056, C1057, C1058, C1059, C1060, C1061, C1062, C1063, C1064, C1065, C1066, C1067, C1068, C1069, C1070, C1071, C1072, C1073, C1074, C1075, C1076, C1077, C1078, C1079, C1080, C1081, C1082, C1083, C1084, C1085, C1086, C1087, C1088, C1089, C1090, C1091, C1092, C1093, C1094, C1095, C1096, C1097, C1098, C1099, C1100, C1101, C1102, C1103, C1104, C1105, C1106, C1107, C1108, C1109, C1110, C1111, C1112, C1113, C1114, C1115, C1116, C1117, C1118, C1119, C1120, C1121, C1122, C1123, C1124, C1125, C1126, C1127, C1128, C1129, C1130, C1131, C1132, C1133, C1134, C1135, C1136, C1137, C1138, C1139, C1140, C1141, C1142, C1143, C1144, C1145, C1146, C1147, C1148, C1149, C1150, C1151, C1152, C1153, C1154, C1155, C1156, C1157, C1158, C1159, C1160, C1161, C1162, C1163, C1164, C1165, C1166, C1167, C1168, C1169, C1170, C1171, C1172, C1173, C1174, C1175, C1176, C1177, C1178, C1179, C1180, C1181, C1182, C1183, C1184, C1185, C1186, C1187, C1188, C1189, C1190, C1191, C1192, C1193, C1194, C1195, C1196, C1197, C1198, C1199, C1200, C1201, C1202, C1203, C1204, C1205, C1206, C1207, C1208, C1209, C1210, C1211, C1212, C1213, C1214, C1215, C1216, C1217, C1218, C1219, C1220, C1221, C1222, C1223, C1224, C1225, C1226, C1227, C1228, C1229, C1230, C1231, C1232, C1233, C1234, C1235, C1236, C1237, C1238, C1239, C1240, C1241, C1242, C1243, C1244, C1245, C1246, C1247, C1248, C1249, C1250, C1251, C1252, C1253, C1254, C1255, C1256, C1257, C1258, C1259, C1260, C1261, C1262, C1263, C1264, C1265, C1266, C1267, C1268, C1269, C1270, C1271, C1272, C1273, C1274, C1275, C1276, C1277, C1278, C1279, C1280, C1281, C1282, C1283, C1284, C1285, C1286, C1287, C1288, C1289, C1290, C1291, C1292, C1293, C1294, C1295, C1296, C1297, C1298, C1299, C1300, C1301, C1302, C1303, C1304, C1305, C1306, C1307, C1308, C1309, C1310, C1311, C1312, C1313, C1314, C1315, C1316, C1317, C1318, C1319, C1320, C1321, C1322, C1323, C1324, C1325, C1326, C1327, C1328, C1329, C1330, C1331, C1332, C1333, C1334, C1335, C1336, C1337, C1338, C1339, C1340, C1341, C1342, C1343, C1344, C1345, C1346, C1347, C1348, C1349, C1350, C1351, C1352, C1353, C1354, C1355, C1356, C1357, C1358, C1359, C1360, C1361, C1362, C1363, C1364, C1365, C1366, C1367, C1368, C1369, C1370, C1371, C1372, C1373, C1374, C1375, C1376, C1377, C1378, C1379, C1380, C1381, C1382, C1383, C1384, C1385, C1386, C1387, C1388, C1389, C1390, C1391, C1392, C1393, C1394, C1395, C1396, C1397, C1398, C1399, C1400, C1401, C1402, C1403, C1404, C1405, C1406, C1407, C1408, C1409, C1410, C1411, C1412, C1413, C1414, C1415, C1416, C1417, C1418, C1419, C1420, C1421, C1422, C1423, C1424, C1425, C1426, C1427, C1428, C1429, C1430, C1431, C1432, C1433, C1434, C1435, C1436, C1437, C1438, C1439, C1440, C1441, C1442, C1443, C1444, C1445, C1446, C1447, C1448, C1449, C1450, C1451, C1452, C1453, C1454, C1455, C1456, C1457, C1458, C1459, C1460, C1461, C1462, C1463, C1464, C1465, C1466, C1467, C1468, C1469, C1470, C1471, C1472, C1473, C1474, C1475, C1476, C1477, C1478, C1479, C1480, C1481, C1482, C1483, C1484, C1485, C1486, C1487, C1488, C1489, C1490, C1491, C1492, C1493, C1494, C1495, C1496, C1497, C1498, C1499, C1500, C1501, C1502, C1503, C1504, C1505, C1506, C1507, C1508, C1509, C1510, C1511, C1512, C1513, C1514, C1515, C1516, C1517, C1518, C1519, C1520, C1521, C1522, C1523, C1524, C1525, C1526, C1527, C1528, C1529, C1530, C1531, C1532, C1533, C1534, C1535, C1536, C1537, C1538, C1539, C1540, C1541, C1542, C1543, C1544, C1545, C1546, C1547, C1548, C1549, C1550, C1551, C1552, C1553, C1554, C1555, C1556, C1557, C1558, C1559, C1560, C1561, C1562, C1563, C1564, C1565, C1566, C1567, C1568, C1569, C1570, C1571, C1572, C1573, C1574, C1575, C1576, C1577, C1578, C1579, C1580, C1581, C1582, C1583, C1584, C1585, C1586, C1587, C1588, C1589, C1590, C1591, C1592, C1593, C1594, C1595, C1596, C1597, C1598, C1599, C1600, C1601, C1602, C1603, C1604, C1605, C1606, C1607, C1608, C1609, C1610, C1611, C1612, C1613, C1614, C1615, C1616, C1617, C1618, C1619, C1620, C1621, C1622, C1623, C1624, C1625, C1626, C1627, C1628, C1629, C1630, C1631, C1632, C1633, C1634, C1635, C1636, C1

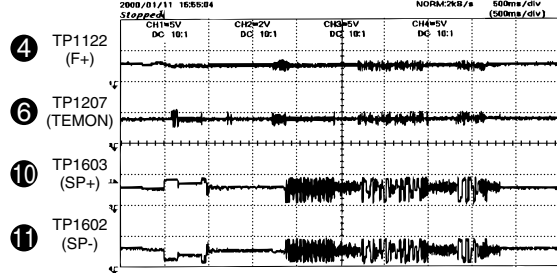
WIRING - 2/2 (LOADING C.B/LEAD IN C.B)



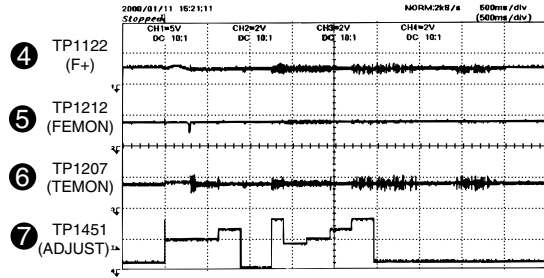
POWER ON



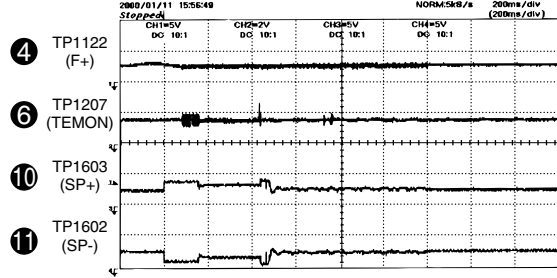
TOC READ (low-reflection disc)



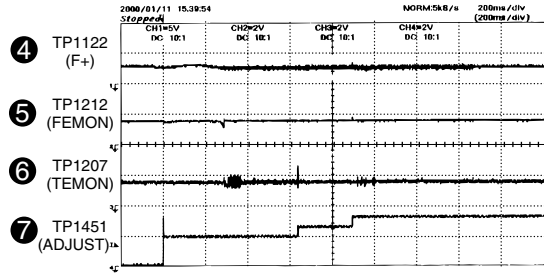
TOC READ (low-reflection disc)



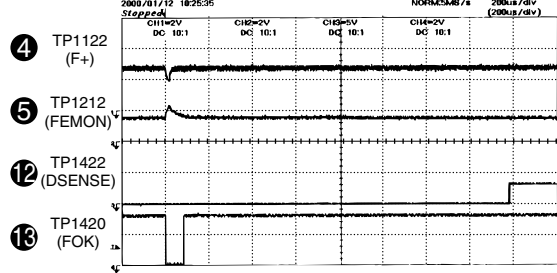
TOC READ (high-reflection disc)



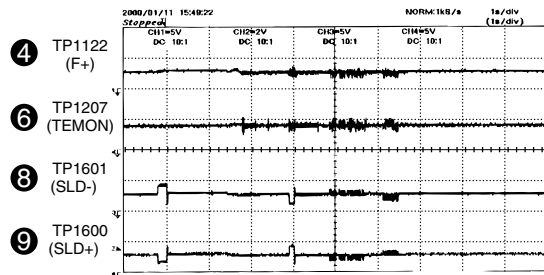
TOC READ (high-reflection disc)



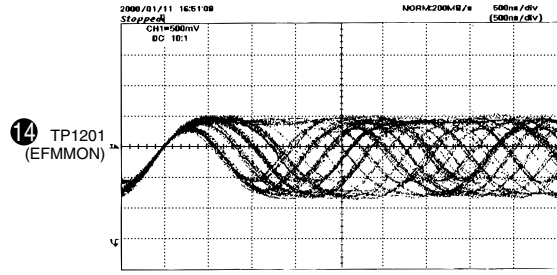
STOP→PLAY



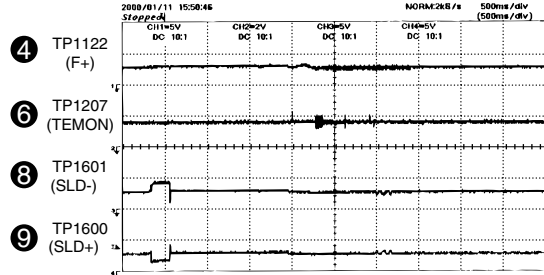
TOC READ (low-reflection disc)



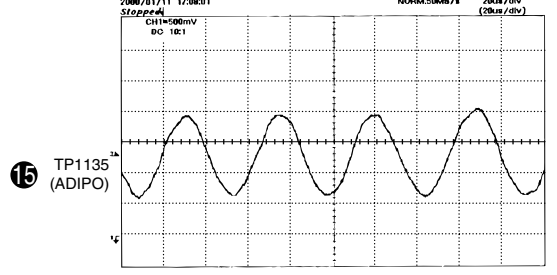
PLAY (low-reflection disc)

