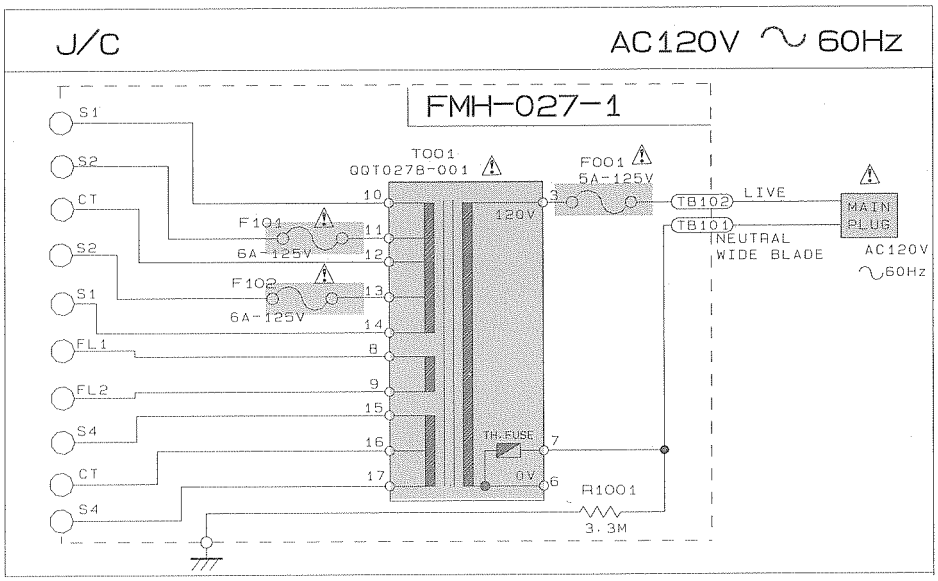
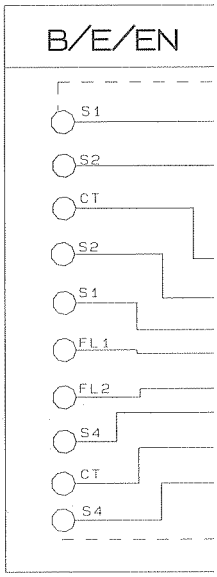
Standard schematic diagrams

