

JVC

SCHEMATIC DIAGRAMS

COMPACT COMPONENT SYSTEM

MX-J500

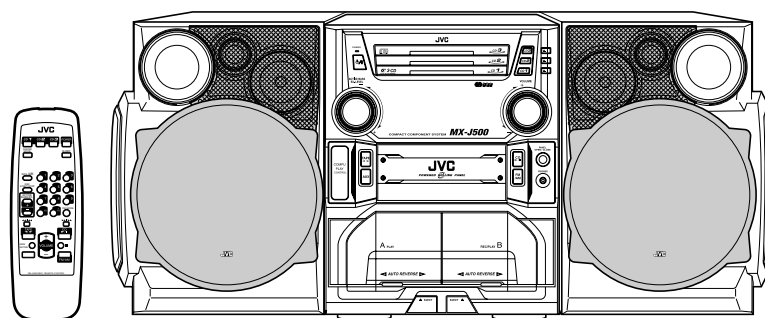
Supplement

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



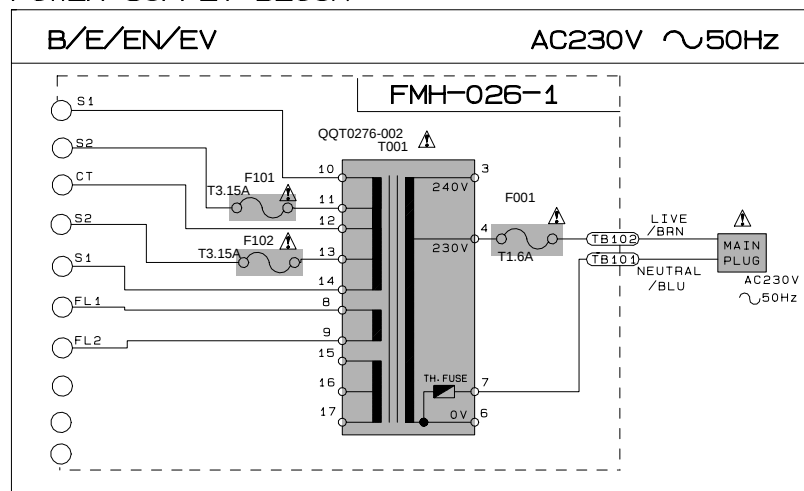
Contents

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

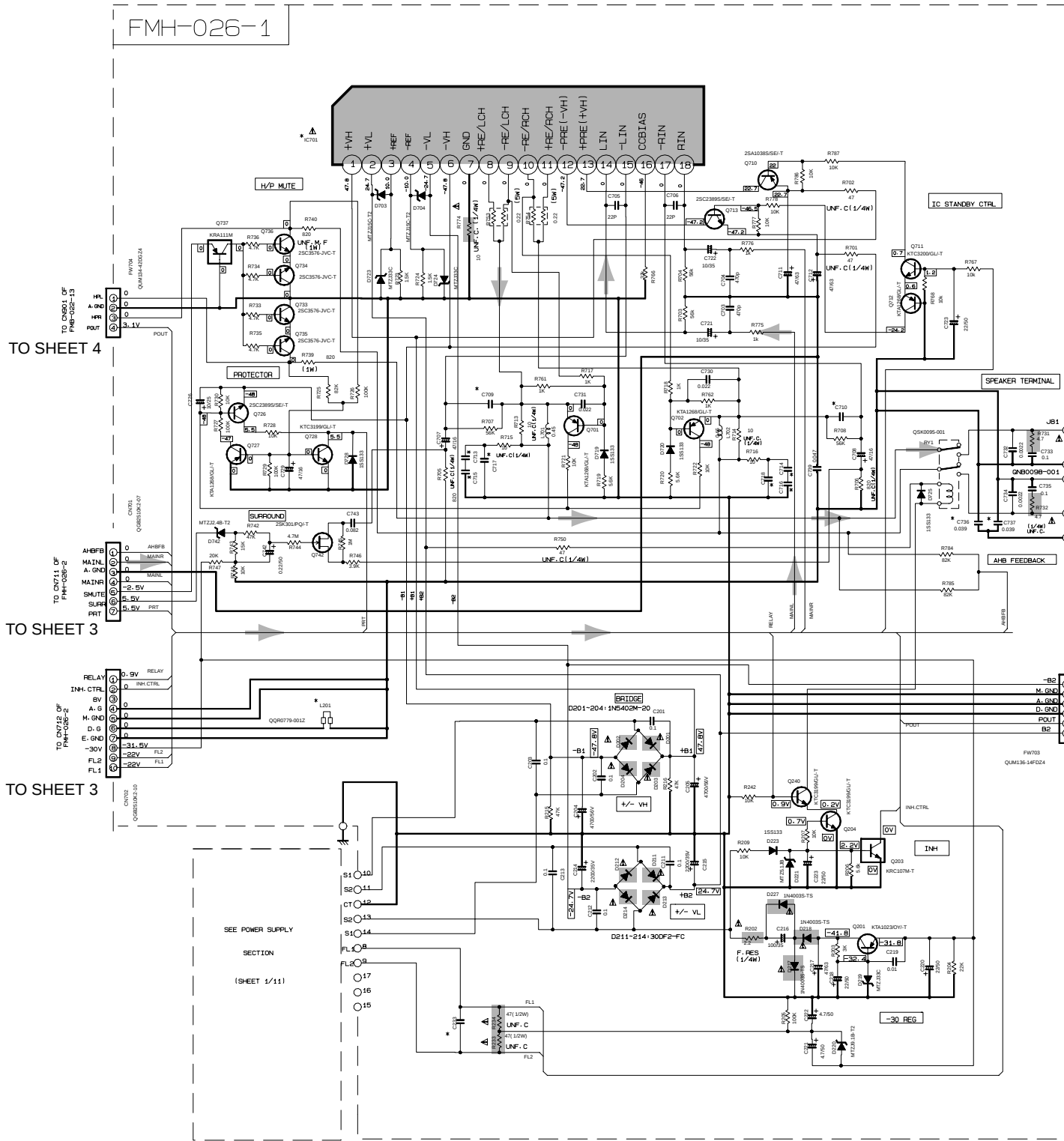
MX-J500

SHEET

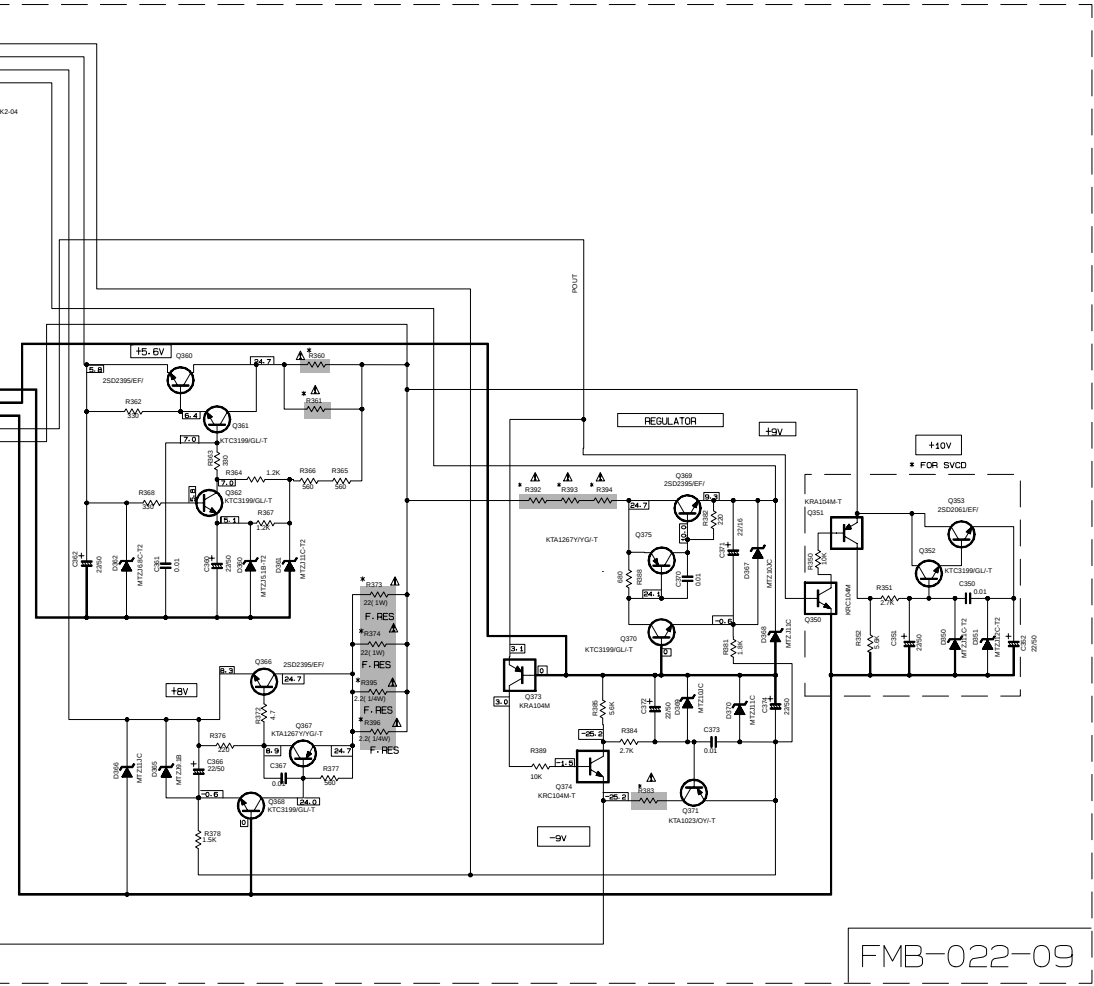
1

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

