

JVC

SCHEMATIC DIAGRAMS

COMPACT COMPONENT SYSTEM

MX-J500

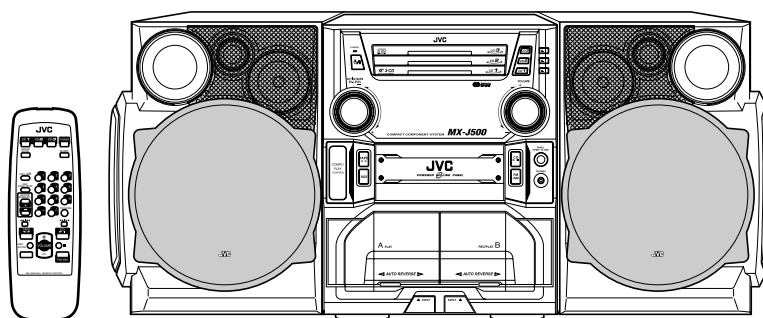
Supplement

Area Suffix

EV Eastern Europe

This model is EV version that is added to the preceding model, the MX-J500. Therefore the service manual for this model is consisting of Standard schematic diagrams, and Parts list only. For others, please refer to the service manual for MX-J500/MX-J506 (issue No.20804).

*Please refer to "CD-ROM No.SML200007 (20804Cpar)" for the parts list section.



COMPACT
disc
DIGITAL AUDIO



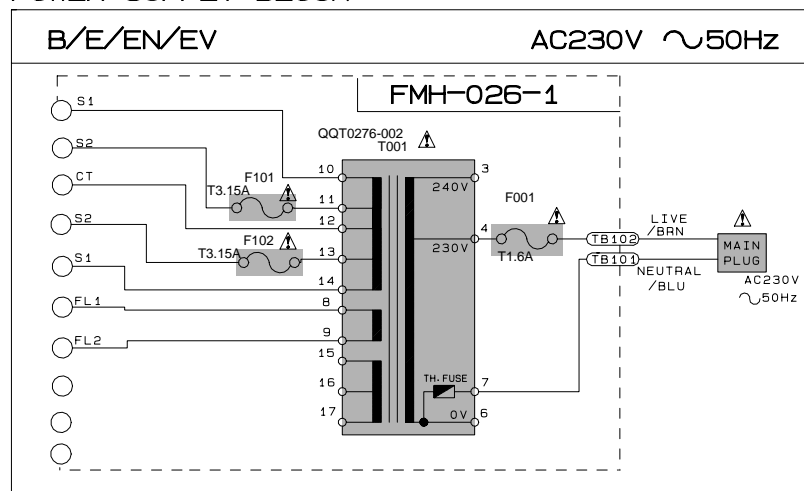
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Standard schematic diagrams 2-1~8

Standard schematic diagrams

■ Power transformer section

POWER SUPPLY BLOCK



EXPLANATION OF OVERALL OF SCHEMA.

MODEL MX-J500/CA-MXJ500/MX-J506/MX-J550R/CA-MXJ550R/CA-MXJ552R

SHEET NUMBER	MODEL NUMBERS TO BE APPLIED	CIRCUITS DESCRIPTION
1/11	CA-MXJ500/CA-MXJ550R CA-MXJ552R/MX-J500 MX-J506/MX-J550R	.PRIMARY WITH MAINS TRANSFORMER
2/11	CA-MXJ500/CA-MXJ550R CA-MXJ552R/MX-J500 MX-J506/MX-J550R	.DC REGULATORS/AUDIO OUTPUT
3/11	CA-MXJ500/CA-MXJ550R CA-MXJ552R/MX-J500 MX-J506/MX-J550R	.EXTERNAL INPUT, SOURCE SELECTOR SWITCH
4/11	CA-MXJ500/CA-MXJ550R CA-MXJ552R/MX-J500 MX-J506/MX-J550R	.FL DISPLAY, SYSTEM CONTROL LSI, USER CONTROL KEYS
5/11	MX-J500	.MIC AMP, ECHO CIRCUIT (ONLY FOR U, UP, US, UT, UX, UY)
6/11	CA-MXJ500/CA-MXJ550R CA-MXJ552R/MX-J500 MX-J506/MX-J550R	.CD SERVO AND CD SYSTEM CONTROL .CD CHANGER MECHANISM CONTROL
7/11	CA-MXJ500/CA-MXJ550R CA-MXJ552R/MX-J500 MX-J506/MX-J550R	.TAPE DECK MECHANISM CONTROL .TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS
8/11	CA-MXJ500/CA-MXJ550R CA-MXJ552R	.TUNER RF/IF/FM MULTIPLEX (ONLY FOR A,B,E,EN,EV)
9/11	MX-J550R	.TUNER RF/IF/FM MULTIPLEX (ONLY FOR EE)
10/11	MX-J500/MX-J506	.TUNER RF/IF/FM MULTIPLEX (ONLY FOR C,J,U, UP, US, UT, UX, UY)
11/11	MX-J550R	.POLAR STEREO MULTIPLEX (ONLY FOR EE)