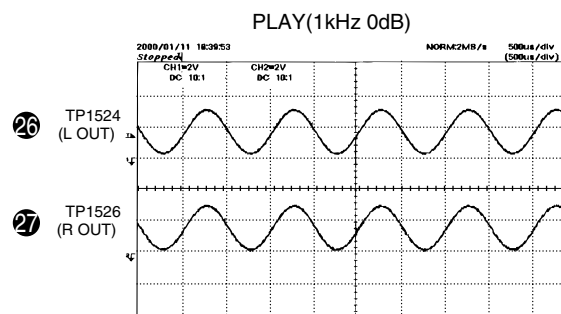
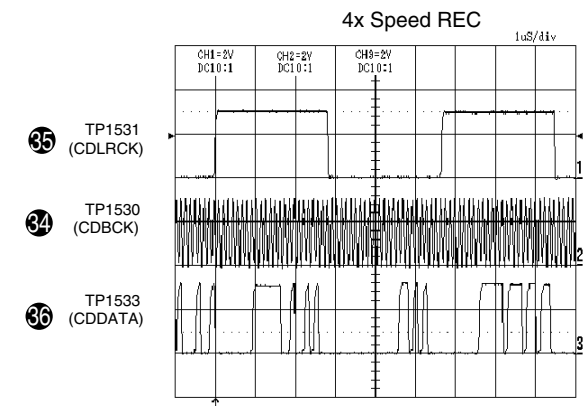
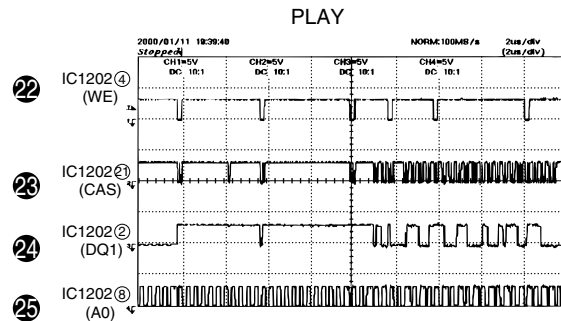
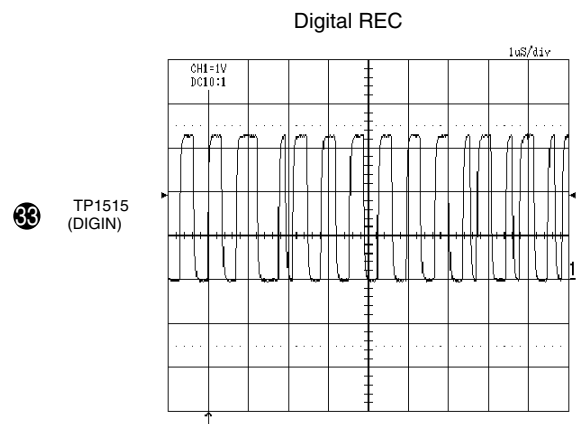
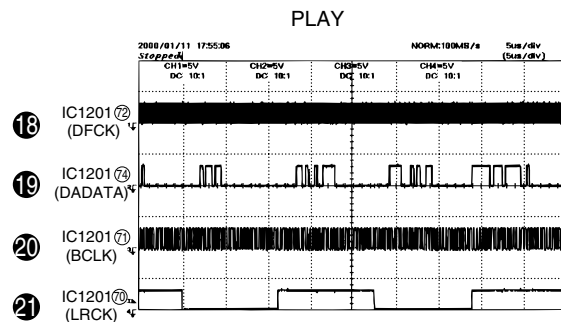
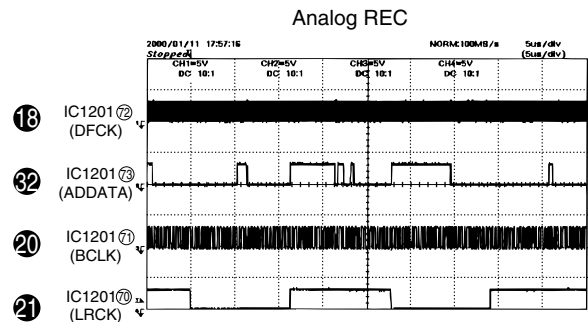
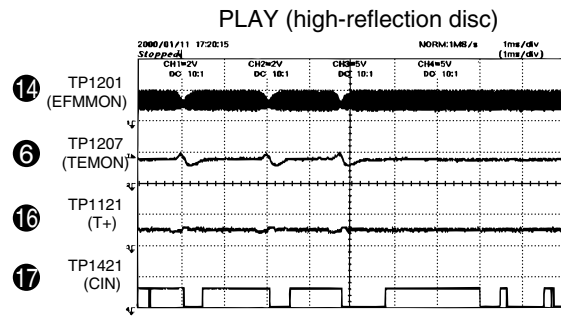
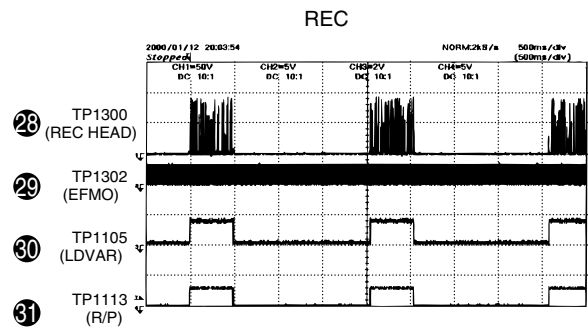
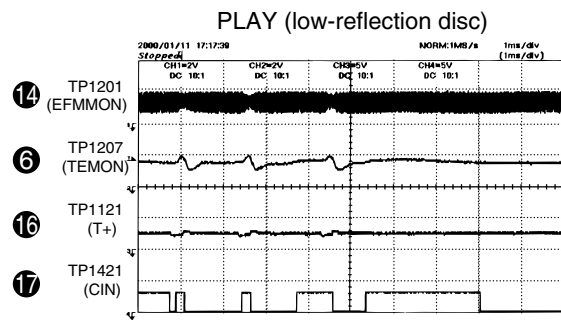


TOC READ (high-reflection disc)



PLAY (low-reflection disc)





● MD Adjustment

Depending on the content of repair, such as when the new mechanism, pickup and MD C.B. are combined, the test mode must be set, and various adjustments may be required.

The adjustment procedure is as follows:

- (1) Set to the test mode and perform the adjustment and check listed below depending on the component replaced.
- (2) Press the POWER button to terminate the test mode (this will write data to EEPROM).

After performing the above, reset the mechanism to start.

Required item Component Replaced	TEMP reference setting	Checking values set in EEPROM	Writing adjustment values to EEPROM	All AUTO adjustment (1st)	AUTO adjustment	Grating a djustment	All AUTO adjustment (2nd)	Writing adjustment values to EEPROM	Operation check (after executing AUTO main adjustment)	
	TEMP	EEPROM_SET	Releasing test mode	AUTO_YOBI	AUTO_ADJ	GRATING	AUTO_YOBI	Releasing test mode	TEST-PLAY	TEST-REC
Pickup	—	①	②	③	④	⑤	⑥	⑦	⑧	⑨
Head	—	—	—	—	—	—	—	—	—	①
Mechanism	—	①	②	③	—	—	—	④	⑤	⑥
Main C.B	①	②	③	④	—	—	—	⑤	⑥	⑦
MD microprocessor	—	①	②	—	—	—	—	—	③	④
MD LSI	—	—	—	①	—	—	—	②	③	④
RF IC	①	②	③	④	—	—	—	⑤	⑥	⑦
EEPROM IC	①	②	③	④	—	—	—	⑤	⑥	⑦

①②③④⑤⑥⑦⑧⑨ Numbers in the table show the order of implementation.

" — " means that the items are unnecessary.

When the test mode is complete, the results of writing to EEPROM will appear.

OK_EEPROM: Writing of "Setting values" and " Preliminary adjustment completed" has been normally executed.

WR_EEPROM: Writing of "Setting values" has been normally executed, but wiring of "Preliminary adjustment completed" has not been executed.

NG_EEPROM: Writing of "Setting values" has not been executed.

Check the connection between MD microprocessor and EEPROM.

* When measuring TEST PLAY, TEST REC operations, or C1 error, etc., be sure to perform these after completing AUTO adjustment, so that they can be measured in the optimum servo status.

1. Preparation for adjustment/check

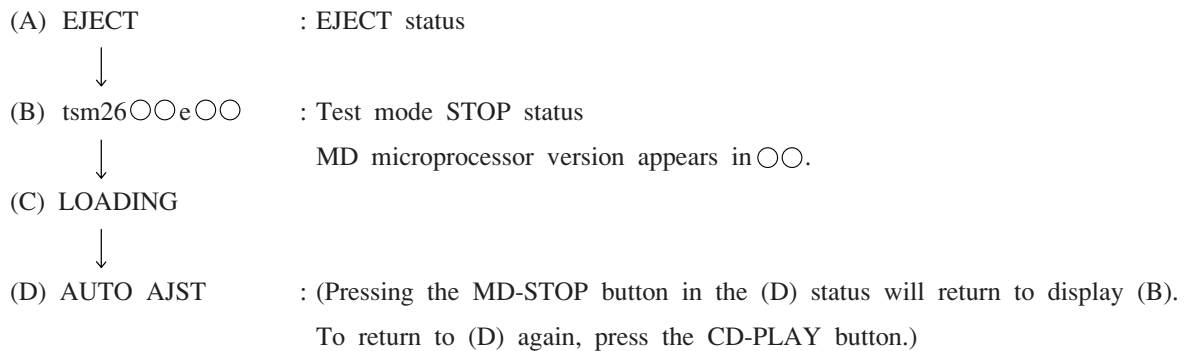
● Test discs

	Type	Test disc	Part code
1	High-reflection disc	TDYS-1 [for playback]	4-963-646-01
2	Low-reflection disc	Disc for checking recording operation (generally available disc used)	-----
3	Low-reflection disc	Disc for main adjustment (MDW-74/GA-1)	4-229-747-01

2. Test mode

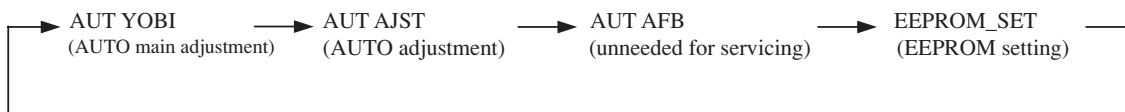
Setting to test mode:

1. While holding down the MD key, plug the power cord into AC outlet.
2. Load disc 1 for playback (high-reflection disc) or a disc for recording (low-reflection disc)
(will enter the (D) status).



● Entering each mode

Each press of CD SYNC button will alternate between the modes:



● Releasing test mode

Resetting will return to normal status.