■ Power amplifier & regulator section



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

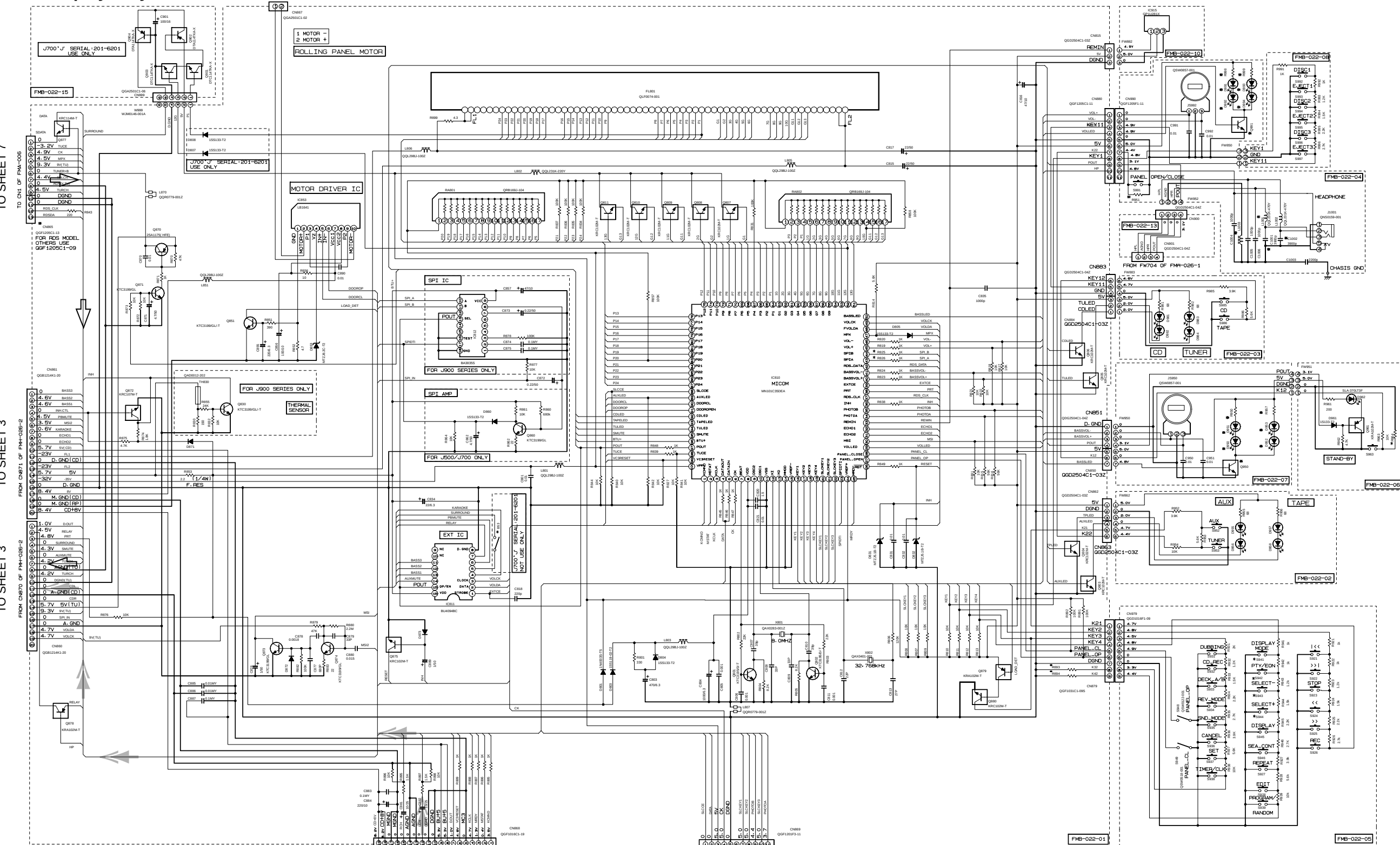


➡ MAIN signal

- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION — AUX MODE, VOL. MIN, BASS OFF
 - UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM (Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN nF (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.