VERSION CODES


J :U. S. A.
C :CANADA
B :U. K.
E :CONTINENTAL EUROPE
EE :RUSSIA
EN :NORDIC COUNTRIES
EV :EASTERN EUROPE
A :AUSTRALIA
UP :KOREA
US :SINGAPORE
UT :TAIWAN
UX :SAUDI ARABIA
UY :ARGENTINA
U :UNIVERSAL EXCEPT ALL OF ABOVE

MODEL

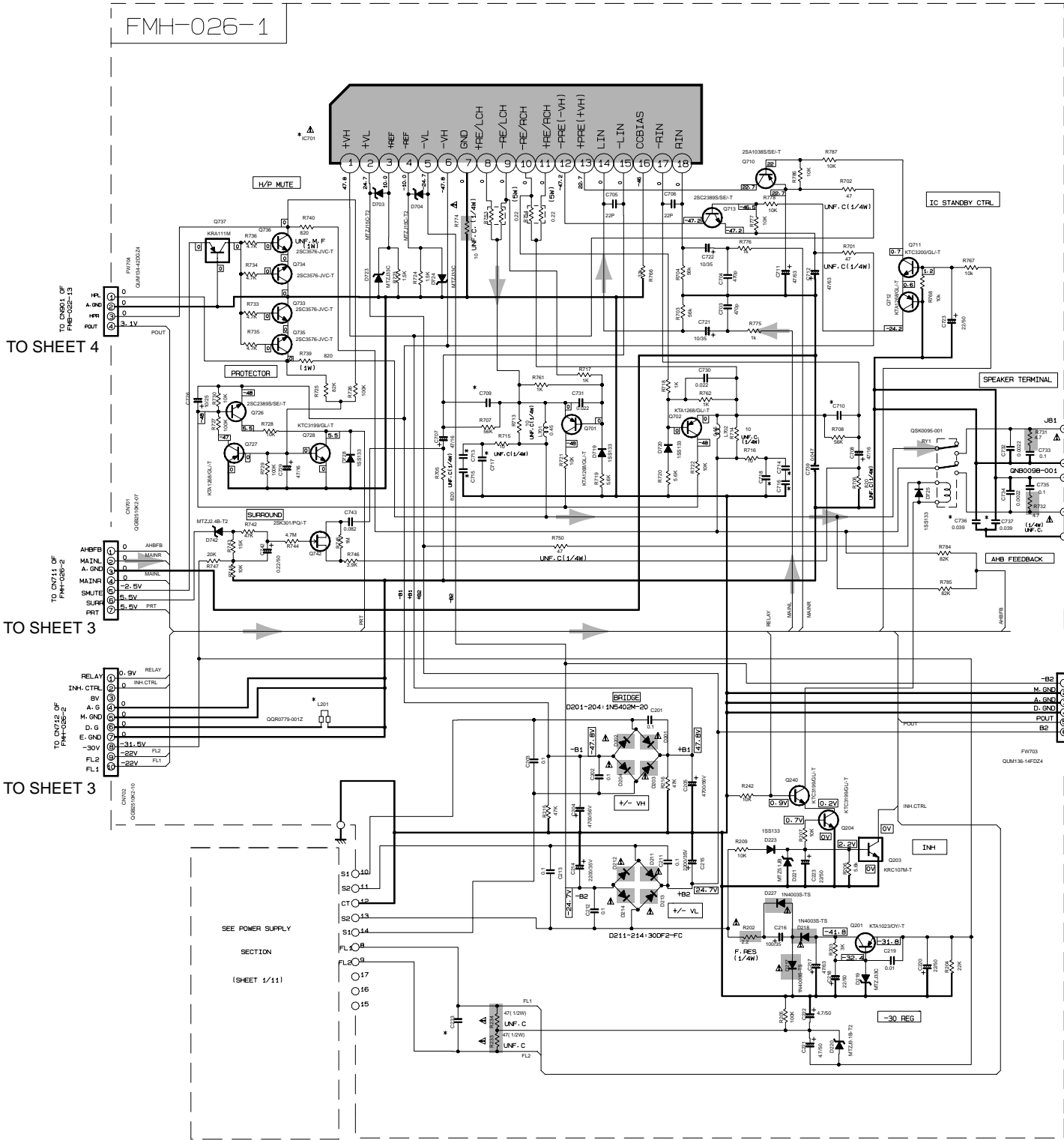
MX-J500

SHEET

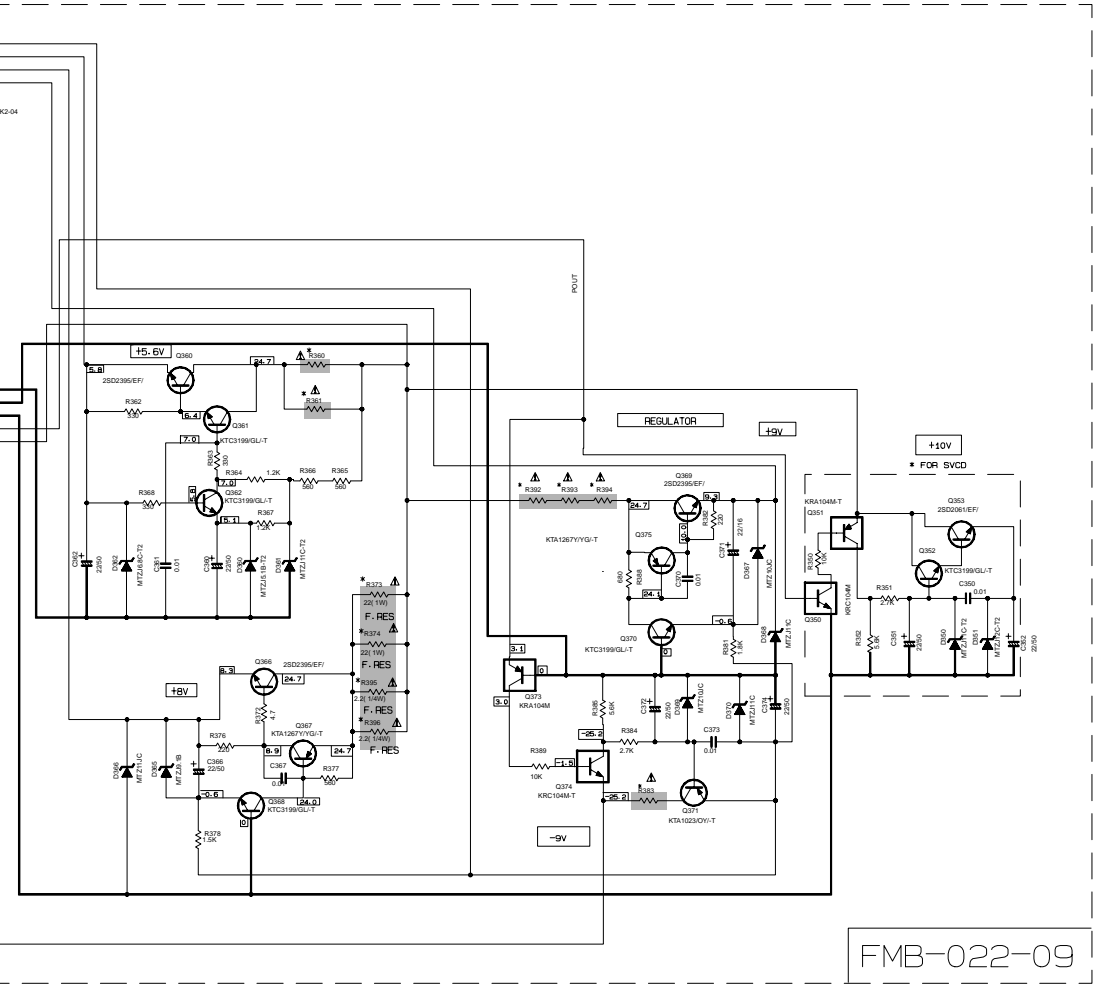
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 Parts are safety assurance parts. When replacing those parts make sure to use the specified.