■ Power transformer section

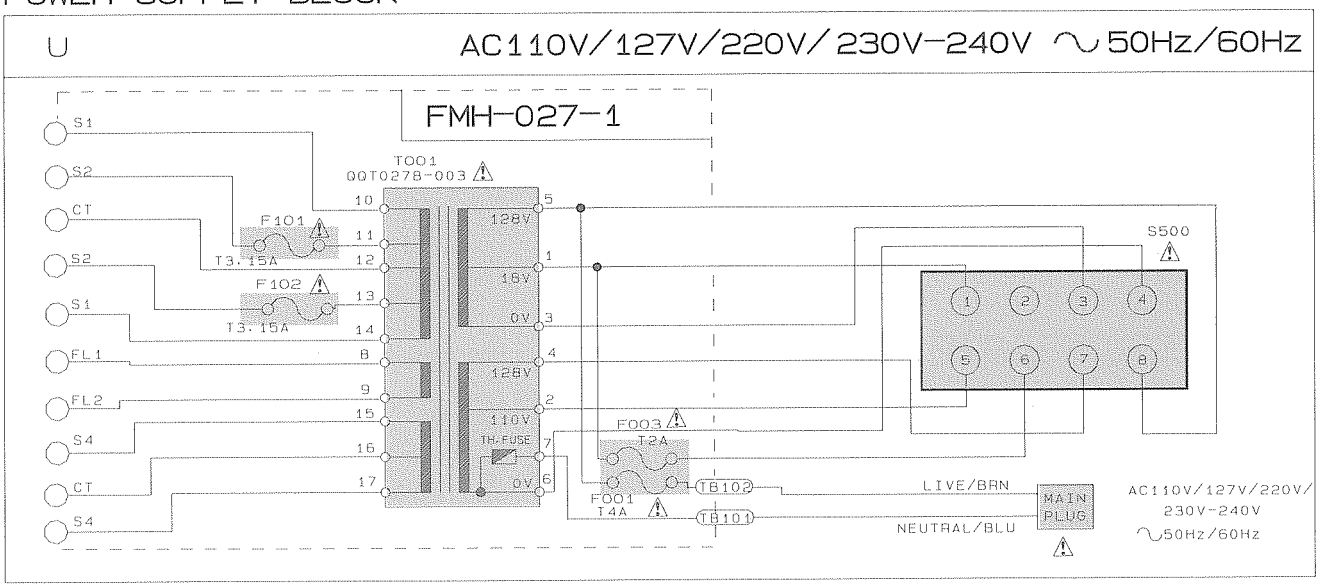
POWER SUPPLY BLOCK



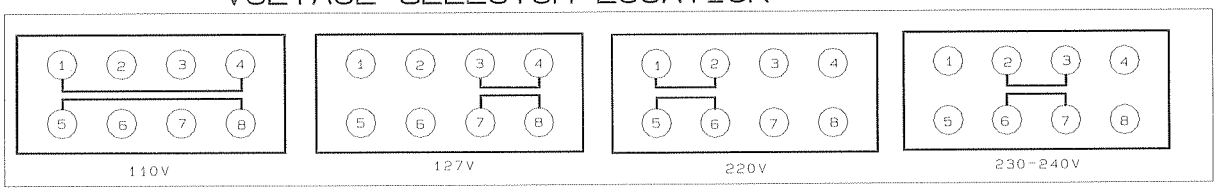
POWER SUPP



POWER SUPPLY BLOCK



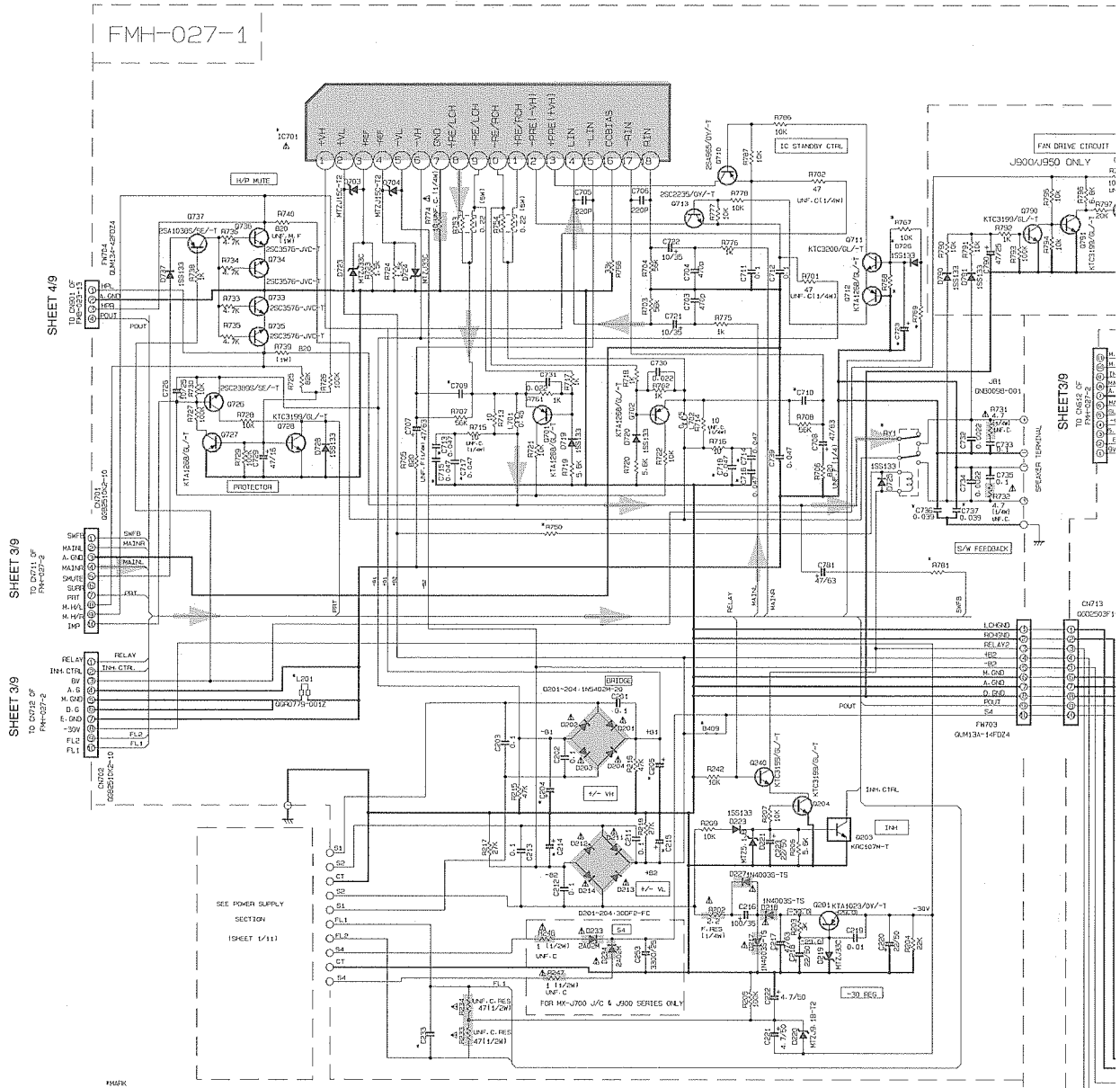
VOLTAGE SELECTOR LOCATION



5 4 3 2 1

A B C D

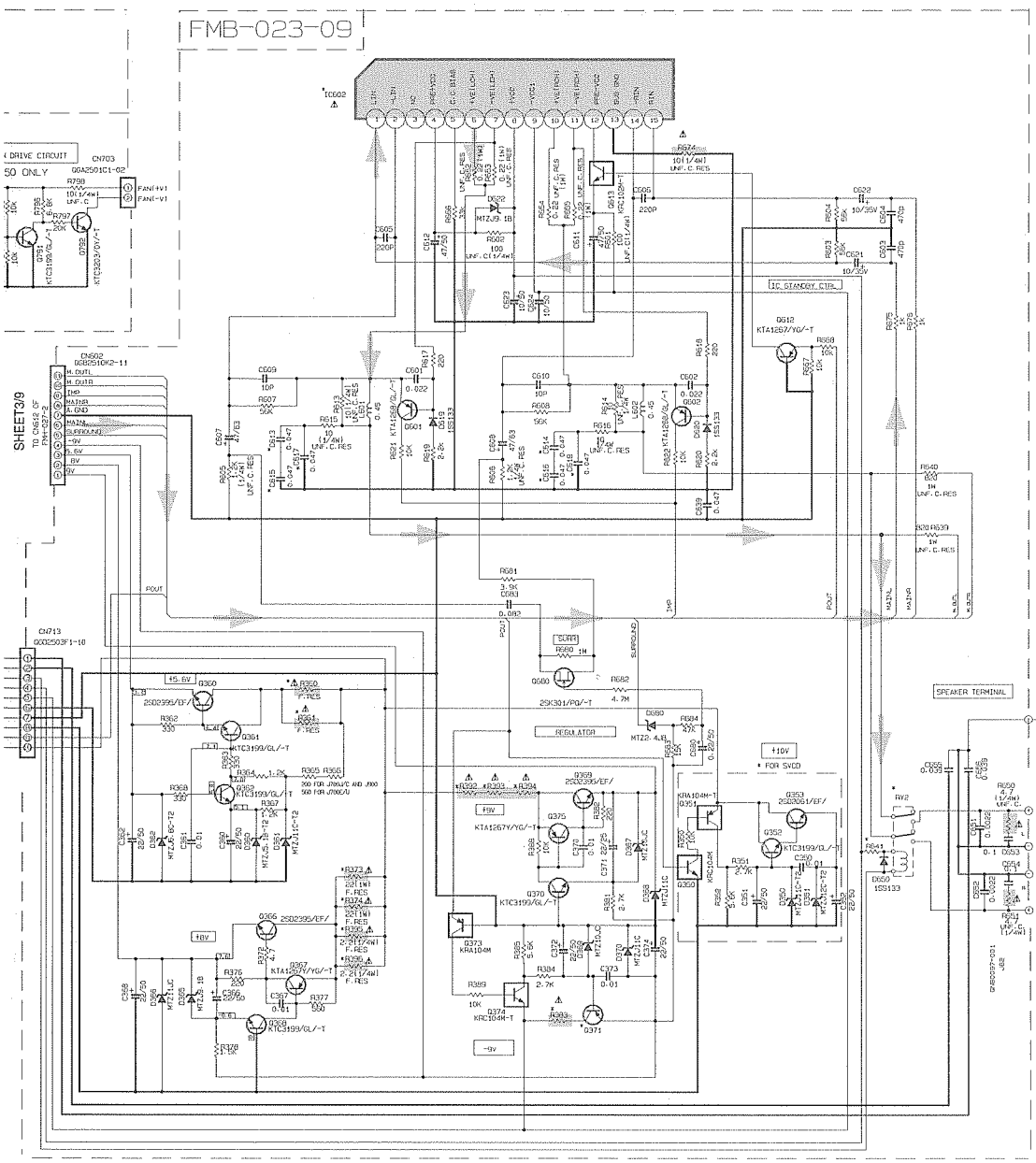
Power amplifier & ragulator section



*MARK

REF NAME / VERSION	CA-MXJ900	CA-MXJ950R	MX-J900	
	U	B-E-EN	J	C
L201	SHORT(B112)	SHORT(B112)	SHORT(B112)	SHORT(B112)
Q371	KTA1023/DY/-T	KTA1023/DY/-T	2SB1274/RS/S	2SB1274/RS/S
R409	NONE	NONE	NONE	NONE
R803	SHORT(B84)	SHORT(B84)	10(1/4W) F.RES	SHORT(B84)
R392-R393-R394	SHORT B81-82-83	SHORT B81-82-83	4.7(1/4W)F.RES	SHORT B81-82-83
C233	0.22	0.01	0.01	0.01
C613-C614-C615-C616 C713-C714-C715-C716	0.047	0.047	NONE	0.047
C617-C618 C717-C718	NONE	NONE	0.047	NONE
IC602	STK402-040	STK402-040	STK402-050	STK402-050
IC701	STK412-010	STK412-010	STK412-020	STK412-020
R767/D726	D726	D726	D726	D726
RY1-RY2	GSK0057-001	GSK0057-001	GSK0057-001	GSK0057-001
C204/C205	4700/63	4700/63	4700/63	4700/63
C214/C215	2200/35	2200/35	2200/50	2200/50
R395/R396	USED	USED	NONE	USED
R373/R374	NONE	NONE	USED	NONE
R768-R769	100K-10K	100K-10K	100K-10K	100K-10K
R950	2.2(1/4W) F.RES	2.2(1/4W) F.RES	15(1/4W) UNF.C	2.2(1/4W) F.RES
C736/C737	NONE	USED	NONE	NONE
R781	5.6K	5.6K	5.6K	5.6K
R961	4.7(1/4W) F.RES	4.7(1/4W) F.RES	15(1/4W) UNF.C	4.7(1/4W) F.RES
R641/R750	150(1/4W) UNF.C	150(1/4W) UNF.C	470(1/4W) UNF.C	470(1/4W) UNF.C
C723	100/10	100/10	100/16	100/16
C709/C710	10p	4.7p	10p	10p