FL Display & system controller section



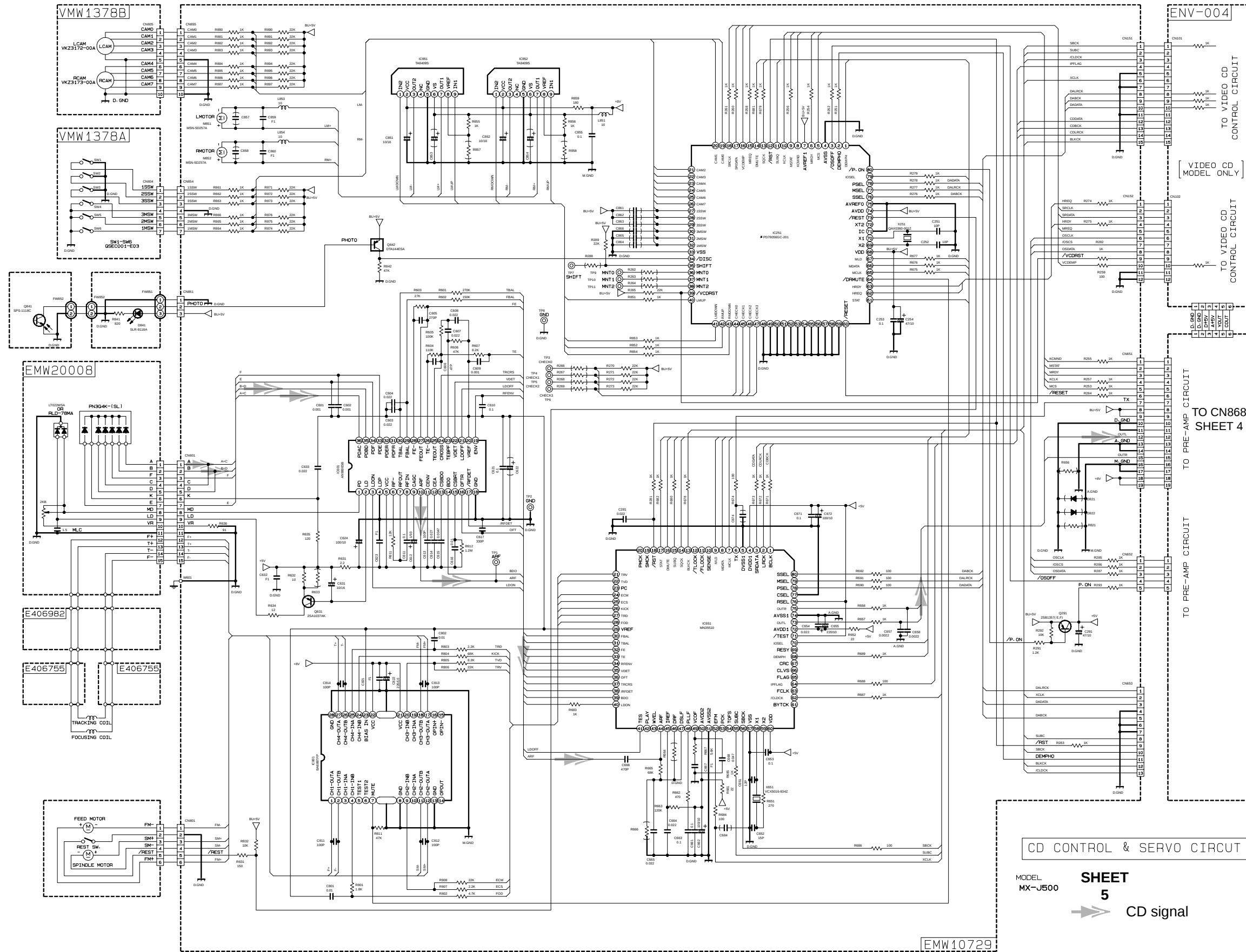
TO SHEET 5 TO CN51 OF EM10729 (CD CHANGER)											
* MARK	CA-MXJ500 B-E-EN-EV	CA-MXJ550 B-E-EN-EV	CA-MXJ552R C-E-EN	MX-J500 U-C-A	MX-J500 UX	MX-J500 U-UP-UY	MX-J505 C	MX-J550R EE	CA-MXJ700 A-U-UP-US UT-UX-UY	MX-J700 C-J	CA-MXJ750R B-E-EN-EV
R964	330K	330K	330K	330K	330K	330K	330K	330K	75K	75K	75K
R951	75K	75K	330K	75K	75K	75K	75K	330K	75K	75K	330K
R953	330K	330K	75K	75K (A=330K)	18K	75K	330K	75K (A=330K)	75K	75K	330K
R994	75K	75K	330K	75K (A=330K)	18K	330K	75K	330K	75K	330K	75K
D950, D992, D951, D991	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
D956, D994, D953, D993	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
R950, R957, R958, R959	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
D950, D991	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
S941, S942, S943, S944	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
L1001, L1002	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u
C1001, C1002	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u
L1003	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u
X801	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z