Power amplifier & regulator section



SHARK										
REF. NAME	VERSION	MX-J500				CA-MXJ500	CA-MXJ550R	CA-MXJ552R	MX-J506	MX-J550R
		U-UP, US U-X, U-Y	UT-A	J	C	B-E, EN-EV	B-E, EN-EV	E-EN	C	EE
C713-C714, C715-C716		0.047	0.047	NONE	0.047	0.047	0.047	0.047	0.047	0.047
C717-C718		NONE	NONE	0.047	NONE	NONE	NONE	NONE	NONE	NONE
R392-R393-R394		SHORT BB1-BB2-BB3	SHORT BB1-BB2-BB3	4.7 (1/4W) F.RES	SHORT BB1-BB2-BB3	SHORT BB1-BB2-BB3	SHORT BB1-BB2-BB3	SHORT BB1-BB2-BB3	SHORT BB1-BB2-BB3	SHORT BB1-BB2-BB3
R383		SHORT BB4	SHORT BB4	10 (1/4W) F.RES	SHORT BB4	SHORT BB4	SHORT BB4	SHORT BB4	SHORT BB4	SHORT BB4
R360		2.2 (1/4W) F.RES	2.2 (1/4W) F.RES	15 (1/4W) UNF.C	2.2 (1/4W) F.RES	2.2 (1/4W) F.RES	2.2 (1/4W) F.RES	2.2 (1/4W) F.RES	2.2 (1/4W) F.RES	2.2 (1/4W) F.RES
R361		4.7 (1/4W) F.RES	4.7 (1/4W) F.RES	15 (1/4W) UNF.C	4.7 (1/4W) F.RES	4.7 (1/4W) F.RES	4.7 (1/4W) F.RES	4.7 (1/4W) F.RES	4.7 (1/4W) F.RES	4.7 (1/4W) F.RES
C233		0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
C736/C737		NONE	USED	NONE	NONE	USED	USED	USED	NONE	NONE
R395/R396		USED	USED	NONE	USED	USED	USED	USED	USED	USED
R373/R374		NONE	NONE	USED	NONE	NONE	NONE	NONE	NONE	NONE
IC701		STK412-000	STK412-000	STK412-010	STK412-010	STK412-000	STK412-000	STK412-000	STK412-010	STK412-000
L201		SHORT (B112)	USED	SHORT (B112)	SHORT (B112)	USED	USED	USED	SHORT (B112)	SHORT (B112)
C709/C710		10P	4.7P	10P	10P	4.7P	4.7P	4.7P	10P	10P



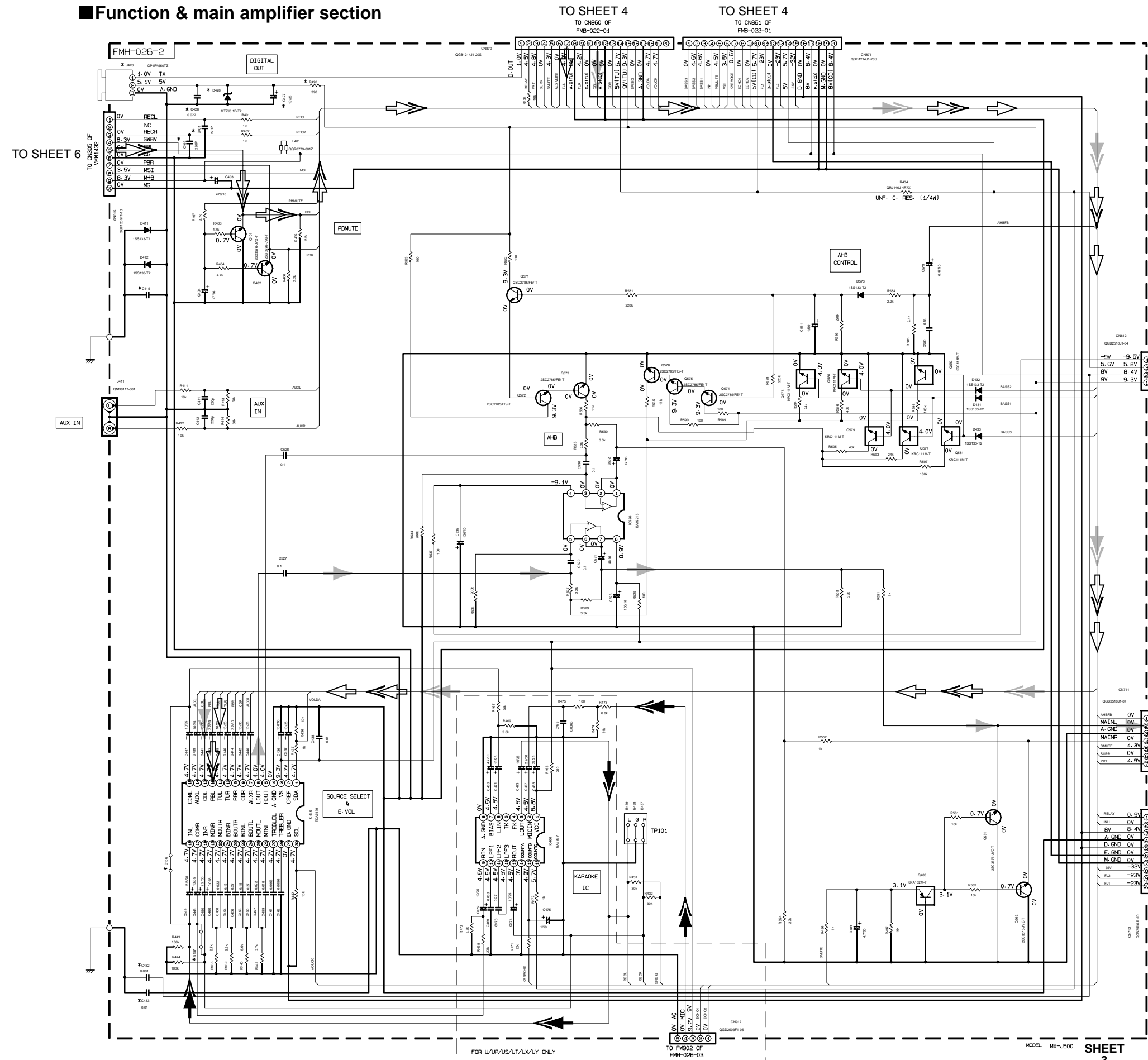
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION — AUX. MODE, VOL. MIN, BASS OFF

2. UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 1/4W 1% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM (Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN pF (pF).
ALL INDUCTANCE VALUES ARE IN mH (mH).
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1SS133

Parts are safety assurance parts.
When replacing those parts make
sure to use the specified.

■Function & main amplifier section



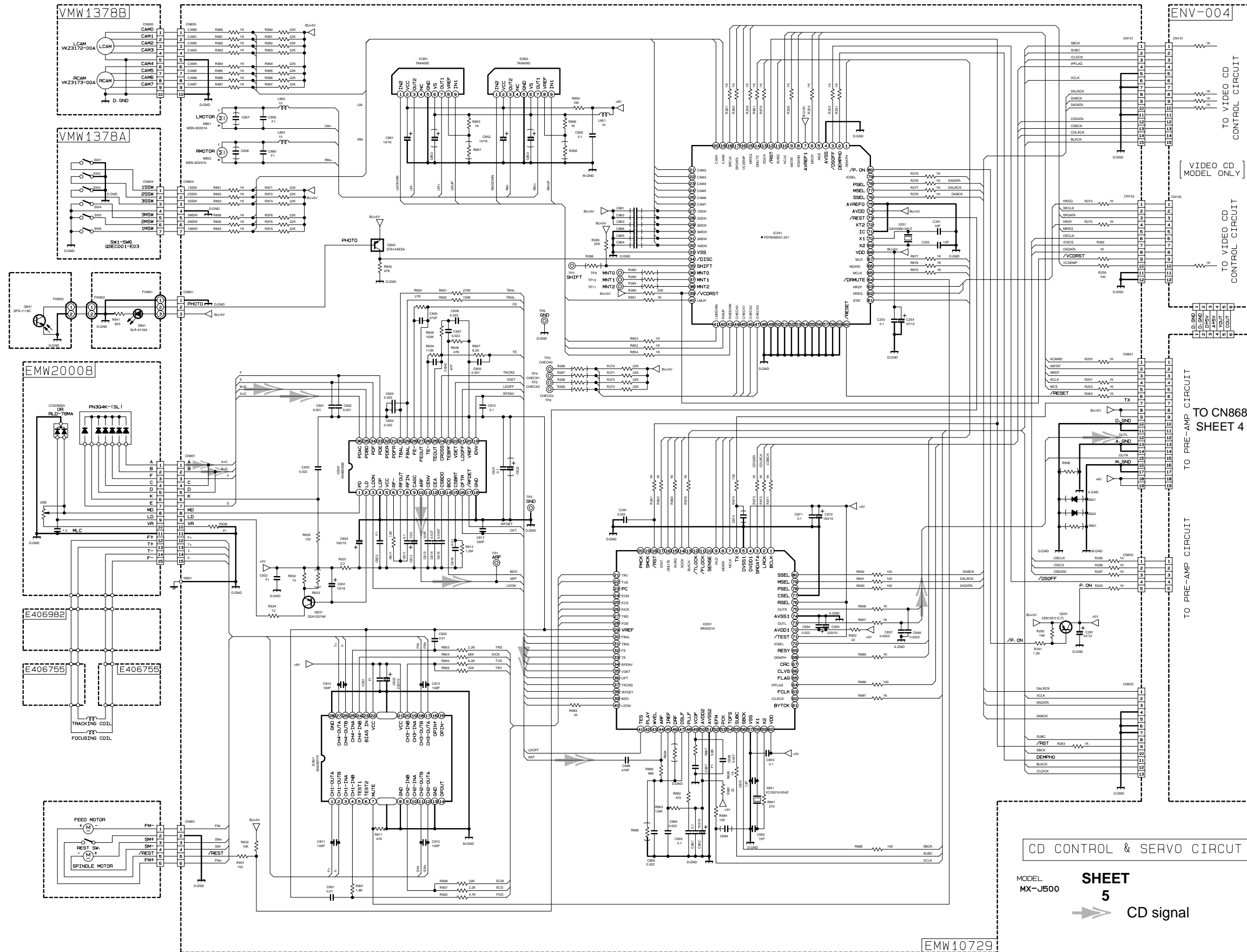
* MARK		MODEL	CA-MXJ500	CA-MXJ50SR	CA-MXJ50SR2	MX-J500				MX-J506	MX-J50SR	
		VERSION	B-E-EN-EV	B-E-EN-EV	E-EN	A	C	J	U-UP L-UX LY	UT	C	EE
DIGITAL	OUT	C426	USED	USED	USED	USED	NONE	USED	NONE	NONE	USED	NONE
		C427	USED	USED	USED	USED	NONE	USED	NONE	NONE	USED	NONE
		D426	USED	USED	USED	USED	NONE	USED	NONE	NONE	USED	NONE
		J426	USED	USED	USED	USED	NONE	USED	NONE	NONE	USED	NONE
		R426	USED	USED	USED	USED	NONE	USED	NONE	NONE	USED	NONE
		C401	USED	USED	USED	USED	NONE	NONE	NONE	USED	NONE	NONE
ENC		C402	USED	USED	USED	USED	NONE	NONE	NONE	USED	NONE	NONE
		C415	0-0022	0-0022	0-0022	0-0022	500	1000	1000P	1500P	100P	100P
		C431	USED	USED	USED	USED	NONE	NONE	NONE	USED	NONE	NONE
		C432	USED	USED	USED	USED	NONE	NONE	NONE	USED	NONE	NONE
		C433	USED	USED	USED	USED	NONE	NONE	NONE	USED	NONE	NONE
		L401	USED	USED	USED	USED	SHORT	SHORT	SHORT	USED	SHORT	SHORT
OTHERS		B156	USED	USED	USED	USED	USED	NONE	NONE	USED	USED	USED
		B157	USED	USED	USED	USED	USED	USED	NONE	NONE	USED	USED