Always press the POWER button before resetting to write the data to EEPROM.

- * In order to change the EEPROM values, write data to EEPROM once, enter the test mode again to adjust using the data, execute AUTO main adjustment, and then write the data to EEPROM again.
- * Be sure to write the data to EEPROM whenever you change the data values in EEPROM or re-execute AUTO main adjustment.

● Contents of test mode

1. EJECT mode	• To TEMP setting (in EEPROM setting) • To CONTROL setting (in EEPROM setting) • Measuring laser power (recording/playback power)
2. AUTO main adjustment mode	• Executing automatic main adjustment (only with low-reflection disc)
3. AUTO adjustment mode	• Executing automatic adjustment
4. AUTO AFB adjustment	• Unnecessary for servicing
5. EEPROM setting mode	• Manually changing various coefficients of digital servo
6. TEST-PLAY mode	• Executing continuous playback from designated address • Measuring C1 error rate, ADIP error rate
7. TEST-REC mode	• Executing continuous recording from designated address (1x speed/4x speed)
8. INNER mode	• Measuring the position where the INNER switch turns "ON"

1. EJECT mode

Step No.	Setting method	Remarks	Display
1	Test mode EJECT status	Pressing STOP button will return to step 1 from each other step.	[____EJECT____]
2	Press SP/LP button	Playback power output status	[ppw____]
3	Press SP/LP button	Recording power output status	[rpw____]
4	Press SP/LP button	Recording power output status (4x speed)	[rpw4____]
5	Press SP/LP button	Special mode unnecessary for adjustment: Move to another mode quickly (pressing CD STOP button will return to step 2)	[xp w____]
6	Press REC START and Edit buttons	To TEMP setting in EEPROM setting (see EEPROM TEMP setting)	
7	Press REC SEL button	To CONTROL setting in EEPROM setting (see EEPROM CONTROL setting)	

* Normally, IC401 pin 3 will be as follows:

Playback power output [ppw] : Approx. 0.2 V DC

Recording power output [rpw] : Approx. 1.8 V DC

Recording power (4x) [rpw4] : Approx. 2.0 V DC

Checking pickup laser power:

Laser power during recording and playback can be checked on laser power meter. However, since there is unevenness in measurement on laser power meter, only check the values. If the reading on laser power meter greatly drifts from the specified value, replace the pickup.

Reference values (at room temperature 25°C):

During playback (ppw) : 0.72 ± 0.1 mW

During recording (rpw) : 5.5 ± 0.5 mW

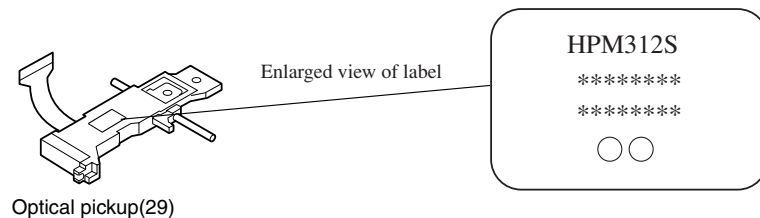
During recording (x4) (rpw4) : 6.1 ± 0.6 mW

Caution: Take great care not to look directly at laser light: Doing so could damage your eye.

Checking pickup laser current:

Measure the pickup laser current and use the measured value for reference to find out the life end of pickup.

- Measure the voltage across R1101 (1 ohm: (A) and (B) in circuit diagram) in the recording (rpw) mode, and convert it to a current value.
- If the measured value is +20% - +25% of the number in label on pickup unit (29) (○○ in mA units shown in label below), the pickup may be damaged.



ADJUSTMENT -4/13

2. AUTO main adjustment mode

Use disc for main adjustment (MDW-74/GA-1).

Step No.	Setting method	Remarks	Display
1	Test mode STOP status		[tsm26○○e○○]
2	Press CD SYNC button	AUTO adjustment menu	[AUTO_AJST_]
3	Press CD SYNC button	AUTO preliminary adjustment menu	[_AUT_YOBI_]
4	Press ENTER (MULTI JOG) button once	• *** varies greatly during auto adjustment: Go to step 6 if adjustment is NG.	[*****]
5	Adjustment complete: Press CLEAR button twice	Go to step 1	[_COMPLETE_]
6	Adjustment value output: Press CLEAR button	Go to step 3	[Can't_ADJ.]

3. AUTO adjustment mode

Step No.	Setting method	Remarks	Display
1	Test mode STOP status		[tsm26○○e○○]
2	Press CD SYNC button once	AUTO adjustment menu	[AUTO_AJST_]
3	Press ENTER (MULTI JOG) button once	• *** changes as follows with high-reflection disc: PEG---HAG • *** changes as follows with low-reflection disc: PEG---LAG Go to step 4 when adjustment is complete OK. Go to step 5 if adjustment is NG.	[***:_____]
4	Press CLEAR button	Go to step 2	[_COMPLETE_] *Note 1
5	Press CLEAR button	Returns to step 2	[Can't_ADJ.]

• *** : Adjustment name; ○○○○: Measured values; □□□□ : Address

*Note 1: If [≠ COMPLETE_] appears, judging the position where the INNER switch turns on is unclear. To check the INNER switch, do it using the specified disc in the INNER mode again. There is no problem in AUTO adjustment.

4. AUTO AFB adjustment

Unneeded for servicing

5. EEPROM setting mode (when writing data to EEPROM, press the POWER button before resetting.)

a) Focus setting

Step No.	Setting method	Display
1	Test mode STOP status	[tsm26 ○○ε○○]
2	Press CD SYNC button 3 times	[EEPROM_SET]
3	Press ENTER button	[__Focus__]
4	Press ENTER button	[FG_____●●]
5	Press CD SYNC button	[FG2_____●●]
6	Press CD SYNC button	[FF0_____●●]
7	Press CD SYNC button	[FF02_____●●]
8	Press CD SYNC button	[FF1_____●●]
9	Press CD SYNC button	[FF12_____●●]
10	Press CD SYNC button	[FF2_____●●]
11	Press CD SYNC button	[FF22_____●●]
12	Press CD SYNC button	[FZHLEV__●●]
13	Press CD SYNC button	[FOKLEVh_●●]
14	Press CD SYNC button	[FOKLEVL_●●]
15	Press CD SYNC button	[FOSTn____●●]
16	Press CD SYNC button	[DSCJG____●●]

●●● : Setting values

b) Spin setting

Step No.	Setting method	Display
1	Test mode STOP status	[tsm26 ○○ε○○]
2	Press CD SYNC button 3 times	[EEPROM_SET]
3	Press ENTER button	[__Focus__]
4	Press CD SYNC button	[_Spindle_]
5	Press CD SYNC button	[SPG_____●●]
6	Press CD SYNC button	[SPG_in___●●]
7	Press CD SYNC button	[SPG_mid___●●]
8	Press CD SYNC button	[SPG_out___●●]
9	Press CD SYNC button	[SP1_____●●]
10	Press CD SYNC button	[SP2_____●●]
11	Press CD SYNC button	[SP22_____●●]
12	Press CD SYNC button	[SP3_____●●]
13	Press CD SYNC button	[SP4_____●●]
14	Press CD SYNC button	[SP5_____●●]
15	Press CD SYNC button	[SP52_____●●]
16	Press CD SYNC button	[SPDLIM___●●]
17	Press CD SYNC button	[SPKLEVm_●●]

●●● : Setting values

c) Tracking setting

Step No.	Setting method	Display
1	Test mode STOP status	[tsm26 ○○ε○○]
2	Press CD SYNC button 3 times	[EEPROM_SET]
3	Press ENTER button	[__Focus__]
4	Press CD SYNC button 2 times	[_Tracking_]
5	Press ENTER button	[TG_____●●]

6	Press CD SYNC button	[TG2_____●●]
7	Press CD SYNC button	[TF0_____●●]
8	Press CD SYNC button	[TF02_____●●]
9	Press CD SYNC button	[TF1_____●●]
10	Press CD SYNC button	[TF12_____●●]
11	Press CD SYNC button	[TF2_____●●]
12	Press CD SYNC button	[TF22_____●●]
13	Press CD SYNC button	[FT3_____●●]
14	Press CD SYNC button	[SVCNT4__●●]
15	Press CD SYNC button	[TRBLVo__●●]
16	Press CD SYNC button	[TRBLVt__●●]
17	Press CD SYNC button	[TRKLVo__●●]
18	Press CD SYNC button	[TRKLVt__●●]
19	Press CD SYNC button	[TDPWo___●●]
20	Press CD SYNC button	[TDPWt___●●]
21	Press CD SYNC button	[SLCTo___●●]
22	Press CD SYNC button	[SLCTt___●●]
23	Press CD SYNC button	[SLCTm___●●]
24	Press CD SYNC button	[TCRSC1P__●●]
25	Press CD SYNC button	[TCRSC0h__●●]
26	Press CD SYNC button	[TCRSC0L_●●]
27	Press CD SYNC button	[TCRSC0h_●●]
28	Press CD SYNC button	[TCRSC0L_●●]
29	Press CD SYNC button	[COTLVp___●●]
30	Press CD SYNC button	[COTLVr___●●]
31	Press CD SYNC button	[JPint_____●●]
32	Press CD SYNC button	[KIK10_____●●]

●●● : Setting values

d) Sled setting

Step No.	Setting method	Display
1	Test mode STOP status	[tsm26 ○○e○○]
2	Press CD SYNC button 3 times	[EEPROM_SET]
3	Press ENTER button	[__Focus__]
4	Press CD SYNC button 3 times	[___Sled___]
5	Press ENTER button	[SLG_____●●]
6	Press CD SYNC button	[SL2_____●●]
7	Press CD SYNC button	[SLDLIM__●●]
8	Press CD SYNC button	[SLDLEV__●●]
9	Press CD SYNC button	[SLKLVk__●●]
10	Press CD SYNC button	[SLKLVt__●●]
11	Press CD SYNC button	[SLKLVm__●●]
12	Press CD SYNC button	[SLBKm___●●]
13	Press CD SYNC button	[SLKrio___●●]
14	Press CD SYNC button	[SLKroi___●●]
15	Press CD SYNC button	[SLKlio___●●]
16	Press CD SYNC button	[SLKloi___●●]
17	Press CD SYNC button	[INNERl___●●]
18	Press CD SYNC button	[INNERu___●●]
19	Press CD SYNC button	[EJOVER___●●]

●●● : Setting values

ADJUSTMENT -7/13

e) TEMP setting

Step No.	Setting method	Display
1	EJECT status (or in no mechanism status)	[___EJECT___]
2	Press REC START button	[TEMP_○○_●●]