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



ts.
ake

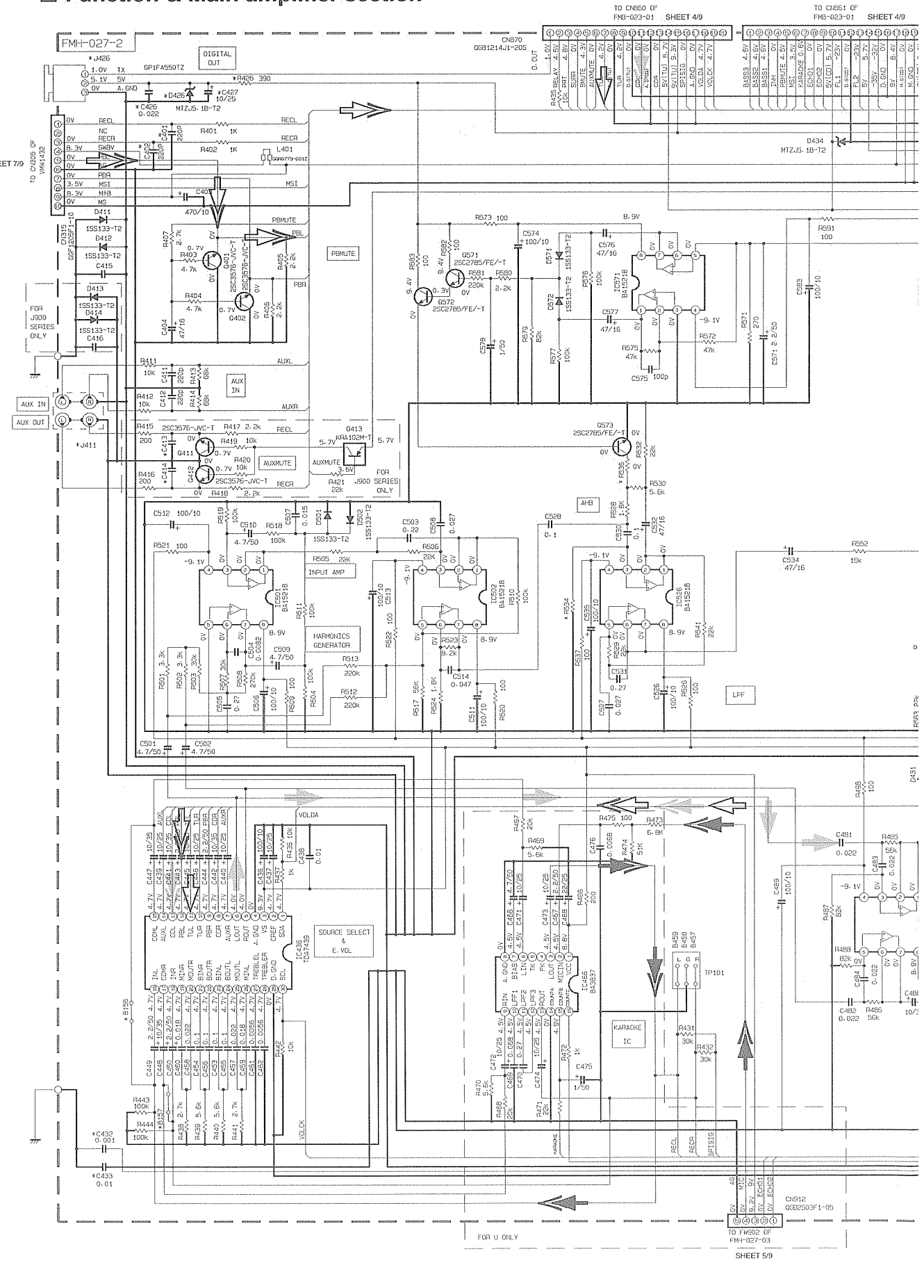
NOTES

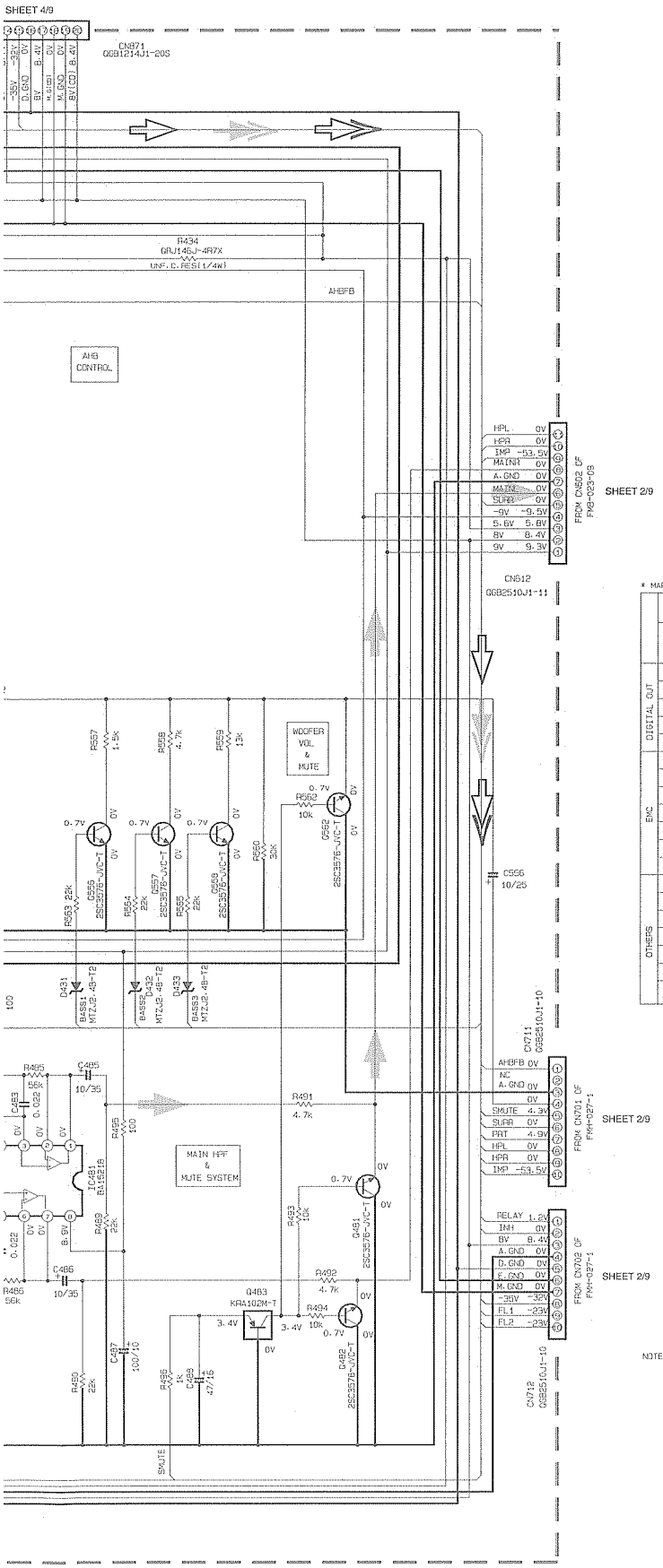
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION ---- AUX MODE: VOL MIN. BASS OFF
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(p=pF).
   ALL INDUCTANCE VALUES ARE IN mH(m=mH).
   ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (uF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS133

MAIN signal

D | E | F | G | H

■ Function & Main amplifier section





* MARK

	MODEL	CA-MXJ900	CA-MXJ950R	MX-J900
	VERSION	U	B.E.EN	C.J
DIGITAL OUT	C426	USED	USED	USED
	C427	USED	USED	USED
	D426	USED	USED	USED
	J426	USED	USED	USED
	R426	USED	USED	USED
EMC	C401	NONE	USED	NONE
	C402	NONE	USED	NONE
	C415	1000p	0.0022	100p
	C416	0.0022	0.0022	100p
	C432	NONE	USED	NONE
	C433	NONE	USED	NONE
	L401	SHORT	USED	SHORT
OTHERS	B156	USED	NONE	NONE
	B157	USED	NONE	NONE
	C413	220p	0.001	220p
	C414	220p	0.001	220p
	J411	GNND132-001		
	R534	220k		
	R535	12k		