NOTES

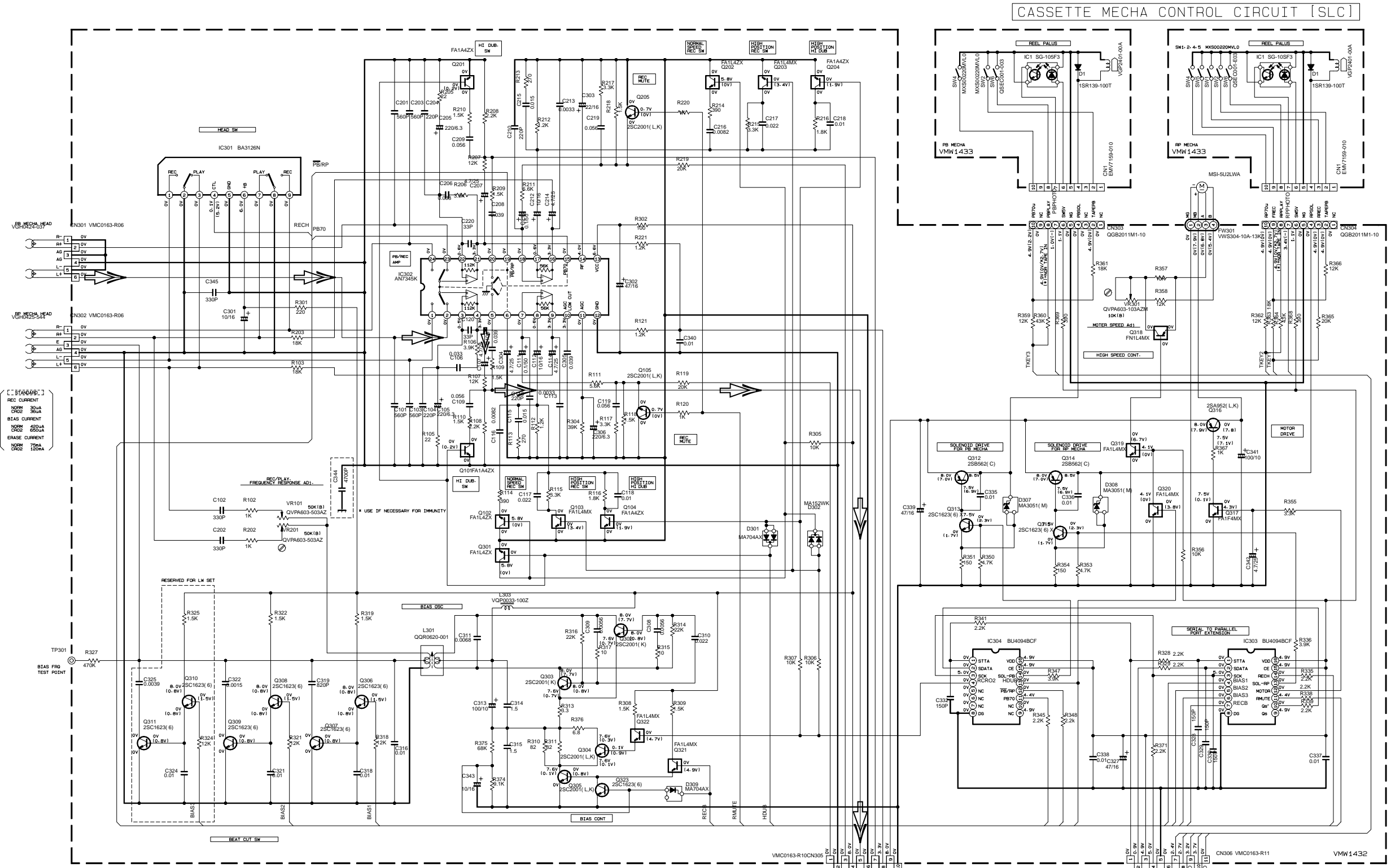
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION — AUX MODE, VOL MIN, BASS OFF
2. UNLESS OTHERWISE SPECIFIED
RESISTORS ARE 1/4W 1% 02 CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHMS (Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN PICOFARADS (pF).
ALL INDUCTANCE VALUES ARE IN MICROHENRIES (μH).
ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1N5133