●●● : Setting value; ○○ : Measured value

f) CONTROL setting

Step No.	Setting method	Display
1	Test mode STOP status	[tsm26○○e○○]
2	Press CD SYNC button 3 times	[EEPROM_SET]
3	Press ENTER button	[__Focus__]
4	Press CD SYNC button 5 times	[__Control__]
5	Press ENTER button	[CONTRL1_●●]
6	Press CD SYNC button	[CONTRL2_●●]
7	Press CD SYNC button	[ADJTM_●●]
8	Press CD SYNC button	[HDEQAD_●●]
9	Press CD SYNC button	[LDEQAD_●●]
10	Press CD SYNC button	[GDEQAD_●●]
11	Press CD SYNC button	[GDEQAD2_●●]
12	Press CD SYNC button	[HDEQBC_●●]
13	Press CD SYNC button	[LDEQBC_●●]
14	Press CD SYNC button	[GDEQBC_●●]
15	Press CD SYNC button	[GDEQBC2_●●]
16	Press CD SYNC button	[HALSG_●●]
17	Press CD SYNC button	[LALSG_●●]
18	Press CD SYNC button	[GALSG_●●]
19	Press CD SYNC button	[HALSOFs_●●]
20	Press CD SYNC button	[LALSOFs_●●]
21	Press CD SYNC button	[GALSOFs_●●]
22	Press CD SYNC button	[EFMOWD_●●]
23	Press CD SYNC button	[HALSCN_●●]
24	Press CD SYNC button	[LALSCN_●●]
25	Press CD SYNC button	[GALSCN_●●]
26	Press CD SYNC button	[ADJ:_ □□ ____]

●●● : Setting values; □□ : Other information

ADJUSTMENT -8/13

g) ADJUST setting

Step No.	Setting method	Display
1	Test mode STOP status	[tsm26 ○○e ○○]
2	Press CD SYNC button 3 times	[EEPROM_SET]
3	Press ENTER button	[__Focus__]
4	Press CD SYNC button 6 times	[_ADJSET_]
5	Press ENTER button	[COK_____●●]
6	Press CD SYNC button	[FAT_____●●]
7	Press CD SYNC button	[TAT_____●●]
8	Press CD SYNC button	[CAT_____●●]
9	Press CD SYNC button	[FAB_____●●]
10	Press CD SYNC button	[STR_____●●]
11	Press CD SYNC button	[SFS_____●●]
12	Press CD SYNC button	[STC_____●●]

• ●● : Setting values

h) REC bit setting

Step No.	Setting method	Display
1	Test mode STOP status	[tsm26 ○○e ○○]
2	Press CD SYNC button 3 times	[EEPROM_SET]
3	Press ENTER button	[__Focus__]
4	Press CD SYNC button 7 times	[RECbit_SET]
5	Press ENTER button	[SPWR50____●●]
6	Press CD SYNC button	[SPWR56____●●]
7	Press CD SYNC button	[SRWR44____●●]
8	Press CD SYNC button	[SPWR53____●●]
9	Press CD SYNC button	[SPWR57____●●]
10	Press CD SYNC button	[LP2WR50__●●]
11	Press CD SYNC button	[LP2WR56__●●]
12	Press CD SYNC button	[LP2WR44__●●]
13	Press CD SYNC button	[LP2WR53__●●]
14	Press CD SYNC button	[LP4WR50__●●]
15	Press CD SYNC button	[LP4WR56__●●]
16	Press CD SYNC button	[LP4WR44__●●]
17	Press CD SYNC button	[LP4WR53__●●]

• ●● : Setting values

ADJUSTMENT -9/13

6. TEST-PLAY mode

(Used to check playback performance with designated address)

Step No.	Setting method	Remarks	Display
1	Test mode STOP status		[tsm26○○e○○]
2	Press REC START button	TEST-PLAY menu	[TEST_PLAY_]
3	Press SP/LP button Press ENTER button	Address setting (Target address initial value displayed)	[ADRES_0032_]
4	Continuous playback (bit portion) Continuous playback (group portion)	[Address + C1 error display (70 or less)] [Address + C1 error display (70 or less)]	[s□□□□ c○○○○] [a□□□□ c○○○○]
5	Press SP/LP button	[Address + ADIP error display (200 or less)]	[a□□□□ a○○○○]
6	Press SP/LP button	(Not necessary for servicing)	[a□□□□ j○○○○]
7	Press CLEAR button	TEST-PLAY menu	[TEST_PLAY_]

• □□□□ : Address; ○○○○ : Measured value

• Pressing the REC START button in address setting mode will change the address as follows:

0032→0700→FFA0→0032→••••

7. TEST-REC mode

Prepare a disc for checking record operation. (Used to check recording performance with designated address)

Step No.	Setting method	Remarks	Display
1	Test mode STOP status		[tsm26○○e○○]
2	Press REC START button	Pressing twice will display TEST-REC menu Pressing 3 times will display TEST-REC (4x) menu	[TEST_REC__] [TEST_REC4_]
3	Press SP/LP button	Address setting (Address initial value displayed)	[a0032_pw△△]
4	Press ENTER button	Continuous recording	[a□□□□_pw△△]
5	Press CLEAR button	START-REC menu	[TEST_REC__] [TEST_REC4_]

• Pressing the REC START button in address setting mode will change the address as follows:

0032→0700→FFA0→0032→••••

8. INNER mode

Step No.	Setting method	Remarks	Display
1	Test mode STOP status		[tsm26○○e○○]
2	Press REC SEL button	INNER menu	[__INNER__]
3	Press ENTER button	IINNER switch position measurement (SUBQ address and C1 error are also displayed)	[s□□□□ c○○○○]
4	Press CLEAR button	INNER menu	[__INNER__]

• □□□□ : Address

●Lead-in switch position measurement mode

Load TDYS-1 high-reflection test disc.

Note: Adjust the lead-in switch position so that the value measured in INNER mode is FF85–FFD8.

1. Loosen the screw (36) holding the mechanism switch C.B.
2. If the lead-in switch position is FF85 or lower before the screw is loosened, tighten the screw while pushing the C.B. in the direction of A; if it is FFD8 or higher, tighten the screw while pushing the C.B. in the direction of B. Then measure the lead-in switch position again.

After position adjustment, use screw (36) to secure the C.B. (See Fig. 14-1)

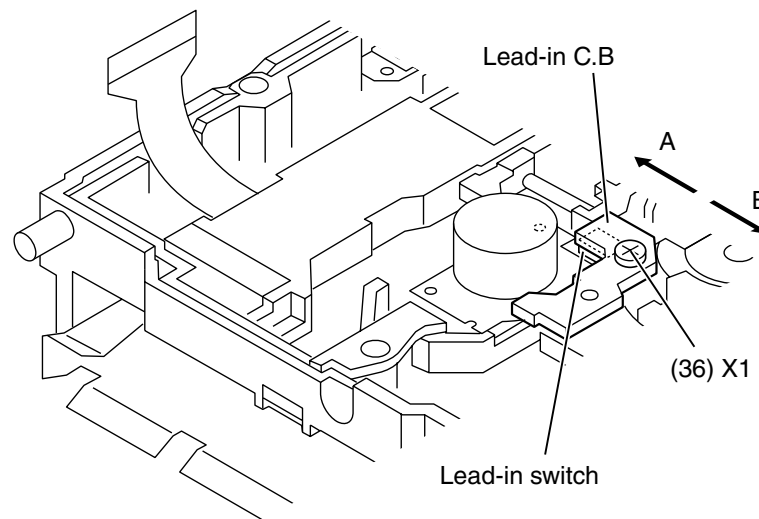


Fig.14 - 1

●Forced rotation of loading motor

When the display is in the test mode STOP or EJECT status, pressing the JOG MODE or EDIT button will enable forced rotation of loading motor.

●Checking installation position of magnetic head

- After replacing the magnetic head or optical pickup, be sure to check the head installation position.
- Move the optical pickup to the center for position adjustment in order to facilitate the installation position adjustment:
 1. Lower the magnetic head up shift arm by hand to raise the head.
 2. While viewing the unit from top, make sure that the optical pickup objective lens is aligned with the magnetic head.
 3. Make sure that the magnetic head moves smoothly up and down.

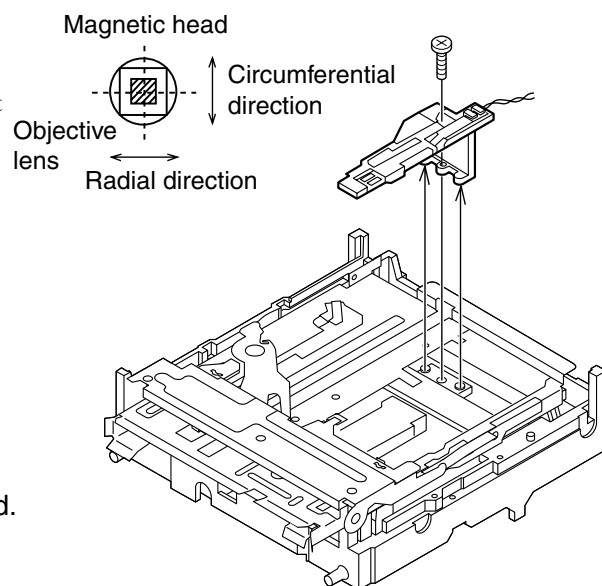
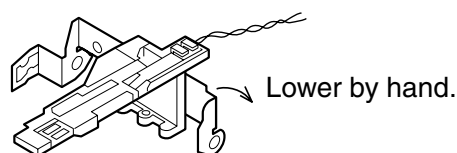


Fig.14 - 2

● Mechanism adjustment

1. Optical pickup grating adjustment

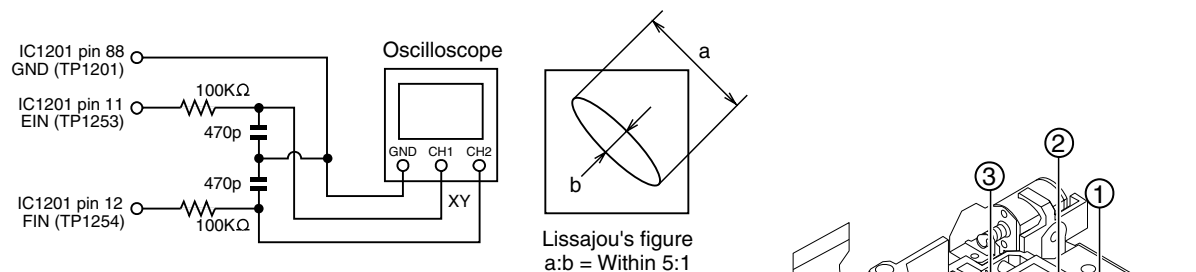
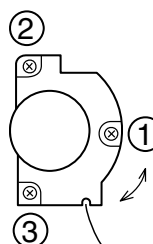