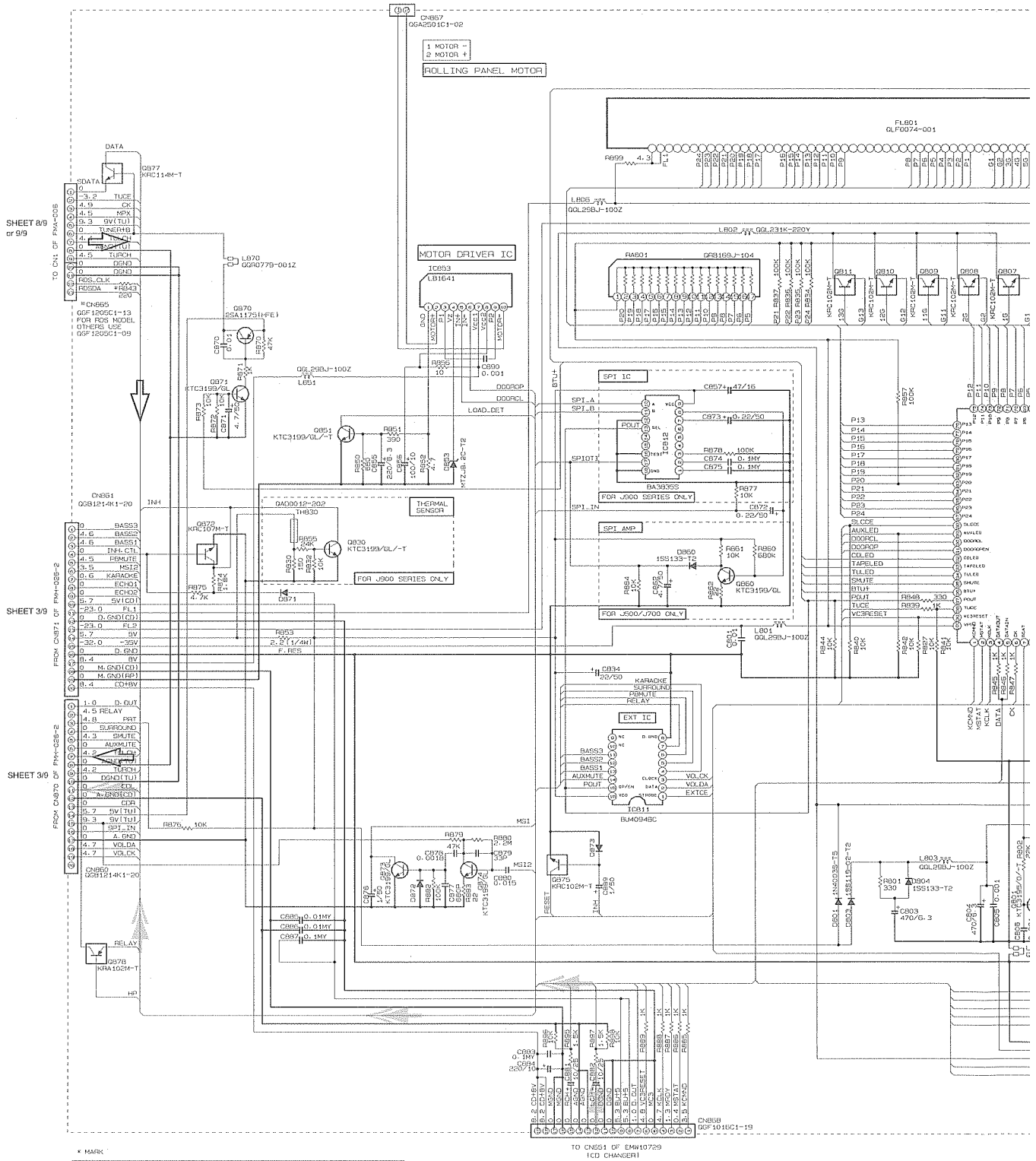
CD signal
TAPE P.B. signal
TUNER signal
MAIN signal
MIC signal

NOTES

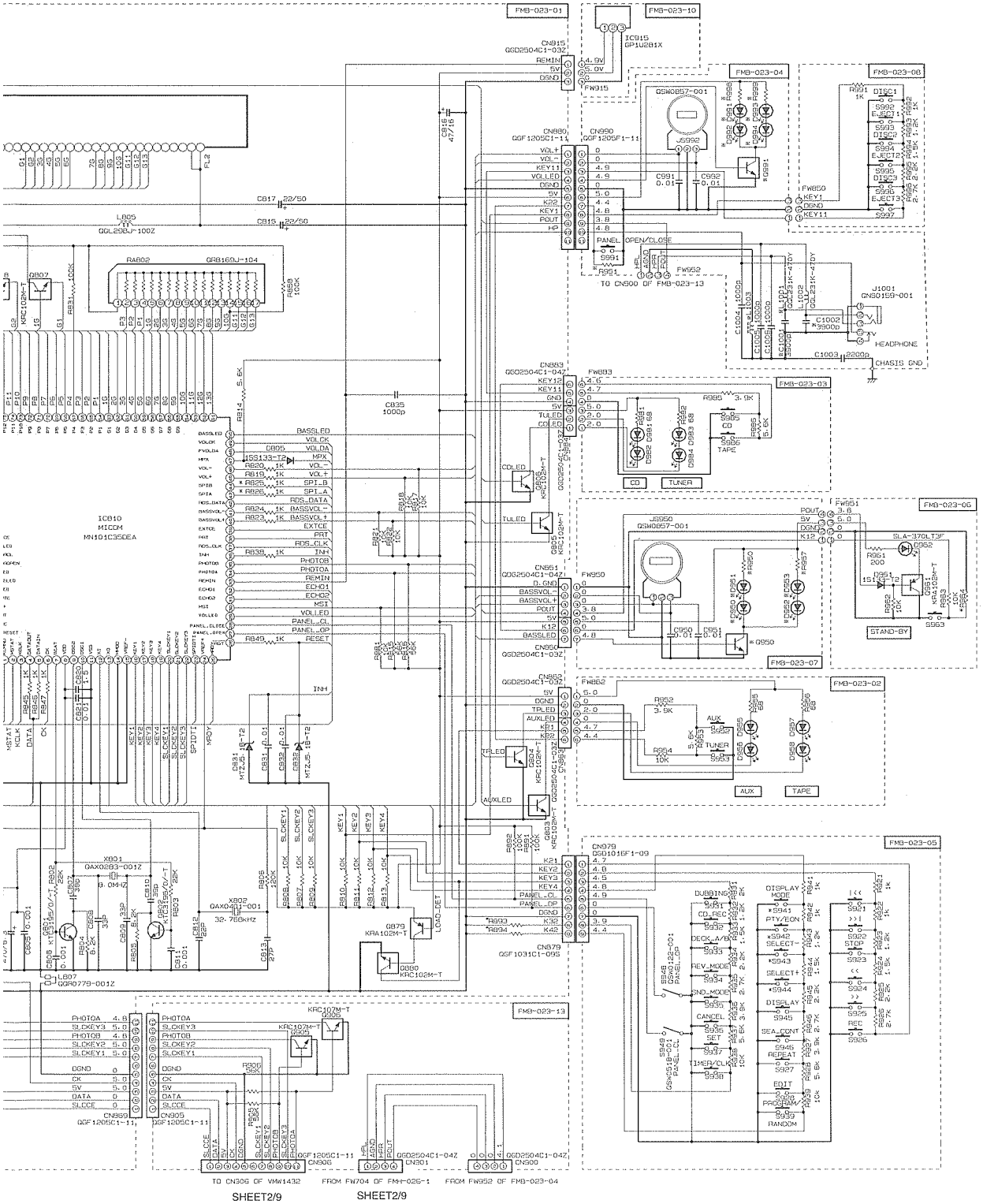
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION --- AUX MODE, VOL MIN. SUBWOOFER VOL 1.
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS133

SHEET 3/9

FL Display & system controller section



	CA-MXJ900 U	MX-J900 C, J	CA-MXJ950R B, E, EN
R894	18K	18K	18K
R951	75K	75K	330K
R893	75K	75K	75K
R894	330K	75K	330K
D950, D992 D951, D991	SLA-570JT3F	SLA-570JT3F	SLA-570JT3F
D952, D994 D953, D993	SLA-570JT3F	SLA-570JT3F	SLA-570JT3F
R950, R957, R998, R999	75	75	75
Q950, Q991	KRC102M-T	KRC102M-T	KRC102M-T
S941, S942, S943, S944	NONE	NONE	QSW0825-001Z
L1001, L1002	SHORT	SHORT	QQL231K-470Y
C1001, C1002	NONE	NONE	3900P
L1003	QQL231K-2R2Y	QQL231K-2R2Y	QQR0779-001Z
RB25, RB26	USE	USE	USE
R843	NONE	NONE	USE
X801	QAX0283-001Z	QAX0283-001Z	QAX0283-001Z



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 ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(=μF).
   ALL INDUCTANCE VALUES ARE IN μHenry(=).
   ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS133