- ➡ MAIN signal
- ➡➡ CD signal
- ➡➡➡ TAPE P.B. signal
- ➡➡ TUNER signal
- ➡➡➡➡➡ MIC signal

CD Servo & CD Mechanism control section



Head amplifier & mechanism control section



- NOTES
- 1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. () IS INVERT MODE
 - 2. UNLESS OTHERWISE SPECIFIED
 - ALL RESISTANCE VALUES ARE IN OHM(Ω).
 - ALL CAPACITORS ARE CERAMIC CAPACITOR.
 - ALL CAPACITANCE VALUES ARE IN μF(μF).
 - ALL INDUCTANCE VALUES ARE IN mH(mH).
 - ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
 - PP: POLYPROPYLENE CAPACITOR

TABLE 1. DIGITAL TR LIST			
PART. NO	CONSTRUCTION	REF. NO	
FN1L-4M		Q318	FA1F-4M
FA1A-4Z		Q101/Q201	FA1L-4M
FA1L-4Z		Q104/Q204	Q103/Q203
		Q301	Q350/Q351/Q352

TO CN315
SHEET 3

FROM PRE-AMP CIRCUIT

TO CN869
SHEET 4

FROM MICON CIRCUIT

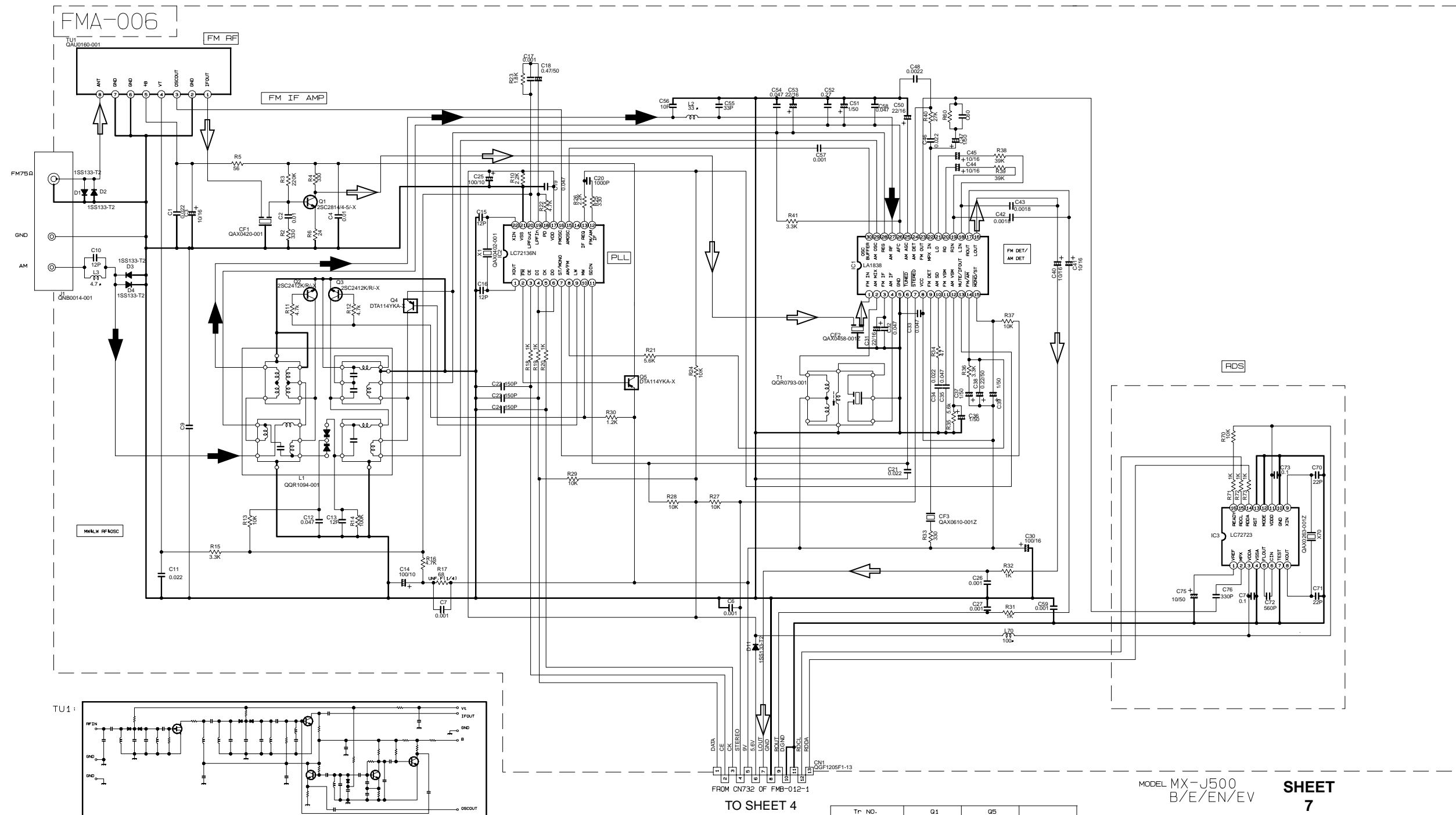
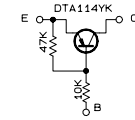
➡ TAPE P.B. signal

■ Tuner section

NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
- ALL RESISTORS ARE 1/8W ±5% METAL GLAZE RESISTOR.
- ALL RESISTANCE VALUES ARE IN OHM(Ω).
- ALL CAPASITANCE VALUES ARE IN *F(P=pF).
- ALL E.CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE (*F)/RATED VOLTAGE (V).