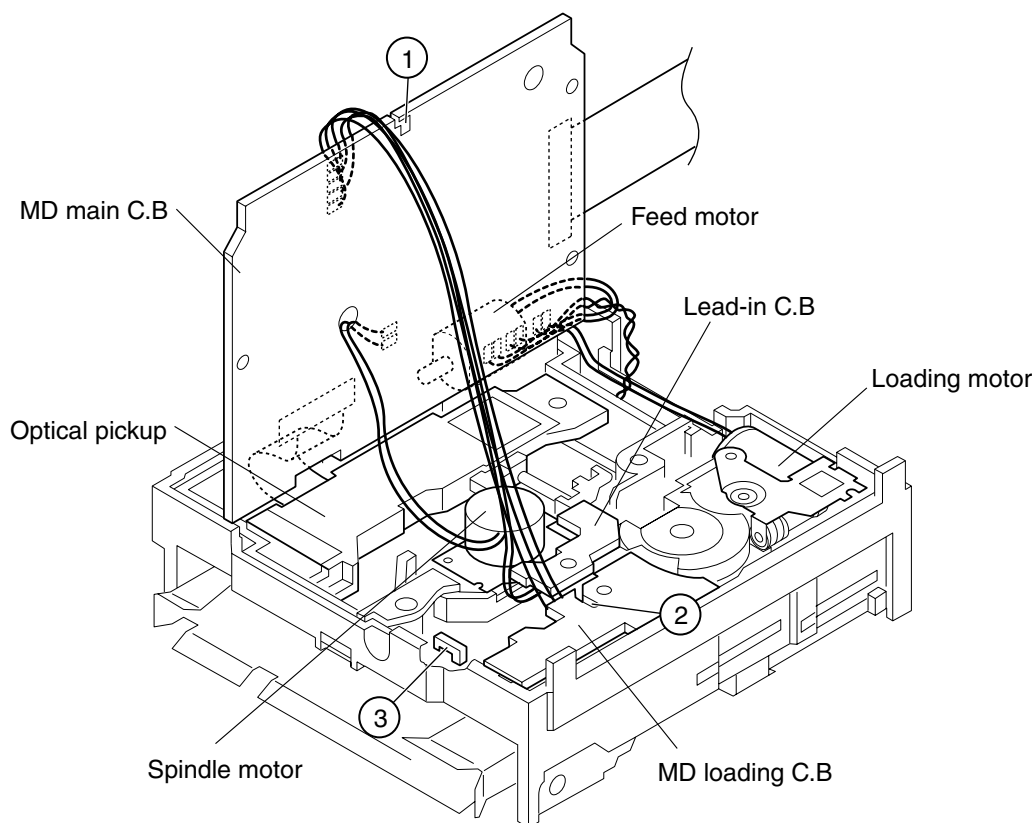
Fig. 14-1 Optical Pickup Grating Drift Measurement Method

After performing auto adjustment in AUTO test mode using the TDYS-1 high-reflection disc (COMPLETE displayed), the TEST-PLAY mode will be entered: Adjust the Lissajou's figure (x-y) of EOUT:FOUT.

1. Slightly loosen the 3 screws holding the spindle motor, and perform adjustment while observing the Lissajou's figure.
2. After adjustment, tighten the 3 screws in numerical order.



Insert a screwdriver into the adjustment groove in spindle motor, and check the Lissajou's figure while shifting the installation position.



Lift the MD main C.B. out for servicing.

Cancel the SPIN wire layout (insert into square hole in C.B.), remove the 3 screws, and then lift the main C.B. while releasing the 5 wires that are connected to PU-IN C.B. and mechanism C.B. from guides (1), (2) and (3).

Procedure for writing data to EEPROM

1. Reference temperature setting method

(Perform this setting quickly with C.B. unheated at room temperature 21-29°C.)

Step	Details of work	Display								
1	After replacing EEPROM, wait until the mechanism cools down.									
2	Connect the unassembled main C.B. to the system unit.									
3	Set to the test mode.	[__EJECT__]								
4	Press REC START button.									
5	Find the temperature compensation value from the ambient temperature according to the table below, and use the JOG MODE and EDIT buttons to set to the compensation value. <table><tr><th>Ambient temperature</th><th>Compensation value</th></tr><tr><td>21°C~23.2°C</td><td>-1H</td></tr><tr><td>23.3°C~26.8°C</td><td>±0H</td></tr><tr><td>26.9°C~29°C</td><td>+1H</td></tr></table> Example: If the ambient temperature is 22°C and the temperature measurement value is 7AH: Temperature set value = 7AH -01H = 79H * If the temperature measurement value drifts between two values, set the smaller value to the measurement value (select 79H if the value drifts between 79H and 7AH).	Ambient temperature	Compensation value	21°C~23.2°C	-1H	23.3°C~26.8°C	±0H	26.9°C~29°C	+1H	[TEMP_○○_◆◆] ○○: Temperature measurement value ◆◆: Temperature set value
Ambient temperature	Compensation value									
21°C~23.2°C	-1H									
23.3°C~26.8°C	±0H									
26.9°C~29°C	+1H									
6	Press POWER button to write the temperature set value to EEPROM.									
7	Assemble the main C.B. into mechanism, connect it to the system unit, perform AUTO main adjustment, and then press the POWER button again to write the data to EEPROM.									

2. Method of setting parameters other than temperature

Step	Details of work	Display
1	Assemble the main C.B. into mechanism and connect it to the system unit.	[AUTO_AJST_]
2	Set to the test mode and load a disc.	[EEPROM_SET]
3	Press CD SYNC button twice.	
4	Display according to the page EEPROM setting mode, and use JOG MODE and EDIT buttons to match the setting values in "List of data in EEPROM".	
5	Press POWER button to write the setting values to EEPROM.	
6	Set to the test mode again, perform AUTO main adjustment, and write the data to EEPROM.	

List of data in EEPROM (version 01)

Focus setting

Item display	Setting value
[FG_____●●]	9 B
[FG2_____●●]	E 4
[FF0_____●●]	1 0
[FF02_____●●]	1 2
[FF1_____●●]	7 0
[FF12_____●●]	4 C
[FF2_____●●]	E 0
[FF22_____●●]	E 4
[FZHLEV__●●]	E D
[FOKLEVh_●●]	0 7
[FOKLEVL_●●]	0 9
[FOSTn____●●]	2 C
[DSCJG____●●]	0 D

Spin setting

Item display	Setting value
[SPG_____●●]	0 A
[SPG_in____●●]	6 0
[SPG_mid____●●]	4 B
[SPG_out____●●]	3 B
[SP1_____●●]	0 1
[SP2_____●●]	5 0
[SP22_____●●]	5 0
[SP3_____●●]	F 2
[SP4_____●●]	F 3
[SP5_____●●]	2 0
[SP52_____●●]	2 0
[SPDLIM____●●]	6 9
[SPKLEVm_●●]	1 6

Tracking setting

Item display	Setting value
[TG_____●●]	4 9
[TG2_____●●]	6 B
[TF0_____●●]	1 0
[TF02_____●●]	1 2
[TF1_____●●]	6 B
[TF12_____●●]	4 8
[TF2_____●●]	E 6
[TF22_____●●]	E A
[FT3_____●●]	0 8
[SVCNT4____●●]	0 0
[TRBLVo____●●]	7 0
[TRBLVt____●●]	6 0
[TRKLVo____●●]	5 B
[TRKLVt____●●]	2 B
[TDPWo____●●]	6 8
[TDPWt____●●]	1 7
[SLCTo____●●]	0 2
[SLCTt____●●]	0 E
[SLCTm____●●]	5 3
[TCRSC1P____●●]	1 6
[TCRSC0h____●●]	0 0
[TCRSC0L____●●]	F A
[TCRSCNh____●●]	0 2
[TCRSCHL____●●]	0 2
[COTLVp____●●]	0 A
[COTLVr____●●]	2 8
[JPint____●●]	0 0
[KIK10____●●]	6 4

**: adjustment unneeded

Slide setting

Item display	Setting value
[SLG_____●●]	4 6
[SL2_____●●]	1 0
[SLDLIM____●●]	7 F
[SLDLEV____●●]	1 4
[SLKLVk____●●]	6 0
[SLKLVt____●●]	2 E
[SLKLVm____●●]	6 0
[SLBKm____●●]	0 7
[SLKrio____●●]	6 4
[SLKroi____●●]	6 2
[SLKlio____●●]	6 4
[SLKloi____●●]	6 0
[INNERl____●●]	8 5
[INNERu____●●]	D 8
[EJOVER____●●]	6 8

CONTROL setting

Item display	Setting value
[CONTRL1____●●]	0 8
[CONTRL2____●●]	0 1
[ADJTm____●●]	0 5
[HDEQAD____●●]	9 2
[LDEQAD____●●]	8 E
[GDEQAD____●●]	9 1
[GDEQAD2____●●]	9 1
[HDEQBC____●●]	8 C
[LDEQBC____●●]	8 F
[GDEQBC____●●]	8 A
[GDEQBC2____●●]	8 A
[HALSG____●●]	1 2
[LALSG____●●]	1 2
[GALSG____●●]	1 2
[HALSOFS____●●]	F F
[LALSOFS____●●]	0 0
[GALSOFS____●●]	0 0
[EFMOWD____●●]	**
[HALSCN____●●]	**
[LALSCN____●●]	**
[GALSCN____●●]	**
[ADJ: _ □ □ ____]	**

ADJUST setting

Item display	Setting value
[COK_____●●]	5 8
[FAT_____●●]	C 0
[TAT_____●●]	3 E
[CAT_____●●]	4 0
[FAB_____●●]	(Note)
[STR_____●●]	0 B
[SFS_____●●]	0 D
[STC_____●●]	0 D