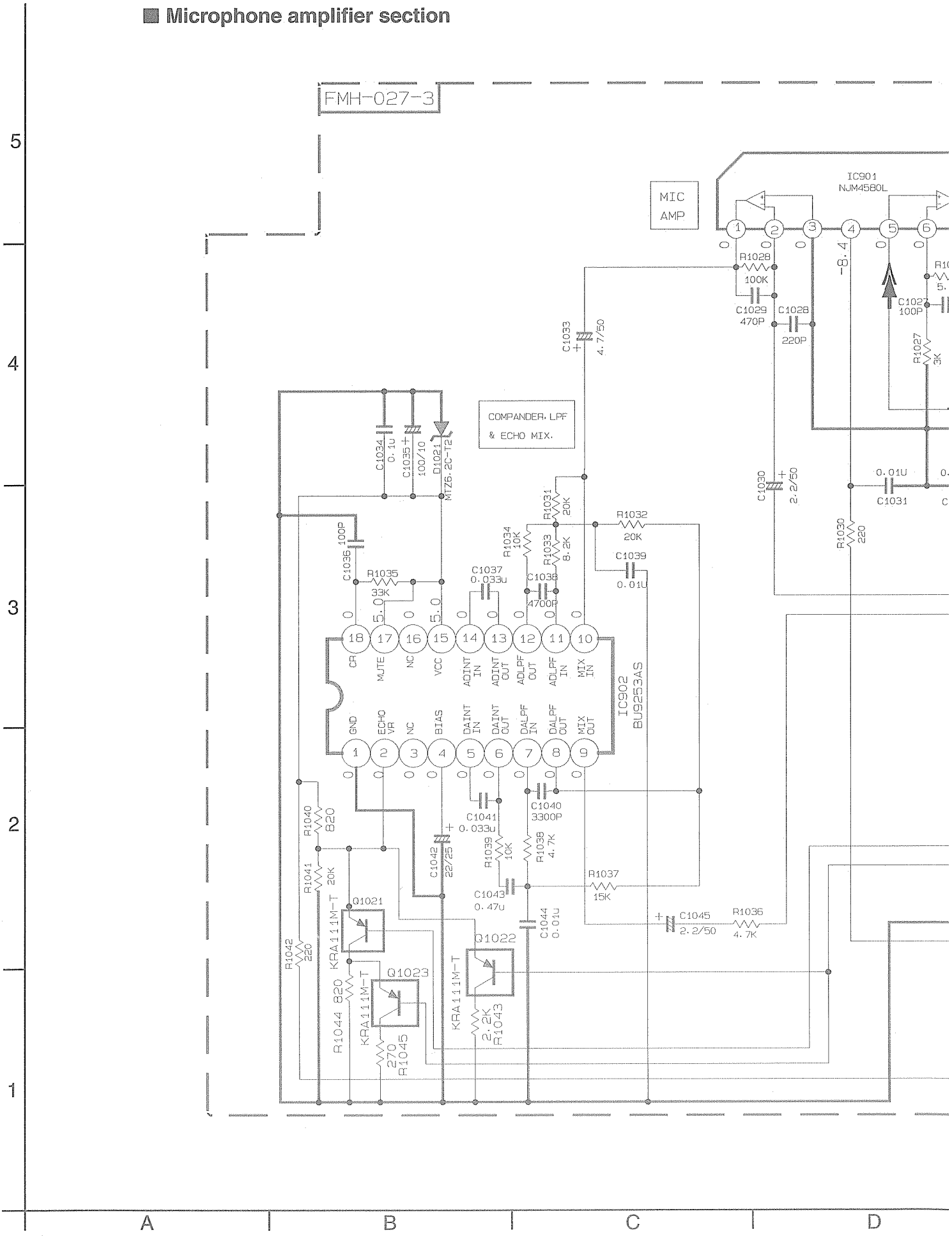
⇨ TUNER signal

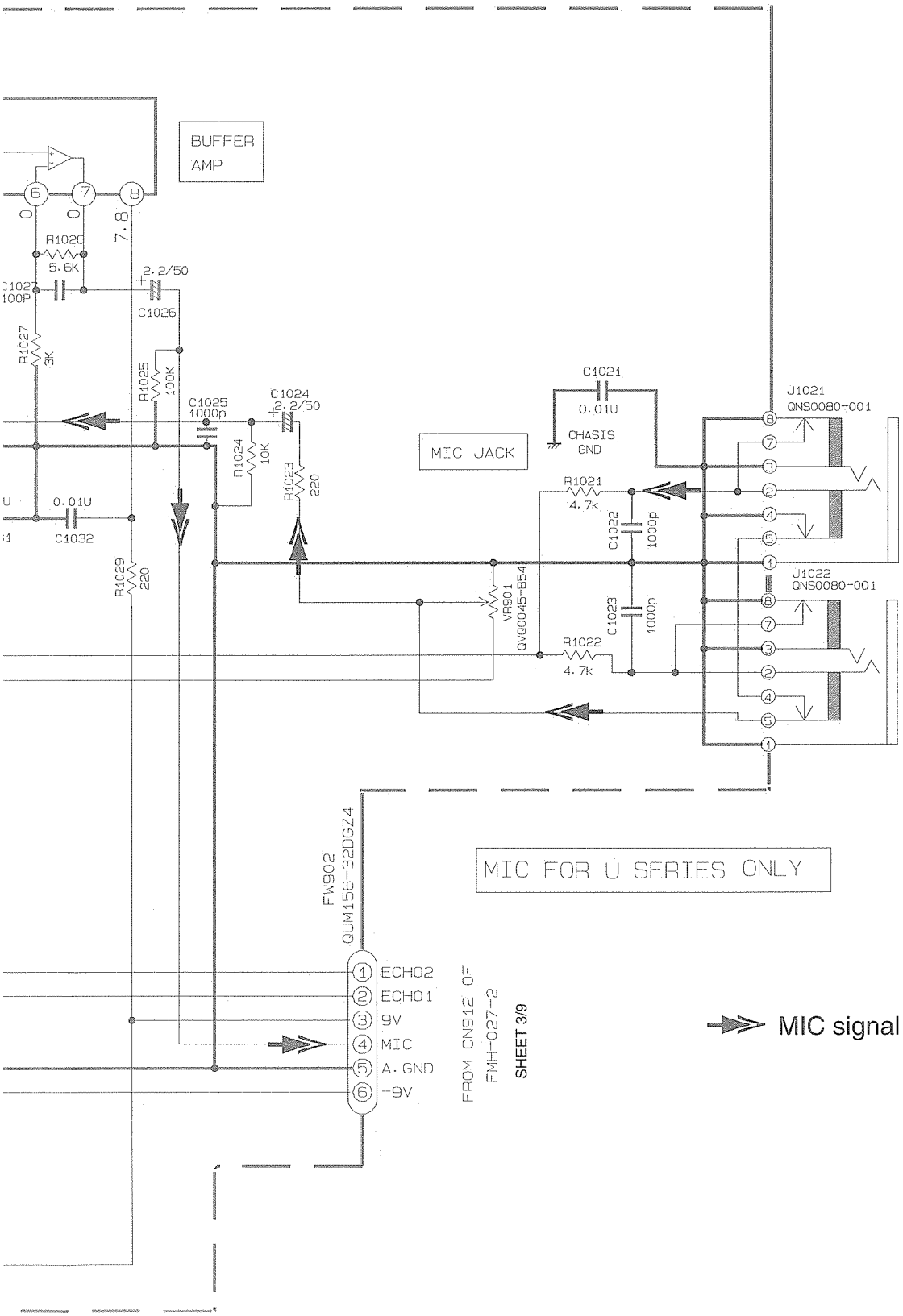
⇨ CD signal

SHEET 4/9

D | E | F | G | H

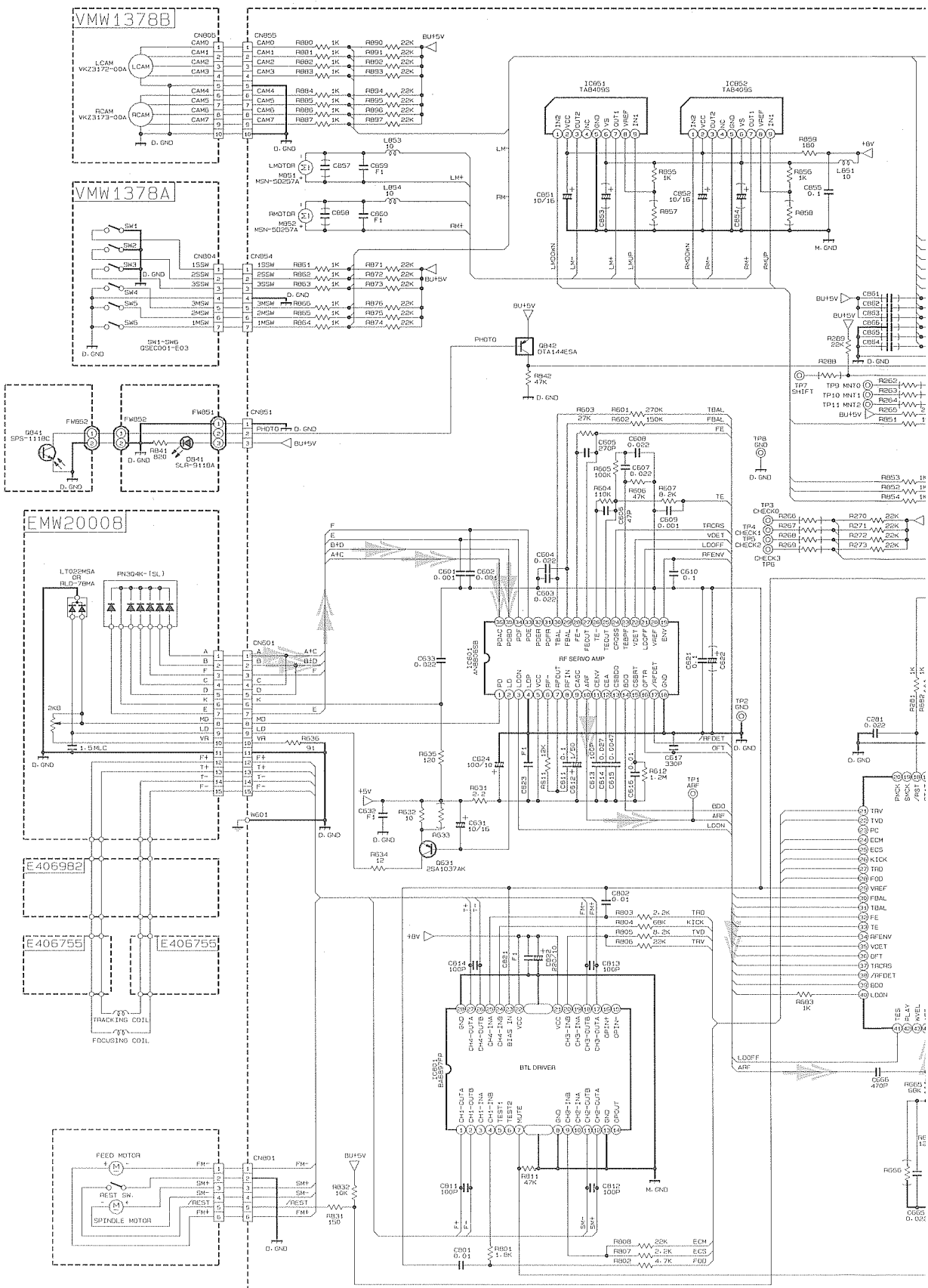
■ Microphone amplifier section

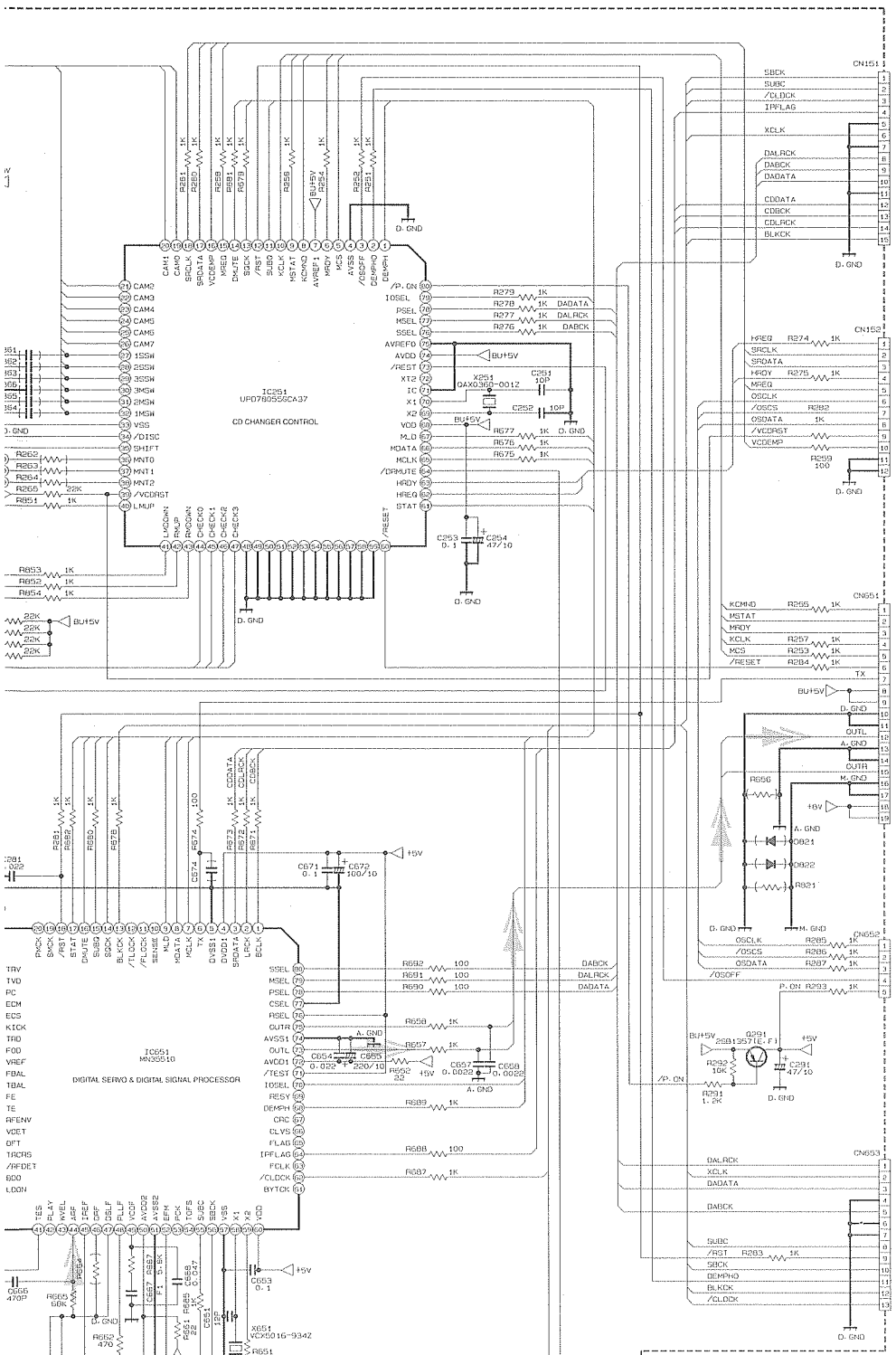



BUFFER
AMP
6
7
8
0
0
7.8
R1026
5.6K
C1027
100P
2.2/50
C1026
R1027
3K
R1025
100K
C1025
1000p
C1024
2.2/50
R1024
10K
R1023
220
0.01U
C1032
R1029
220
C1021
0.01U
CHASIS
GND
MIC JACK
R1021
4.7k
C1022
1000p
VR901
QV30045-B54
C1023
1000p
R1022
4.7k
J1021
QNS0080-001
J1022
QNS0080-001
MIC FOR U SERIES ONLY
FW902
QUM156-32DGZ4
1 ECHO2
2 ECHO1
3 9V
4 MIC
5 A. GND
6 -9V
FROM CN912 OF
FMH-027-2
SHEET 3/9
MIC signal