- SI DIODES (D) ARE ALL 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.
- PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.
G1 2SC2814/4-5/-X G2, G3 2SC2412K/R/-X
G4- G5 DTA114YKA-X

B. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS:



	CONDITION	PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
IC1	FM NO SIGNAL		3.6	8.9	3.6	3.6	0	5.0	5.0	8.9	8.9	1.3	0.1	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.5	3.5	3.6	3.6	2.7
	FM 600B STEREO		3.6	8.9	3.6	3.6	0	0	5.0	8.9	8.9	1.3	4.3	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.6	3.6	3.6	3.6	2.7
	AM NO SIGNAL		3.5	9.0	3.5	3.5	0	5.0	5.1	9.0	2.6	1.3	0	0	0.9	4.7	5.5	4.3	4.3	4.3	3.3	3.3	3.2	2.8	ust	0.7	0.7	3.6	3.6	3.6	3.6	2.1
IC2	FM NO SIGNAL		2.5	0	0	5.0	4.9	5.0	7.9	7.8	3.6	6.1	5.1	0	0	0	0	2.5	5.1	0.9	0.9	3.8	0	2.3								

FROM CN732 OF FMB-012-1

TO SHEET 4

Tr. NO.	G1			G5					
PIN NO.	E	C	B	E	C	B	E	C	B
FM 87.9MHz NO SIGNAL	0	7.1	0.85	8.9	8.8	0			
AM 522KHz NO SIGNAL	0	0	0	9.0	0	8.9			
Tr. NO.	G2			G3			G4		
PIN NO.	E	C	B	E	C	B	E	C	B
AM 522KHz NO SIGNAL	0	0	0.7	0	0	0.7	0	3.6	0.
AM 144KHz NO SIGNAL	0	0	0.3	0	0.3	0.3	3.6	3.6	3.

MODEL MX-J500
B/E/EN/EVSHEET
7

FM/TUNER signal
AM signal