TO SHEET 6 TO CN306 OF VM1432											
* MARK	CA-MXJ500 A-U-UP-US UT-UX-UY	MX-J500 C-J	CA-MXJ550R B-E-EN-EV	MX-J550R EE	CA-MXJ550R B-E-EN-EV	MX-J550R EE	CA-MXJ550R B-E-EN-EV	MX-J550R EE	CA-MXJ550R B-E-EN-EV	MX-J550R EE	CA-MXJ550R B-E-EN-EV
R964	330K	330K	330K	330K	330K	330K	330K	330K	330K	330K	330K
R951	75K	75K	330K	75K	75K	75K	330K	75K	75K	330K	330K
R953	330K	330K	75K	75K (A=330K)	18K	75K	330K	75K (A=330K)	75K	75K	330K
R994	75K	75K	330K	75K (A=330K)	18K	330K	75K	330K	75K	330K	75K
D950, D992, D951, D991	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
D956, D994, D953, D993	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
R950, R957, R958, R959	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
D950, D991	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
S941, S942, S943, S944	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
L1001, L1002	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u
C1001, C1002	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u
L1003	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u	0.001u
X801	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z	AX0416-001Z

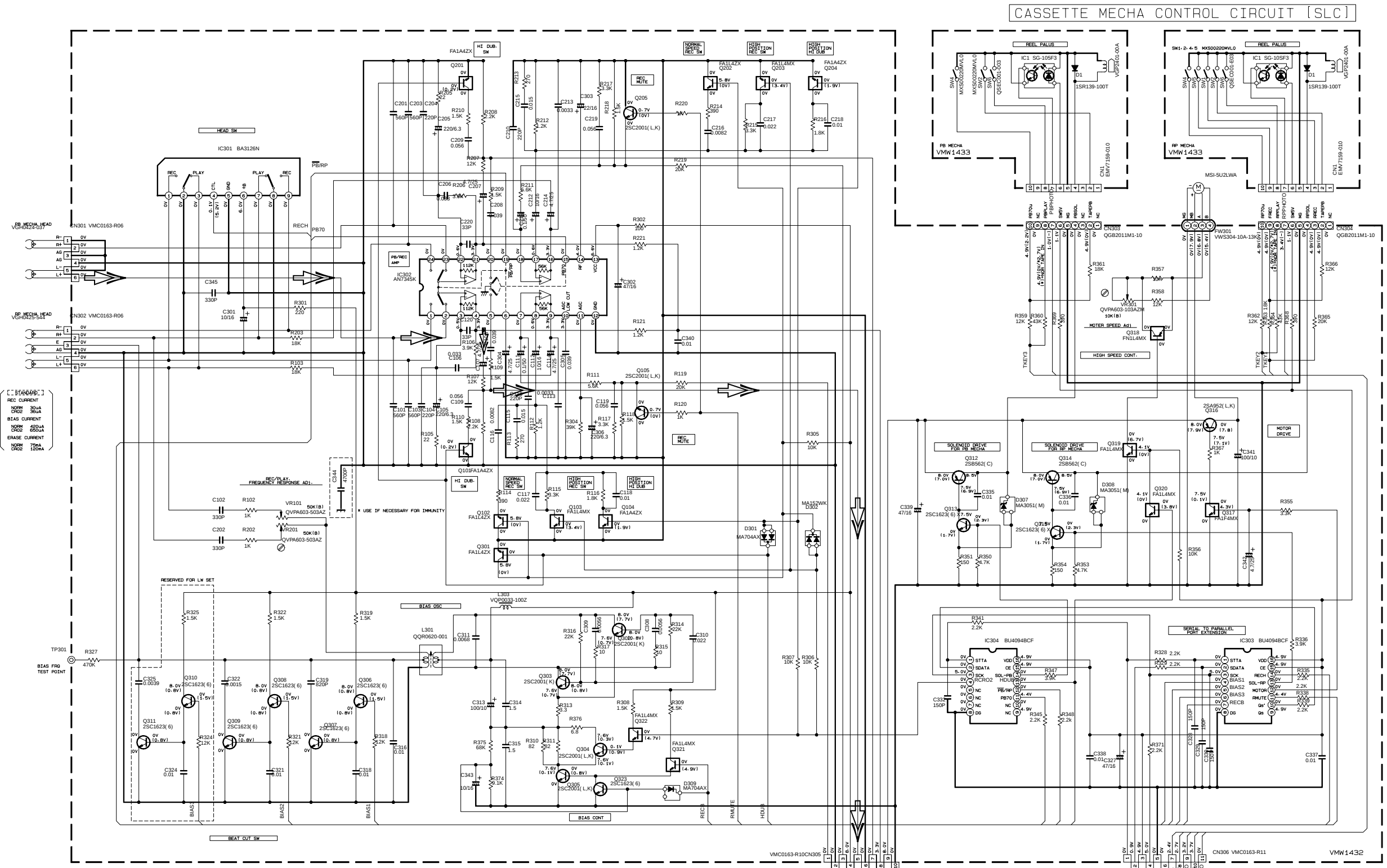
NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION — AUX MODE, VOL MEN, BASS OFF
2. UNLESS OTHERWISE SPECIFIED
RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN μF (μF).
ALL INDUCTANCE VALUES ARE IN mH (mH).
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1N5113

TUNER signal
CD 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(PμF)
 - ALL INDUCTANCE VALUES ARE IN mH(mH)
 - E.C. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
- ≡ PLYPROPYLENE CAPACITOR

TABLE 1. DIGITAL TR LIST

PART-NO	CONSTRUCTION	REF.-NO		
FN14M		Q318		Q317
FA184Z		Q101/Q201 Q104/Q204		Q313/Q203 Q319 Q320/Q201/Q321
FA1L4Z		Q102/Q202 Q301		