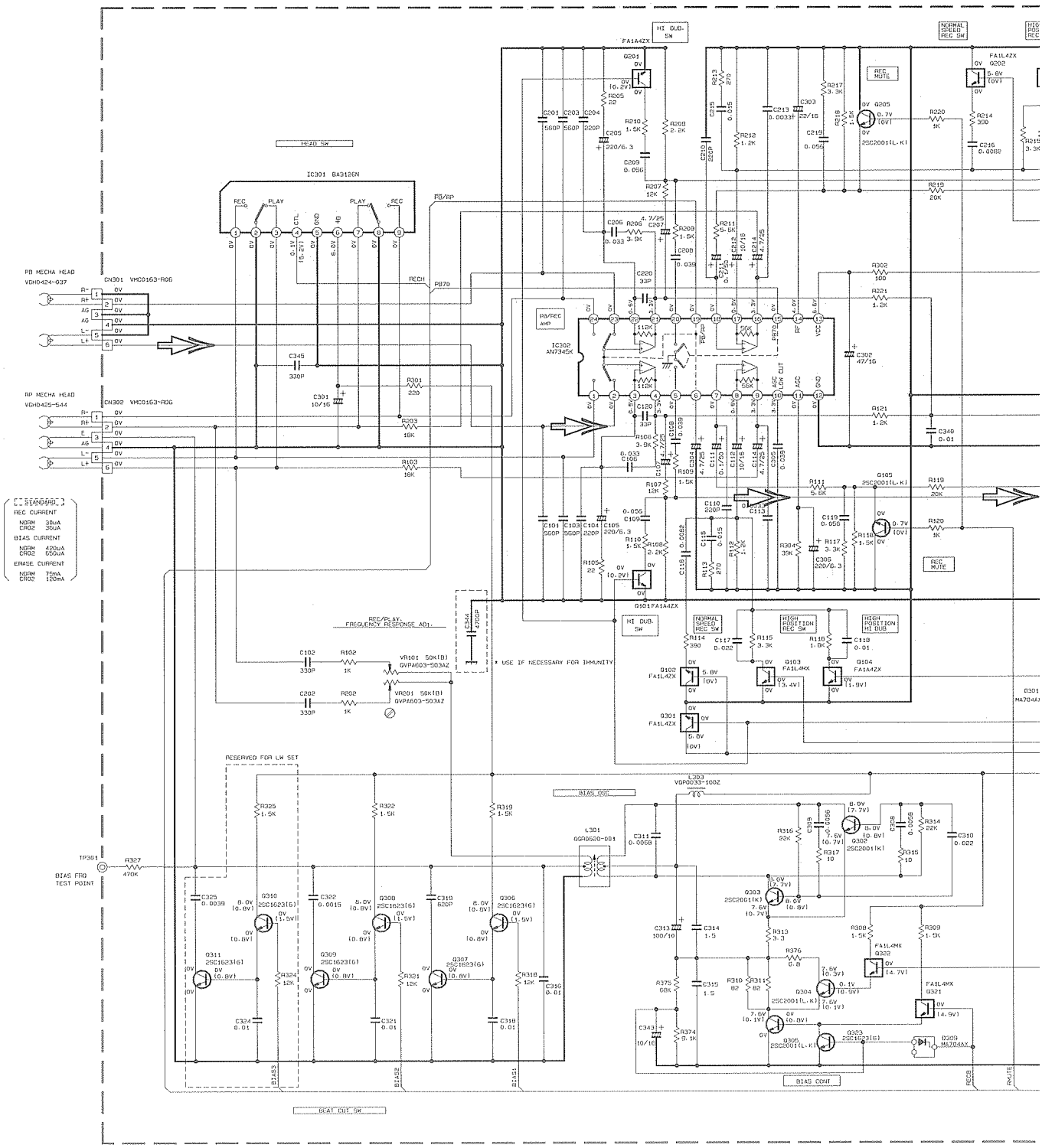
SHEET 5/9

CD Servo & CD Mechanism control section




IC251
UPD780558CA37
CD CHANGER CONTROL
IC651
MN35510
DIGITAL SERVO & DIGITAL SIGNAL PROCESSOR
CN151
CN152
CN651
CN652
CN653
FROM CNB6
OF FMB-023-01
SHEET 4/9
CD signal
CD CONTROL & SERVO CIRCUIT
SHEET 6/9
EMW10729

■ Head amplifier & Mechanism control section



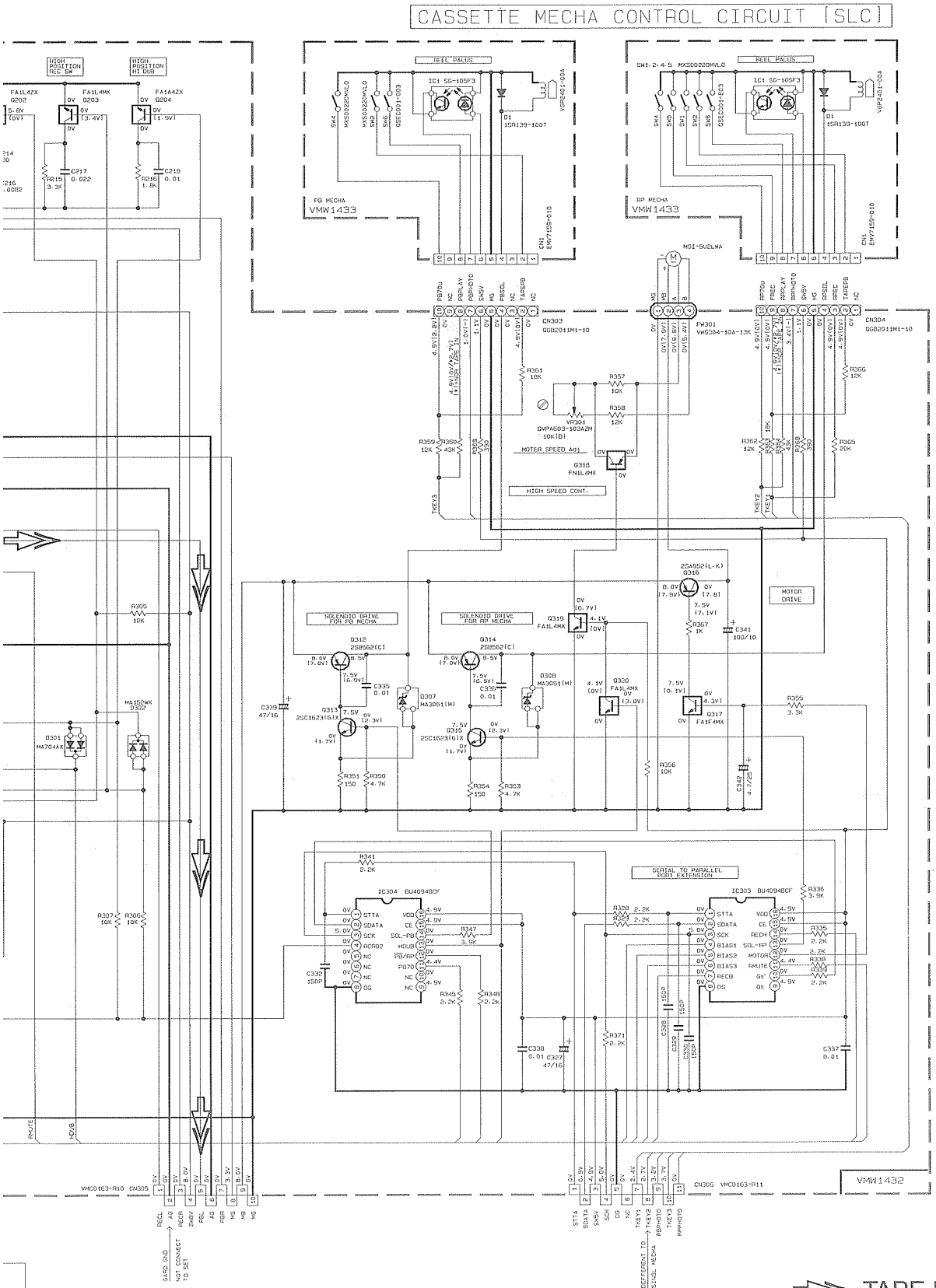
NOTES

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(P=pF).
   - ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   - ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   - PP = PLYPROPYLENE CAPACITOR

TABLE 1. DIGITAL TR LIST

PART-NO	CONSTRUCTION	REF-NO	PART-NO	CONSTRUCTION	REF-NO
FN1L4M	47K 47K	Q318	FA1F4M	22K 30K	Q317
FA1A4Z	10K	Q101/Q201 Q104/Q204	FA1L4M	47K 47K	Q103/Q203 Q319 Q320/Q321/Q322
FA1L4Z	47K	Q102/Q202 Q301			