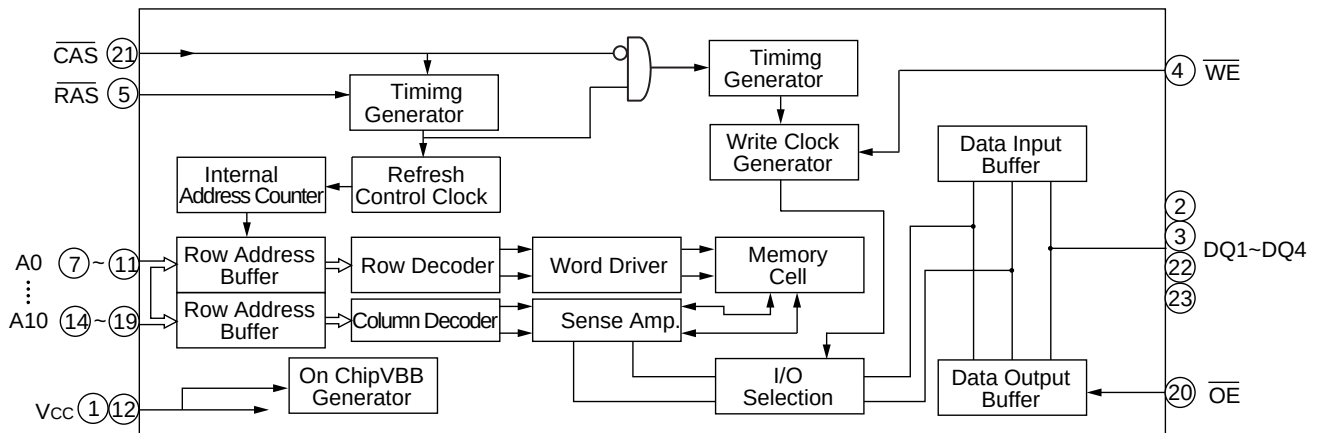
Note: AFB adjustment result value

REC bit setting

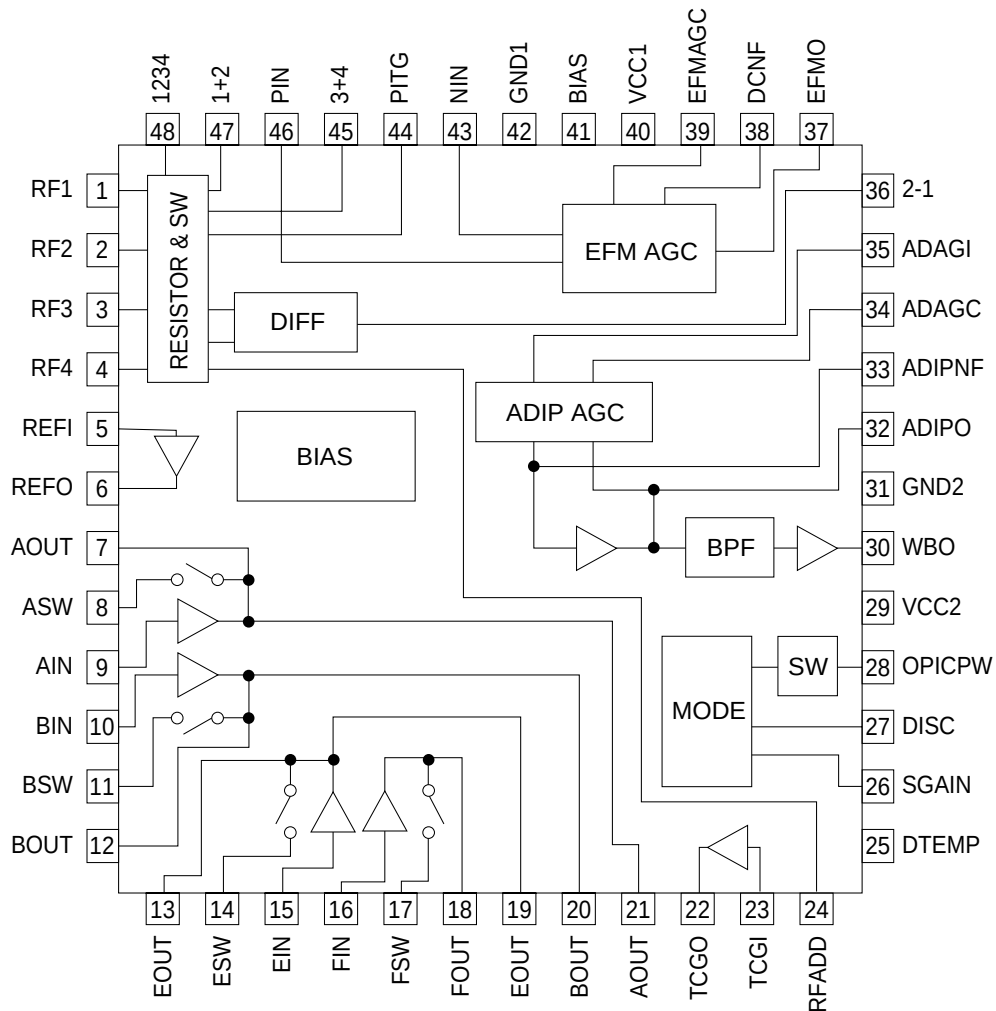
Item display	Setting value
[SPWR50____●●]	C 0
[SPWR56____●●]	F E
[SRWR44____●●]	0 0
[SPWR53____●●]	1 6
[SPWR57____●●]	**
[LP2WR50____●●]	8 0
[LP2WR56____●●]	2 0
[LP2WR44____●●]	8 0
[LP2WR53____●●]	0 0
[LP4WR50____●●]	B F
[LP4WR56____●●]	0 2
[LP4WR44____●●]	8 0
[LP4WR53____●●]	0 0

IC BLOCK DIAGRAM -1/2

IC, IX2960AF

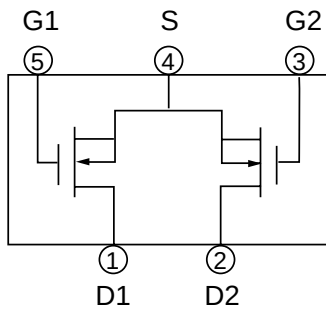


IC, IR3R58M

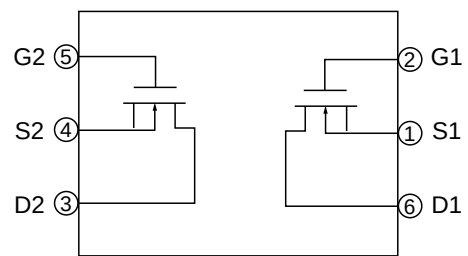


IC BLOCK DIAGRAM -2/2

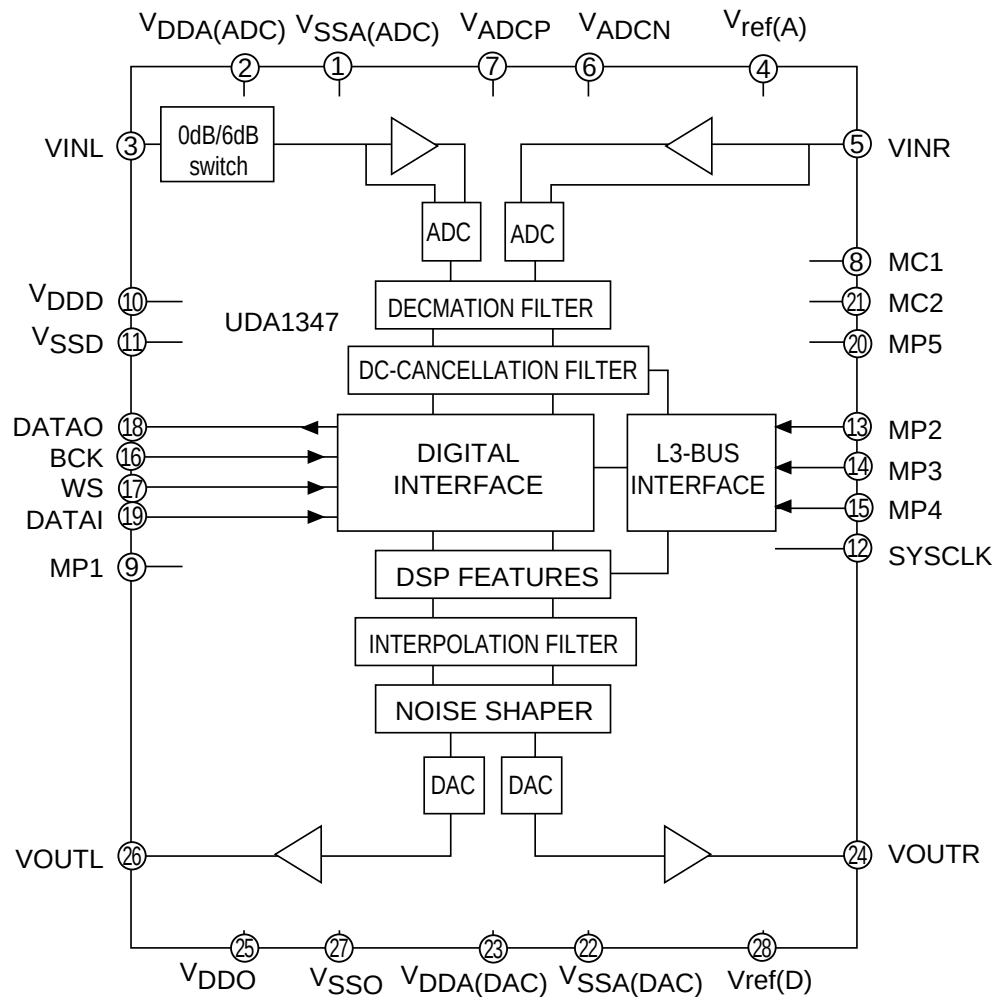
IC, CPH5608



IC, MCH6616



IC, UDA1345TS



IC DESCRIPTION -1/3 (IX0520AW -1/3)

Pin No.	Pin Name	I/O	Description
1	NC	-	Not Use
2	NC	-	Not Use
3	LDVAR	O	Laser power control output
4	ADJS	O	Automatic adjustment step output
5	CIN	I	Track count signal input
6	NC	-	Not Use
7	UNLOCK	I	Unlock of Monitor PLL
8	BYTE	-	GND
9	CNVss	I	At usually, the time (L)/At the time of serial writing (H)
10	DFS0	O	DFS0 output
11	DFS1	O	DFS1 output
12	RESET	I	RESET input
13	NC	-	Not Use
14	Vss	-	GND
15	MCCK	I	System lock input (8.4672MHz)
16	Vcc	I	+3.2V
17	NC	-	It is a pull-up to Vcc.
18	DINT	I	The interruption input from MD-LSI
19	NC	-	Not Use
20	ST? ID IN	I	ST-ID input
21	SERCH	I	CD search input
22	ST?ID OUT	O	ST-ID output
23	MDÉTÂ[É'OUT	O	MD search output
24	PCNT0	O	Power supply circuit control output
25	PDNON	I	Power failure detection / power failure return interruption input
26	HDON	O	Magnetic head current ON/OFF control
27	EEPRO	O	EEPROM protection output
28	ADMUTE	O	ADMUTE output (for CHECK)
29	EEPK	O	EEPROM serial clock output
30	EEPD	I/O	EEPROM data input and output
31	MDDATA	O	The serial data output to a system microcomputer
32	KDATA	I	Serial data input from a system microcomputer
33	DSCK	I	The clock input for serial communication from a system microcomputer
34	DSTB	O	The state output to a system microcomputer which can be communicated serial
35	NC	-	Not Use
36	SBO	I	Sub code serial data input
37	SBCK	O	Sub code serial communication clock output
38	LD+	O	Loading motor + side control output
39	LD?	O	Loading motor - side control output
40	MDRMUT	O	Motor driver-on/OFF control output
41	FLASH L	I	At the time of flash writing (L)
42	LAST	O	LAST output
43	RAST	O	RAST output