TO CN315
SHEET 3

FROM PRE-AMP CIRCUIT

TO CN869
SHEET 4

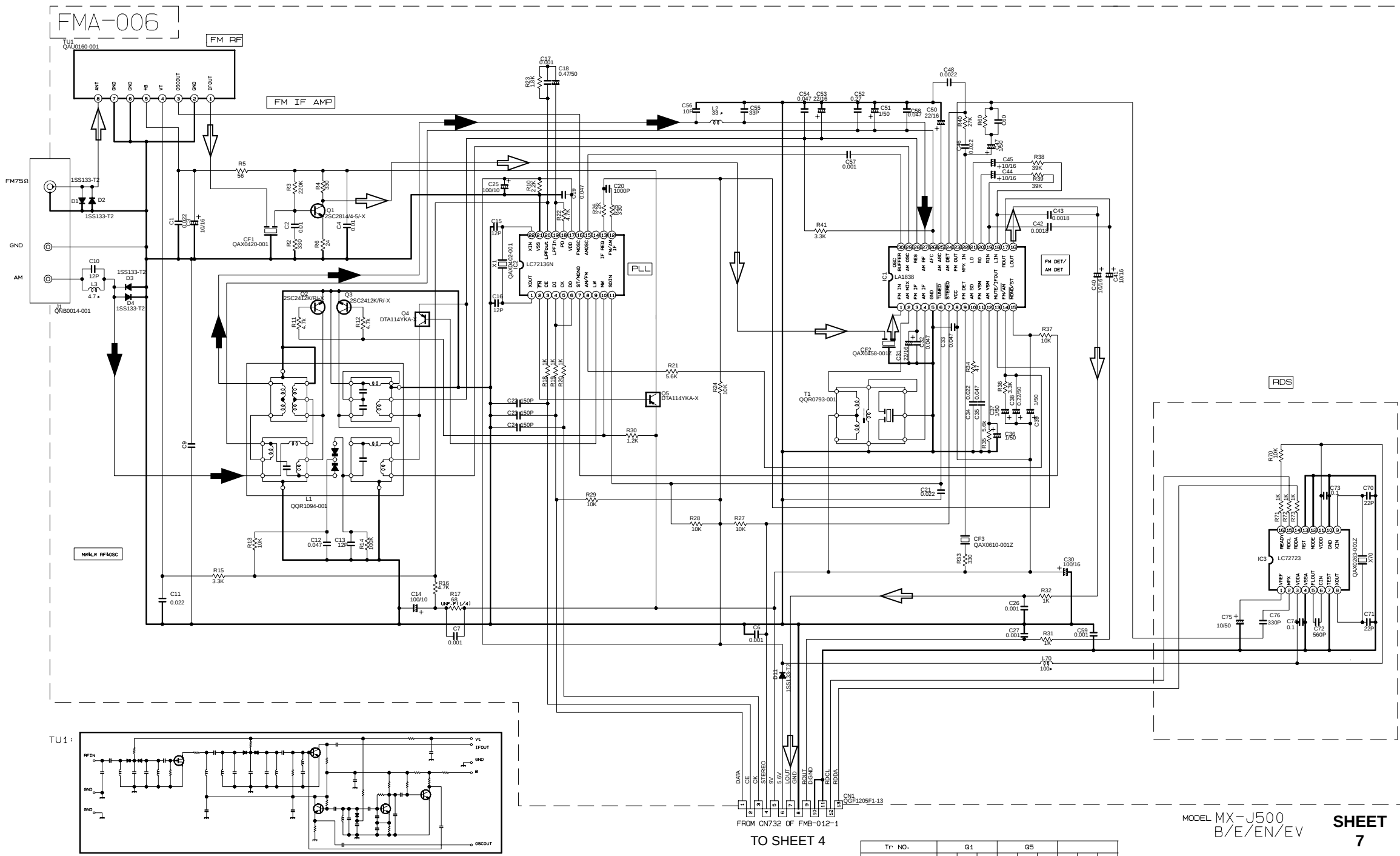
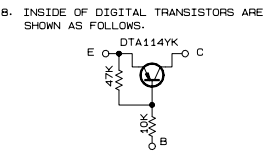
FROM MICON CIRCUIT

➡➡➡ TAPE P.B. signal

MODEL **SHEET**
MX-J500 **6**

Tuner section

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



	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	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	4.3	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								

Tr NO.	Q1			Q5					
PIN NO.	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.	Q2			Q3			Q4		
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	0.7
AM 144KHz NO SIGNAL	0	0	0.3	0	0.3	0.3	3.6	3.6	3.6

FM/TUNER signal
AM signal