IC DESCRIPTION -1/3 (IX0520AW -2/3)

Pin No.	Pin Name	I/O	Description
44	R/P	O	REC/PLAY change output
45	LDON	O	Laser diode-on output
46	FLASH H	I	At the time of flash writing (H)
47	SGAIN	O	SGAIN output
48	DISC	O	DISC output
49	HFON	O	High frequency superposition output
50	4M/16M	I	DRAM selection input
51	A/B	I	Unit type discernment input
52	SYRS	O	MDLSI register selection signal output
53	SYRD	O	MDLSI read signal output
54	SYWR	O	MDLSI light signal output
55	SYSD7	I/O	MDLSI data bus 7
56	SYSD6	I/O	MDLSI data bus 6
57	SYSD5	I/O	MDLSI data bus 5
58	SYSD4	I/O	MDLSI data bus 4
59	SYSD3	I/O	MDLSI data bus 3
60	SYSD2	I/O	MDLSI data bus 2
61	SYSD1	I/O	MDLSI data bus 1
62	+3.2V	-	+3.2V
63	SYSD0	I/O	MDLSI data bus 0
64	GND	-	GND
65	XRST	O	MDLSI reset output
66	NC	-	Not Use
67	DSENSE	I	The sense input from MDLSI
68	FOK	I	Focus servo state monitor input
69	NC	-	Not Use
70	NC	-	Not Use
71	NC	-	Not Use
72	NC	-	Not Use
73	DAPON	O	DAPON output (for CHECK)
74	SFSY	I	Sub code frame synchronized signal input
75	SBSY	I	Sub code block synchronized signal input
76	NC	-	Not Use
77	NC	-	Not Use
78	NC	-	Not Use
79	NC	-	Not Use
80	64M	I	DRAM selection input
81	LOAD IN	I	LOAD IN input
82	L3DATA	O	ADC/DAC serial data output
83	L3MODE	O	ADC/DAC serial mode output
84	L3CLK	O	ADC/DAC serial lock output
85	INNSW	I	The disk inner side detection input of a pickup
86	TEST2	I	Special mode setting input 2

IC DESCRIPTION -1/3 (IX0520AW -3/3)

Pin No.	Pin Name	I/O	Description
87	TEST1	I	Special mode setting input 1
88	TEST0	I	Special mode setting input 0
89	AVCK3	I	Motor driver power supply monitor input
90	AVCK2	I	ADC/DAC power supply monitor input
91	AVCK1	I	Head circuit power supply monitor input
92	DTEMP	I	Temperature sensor in-and-out power
93	MINF	I	Mechanism switch information combination input
94	TEST?K1	I	The key 1 input for a test
95	TEST?K	I	The key input for a test
96	GND	-	GND
97	NC	-	Not Use
98	VREF	I	+3.2V
99	AVcc	I	+3.2V
100	NC	-	Not Use

IC DESCRIPTION -2/3 (IR3R58M -1/2)

Pin No.	Pin Name	I/O	Description
1	RF1	I	RF signal input terminal 1 RF signal output of a pickup is inputted.
2	RF2	I	RF signal input terminal 2 RF signal output of a pickup is inputted.
3	RF3	I	RF signal input terminal 3 RF signal output of a pickup is inputted.
4	RF4	I	RF signal input terminal 4 RF signal output of a pickup is inputted.
5	REFI	I	Standard voltage amplifier input terminal
6	REFO	O	Standard voltage amplifier output terminal
7	AOUT	O	The output terminal 1 of the signal amplifier for servo (Focus servo system)
8	ASW	O	The output terminal 2 of the signal amplifier for servo (Focus servo system)
9	AIN	I	The reversal input terminal of the signal amplifier for servo (Focus servo system)
10	BIN	I	The reversal input terminal of the signal amplifier for servo (Focus servo system)
11	BSW	O	The output terminal 2 of the signal amplifier for servo (Focus servo system)
12	BOUT	O	The output terminal 1 of the signal amplifier for servo (Focus servo system)
13	EOUT	O	The output terminal of the signal amplifier for servo (Tracking servo system)
14	ESW	O	The output terminal of the signal amplifier for servo (Tracking servo system)
15	EIN	I	The reversal input terminal of the signal amplifier for servo (Tracking servo system)
16	FIN	I	The reversal input terminal of the signal amplifier for servo (Tracking servo system)
17	FSW	O	The output terminal of the signal amplifier for servo (Tracking servo system)
18	FOUT	O	The output terminal of the signal amplifier for servo (Tracking servo system)
19	EOUT	O	The output terminal of the signal amplifier for servo (Tracking servo system)
20	BOUT	O	The output terminal of the signal amplifier for servo (Tracking servo system)
21	AOUT	O	The output terminal of the signal amplifier for servo (Tracking servo system)
22	TCGO	O	The track crossing detected signal amplifier output terminal at the time of a groove
23	TCGI	I	The track crossing detected signal amplifier input terminal at the time of a groove
24	RFADD	O	The resistance addition output terminal of RF1-RF4
25	DTEMP	O	Tip temperature detection terminal
26	SGAIN	O	The switch part control terminal of the amplifier for servo
27	DISC	O	Pit mode, a groove mode change control terminal
28	OPICPW	O	The power supply output terminal for OPIC
29	VCC2	-	Digital part and a power part power supply terminal
30	WBO	O	The comparator output terminal for the formation of ADIP signal 2 value
31	GND2	-	Digital part and a power part GND terminal
32	ADIPO	O	ADIP signal preamplifier output terminal
33	ADIPNF	O	ADIP signal AGC amplifier output terminal
34	ADAGC	-	The smoothing capacitor connection terminal for ADIP signal AGC
35	ADAGI	I	ADIP signal AGC amplifier input terminal
36	2?1	-	Difference signal of RF1 and RF2
37	EFMO	O	RF signal AGC amplifier output terminal
38	DCNF	-	Smoothing capacitor connection terminal for RF signal AGC amplifier standard voltage
39	EFMAGC	-	Smoothing capacitor connection terminal for RF signal AGC
40	VCC1	-	Analog part power supply terminal
41	BIAS	I	Bias input terminal
42	GND1	-	Analog part GND terminal
43	NIN	I	RF signal AGC amplifier reversal input terminal

IC DESCRIPTION -2/3 (IR3R58M -2/2)

Pin No.	Pin Name	I/O	Description
44	PITG	-	It is a grounding terminal at the time of a pit.
45	3+4	O	It is the resistance addition output terminal of RF3 and RF4 at the time of a groove.
46	PIN	I	RF signal AGC amplifier reversed input terminal
47	1+2	O	It is the resistance addition output terminal of RF1 and RF2 at the time of a groove.
48	1234	O	It is the resistance addition output terminal of RF1-RF4 at the time of a pit.

IC DESCRIPTION -3/3 (LR37816A -1/3)

Pin No.	Pin Name	I/O	Description
1	EFMMON	O	EFM monitor output
2	AVCC1	-	Analog power supply (EFM system 8AD and for 8DA)
3	EFMI	I	The EFM signal input from RF amplifier
4	AGND1	-	Analog GND
5	AVCC2	-	Analog power supply (for servo system and ADIP system 1bit AD)
6	VREF	I	The standard voltage input of RF amplifier
7	WBI	I	ADIP wobble signal
8	TCG	I	Track crossing signal
9	AIN	I	Focal error signal A
10	BIN	I	Focus error signal B
11	EIN	I	Tracking error signal E
12	FIN	I	Tracking error signal F
13	VBAT	I	The constant power supply voltage detected signal for voltage servo
14	VDD1	-	Internal digital power supply
15	DGND	-	Digital GND
16	TEST2	I	The input for a test. Usually, it connects with GND at the time of use.
17	X176KO	O	Clock output. f=176.4KHz (4fs)
18	FODRF	O	Focus servo forward output. PWM.
19	FODRR	O	Focus servo reverse output. PWM.
20	TRDRF	O	Tracking servo forward output. PWM.
21	TRDRR	O	Tracking servo reverse output. PWM.
22	SLDRF	O	Slide servo forward output. PWM.
23	SLDRR	O	Slide servo reverse output. PWM.
24	SPDRF	O	Spindle Servo forward output. PWM.
25	SPDRR	O	Spindle Servo reverse output
26	RAA3	O	The address output to external D-RAM. ADR3
27	RAA2	O	The address output to external D-RAM. ADR2
28	RAA1	O	The address output to external D-RAM. ADR1
29	RAA0	O	The address output to external D-RAM. ADR0 (LSB)
30	RAA10	O	The address output to external D-RAM. ADR10 (MSB)
31	VDD2	-	The power supply for interfaces
32	RAA4	O	The address output to external D-RAM. ADR4
33	RAA5	O	The address output to external D-RAM. ADR5
34	RAA6	O	The address output to external D-RAM. ADR6
35	RAA7	O	The address output to external D-RAM. ADR7
36	RAA8	O	The address output to external D-RAM. ADR8
37	RAOEX	O	The data output enable signal output to external D-RAM
38	DGND	-	Digital GND
39	RACASX	O	The column address strobe signal output to external D-RAM
40	RAD2	I/O	Data input and output with Exterior D-RAM. D2
41	RAD3	I/O	Data input and output with Exterior D-RAM. D3 (MSB)
42	RAA9	O	The address output to external D-RAM. ADR9
43	RARASX	O	The row address strobe signal output to external D-RAM

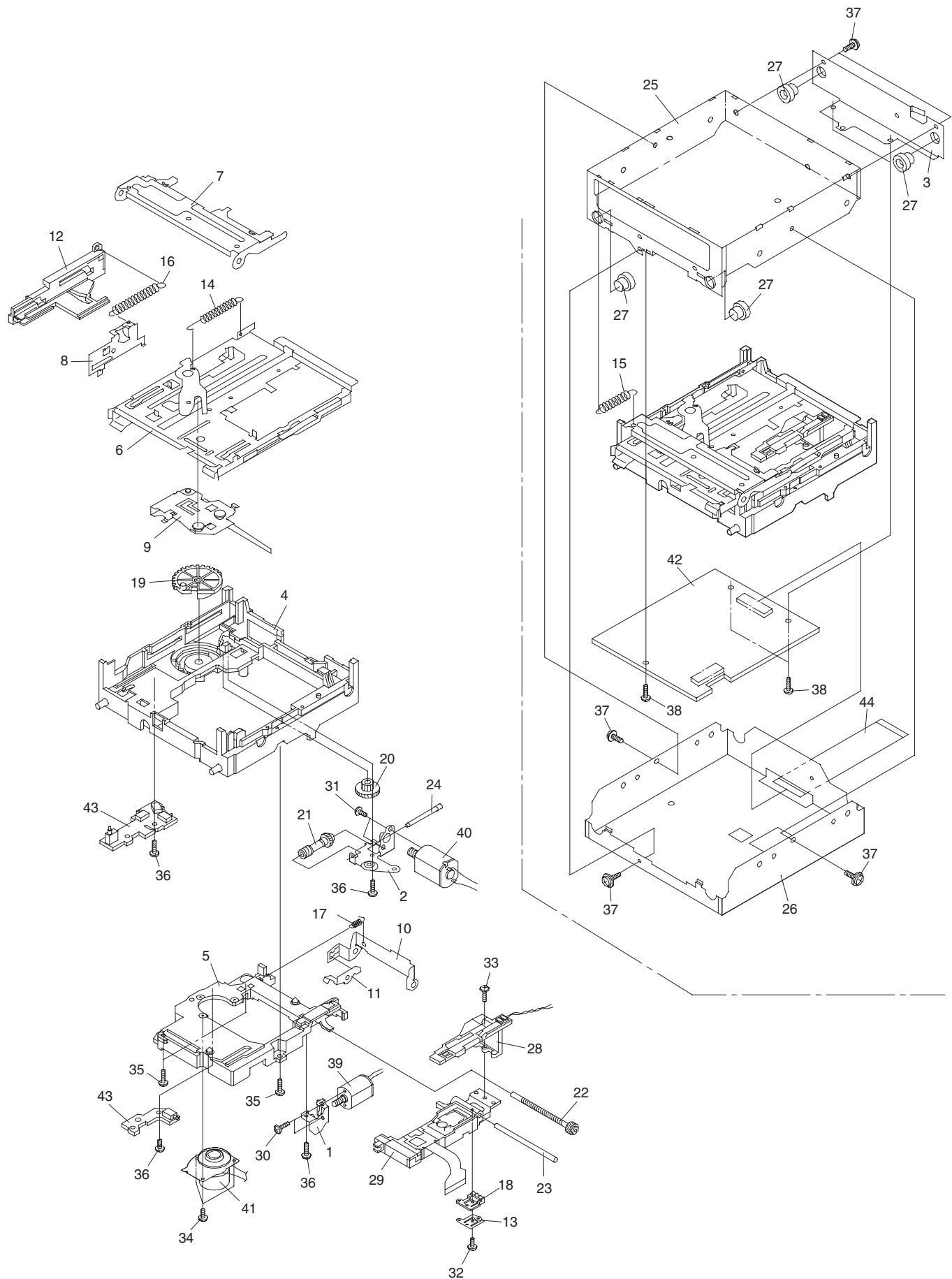
IC DESCRIPTION -3/3 (LR37816A -2/3)

Pin No.	Pin Name	I/O	Description
44	RAWEX	O	The data write enable signal output to external D-RAM
45	RAD1	I/O	Data input and output with Exterior D-RAM. D1
46	RAD0	I/O	Data input and output with Exterior D-RAM. D0 (LSB)
47	RAA11	O	ADR11 (MSB 64Mbit)
48	ACRCER	O	The CRC error flag monitor output of ADIP.
49	PLCK	O	The EFM PLL clock output at playback.
50	EFM0	O	It is an EFM signal output at record. It is a C1F (C1 error flag) monitor output at playback.
51	X700KO	O	Clock output. f=705.6KHz
52	TCRS	O	Track crossing signal
53	TEST0,TEST1	I	The input for a test. Usually, it connects with GND at the time of use.
54	TEST0,TEST1	-	The input for a test. Usually, it connects with GND at the time of use.
55	DILOCK	O	DIN lock detection
56	DIN2	I/O	Digital output signal.Extended port 0.
57	CDDATA	I/O	Data input for dubbing. Extended output port 1.
58	CDLRCK	I/O	The LR clock input for dubbing. Extended output port 2.
59	CDBCLK	I/O	The bit clock input for dubbing. Extended output port 3.
60	VXI	I	The PLL clock input for variable pitches.
61	VPO	O	The PLL phase error output for variable pitches.
62	VDD1	-	Internal digital power supply
63	DGND	-	Digital GND
64	XI	I	Oscillation circuit input. 33.8688MHz
65	XO	O	Oscillation circuit output. 33.8688MHz
66	DIN	I	Digital input signal
67	DOUT	O	Digital output signal
68	PLLBVG	O	A capacitor connection terminal with the outside for Insides PLL
69	DGND	-	Digital GND
70	LRCK	O	The change output of Lch and Rch of music data
71	BCLK	O	The shift clock of music data
72	DFCK	O	The clock for AD/DA converter digital filters 256Fs.
73	ADDATA	I	Voice data input.
74	DADATA	O	Voice data output.
75	FEMON	O	Focus error signal monitor output. Series resistance 10 - 100k ohms built-in
76	TOTMON	O	Total signal monitor output. Series resistance 10 - 100k ohms built-in
77	TEMON	O	Tracking error signal monitor output. Series resistance 10 - 100k ohms built-in.
78	SBCK	I/O	The sub code read-out clock of DIN. Extended port 4.
79	SBO	I/O	Sub code serial data of DIN. Extended port 5.
80	SBSY	I/O	The sub code block synchronized signal of DIN. Extended port 6.
81	SFSY	I/O	The sub code frame synchronized signal of DIN. Extended port 7.
82	FOK	O	Focus O.K. detected signal. "0": Focus O.K.
83	SENSE	O	Servo state detected signal
84	COUT	O	Track crossing signal output
85	MCCK	O	The clock output for microcomputers
86	DINTX	O	The interruption demand output terminal to a system component interface

IC DESCRIPTION -3/3 (LR37816A -3/3)

Pin No.	Pin Name	I/O	Description
87	VDD2	-	The power supply for interfaces
88	DGND	-	Digital GND
89	RSTX	I	Chip reset input. It resets by active Lo.
90	SYD0	I/O	The data bus terminal of a system control interface. (LSB)
91	SYD1	I/O	The data bus terminal of a system control interface.
92	SYD2	I/O	The data bus terminal of a system control interface.
93	SYD3	I/O	The data bus terminal of a system control interface.
94	SYD4	I/O	The data bus terminal of a system v interface.
95	SYD5	I/O	The data bus terminal of a system control interface.
96	SYD6	I/O	The data bus terminal of a system control interface.
97	SYD7	I/O	The data bus terminal of a system control interface. (MSB)
98	SYWRX	I	The register write-in pulse input of a system control interface.
99	SYRDX	I	The register read-out pulse input of a system control interface.
100	SYRS	I	The register selection input of a system control interface.

MECHANISM EXPLODED VIEW -1/1



MECHANISM PARTS LIST -1/1

! = ⚠ 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
MDM-16QA					
	O	MC1001	S1-242-000-505	ANGLE, F/M	a
	O	MC1002	S1-242-000-506	ANGLE, LD MOTOR	a
	O	MC1003	S1-242-000-507	PLATE, EARTH	a
	O	MC1004	S1-242-070-130	LD BASE	a
	O	MC1005	S1-242-070-131	MD BASE	a
	O	MC1006	S1-242-140-349	HLDR, CARTRIGE ASSY	a
	O	MC1007	S1-242-480-307	HLDR, ARM	a
	O	MC1008	S1-242-480-308	PLATE, SW	a
	O	MC1009	S1-242-480-309	SLIDER ASSY	a
	O	MC1010	S1-242-480-310	ARM, H/A SHIFT	a
	O	MC1011	S1-242-480-311	ANGLE, H/A SHIFT	a
	O	MC1012	S1-242-480-312	CAM PLATE	a
	O	MC1013	S1-242-580-289	SPR, GRIP	a
	O	MC1014	S1-242-580-291	SPR, LD ARM	a
	O	MC1015	S1-242-580-300	SPR, EARTH	a
	O	MC1016	S1-242-580-376	SPR, LD OS	a
	O	MC1017	S1-242-580-377	SPR, H/A SHIFT	a
	O	MC1018	S1-242-810-110	GRIP RACK	a
	O	MC1019	S1-242-810-141	CAM, LOADING	a
	O	MC1020	S1-242-810-143	GEAR, MODDLE	a
MDM-16QA					
	O	MC1021	S1-242-810-142	GEAR, LOADING	a
	O	MC1022	S1-242-900-196	DRIVE SCREW ASSY	a
	O	MC1023	S1-242-900-167	SHAFT, PICK GUIDE	a
	O	MC1024	S1-242-900-197	SHAFT, LD GEAR	a
	O	MC1025	S1-243-230-066	COVER, TOP	a
	O	MC1026	S1-243-230-073	COVER, BOTTOM	a
	O	MC1027	S1-243-260-243	INSULATOR	a
	O	MC1028	S1-246-100-022	MAGNETIC HEAD	a
	O	MC1029	S1-246-170-048	OPTICAL PICK UP UNIT	a
	O	MC1030	S1-249-700-227	SCREW, 1.4-1.5	a
	O	MC1031	S1-249-700-239	SCREW, 2-2	a
	O	MC1032	S1-249-700-007	SCREW, 1.4-2.5	a
	O	MC1033	S1-249-700-108	SCREW, 1.7-5	a
	O	MC1034	S1-249-700-228	SCREW, 1.4-3	a
	O	MC1035	S1-249-700-229	SCREW, 1.7-6	a
	O	MC1036	S1-249-700-242	SCREW, 1.4-5	a
	O	MC1037	S1-249-700-241	SCREW, 2-3	a
	O	MC1038	S1-249-700-077	SCREW, 1.7-3	a
	O	MC1039	S1-246-300-098	MOT, FEED ASSY	a
	O	MC1040	S1-246-300-135	MOT, LOADING ASSY	a
MDM-16QA					
	O	MC1041	S1-126-300-052	MOT, SPINDLE ASSY	a
	X	MC1042	S1-245-210-332	PWB, MD MAIN	a
	X	MC1043	S1-245-210-323	PWB MD MECH	a
	O	MC1044	- - -	FLAT CABLE, 28P L=80mm	a

! = SAFETY PARTS
C = Components marked

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

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.