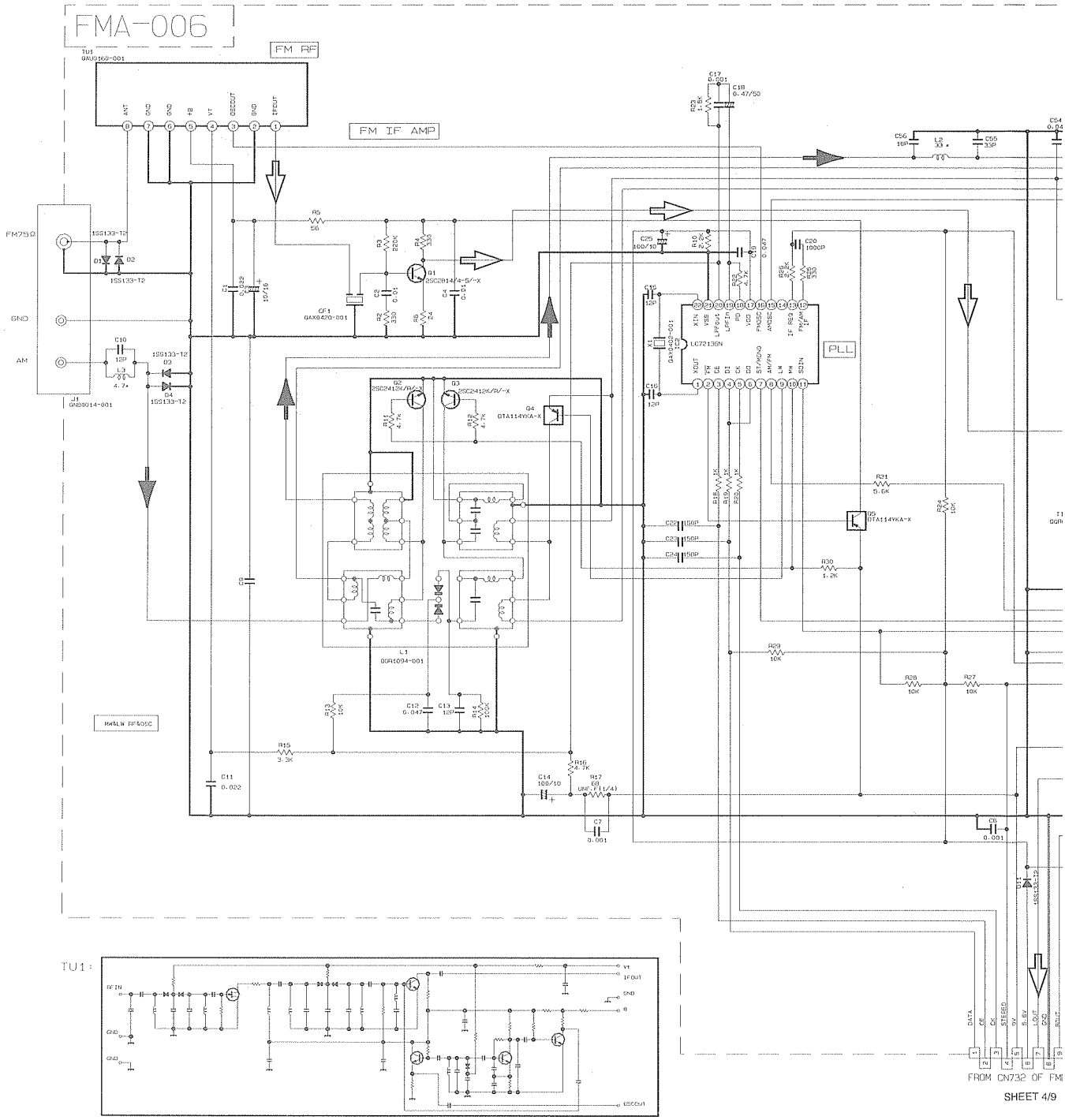
CASSETTE MECHA CONTROL CIRCUIT [SLC]



TAPE P.B. signal

SHEET 7/9

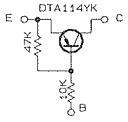
■ Tuner section (Only Ver B. E. EN)

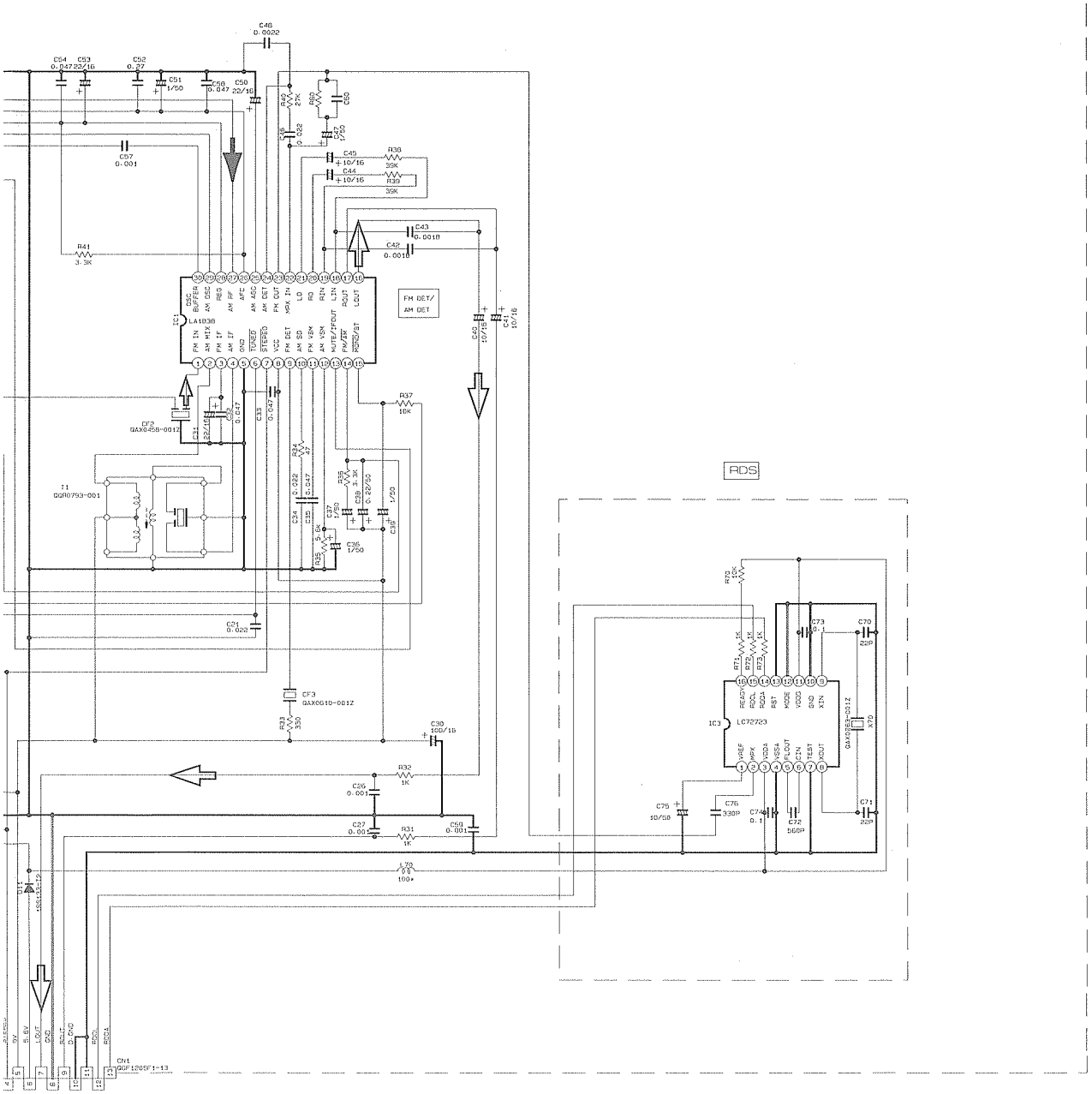


	CONDITION PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
IC1	FM NO SIGNAL	3.6	8.9	3.6	3.6	0	5.0	5.0	8.9	8.9	1.3	0.1	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.5	3.5	3.6	3.6	2.7
	FM 60dB STEREO	3.6	8.9	3.6	3.6	0	0	5.0	8.9	8.9	1.3	4.3	0	0.9	7.8	7.8	4.3	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	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								

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 μF(P=pF).
5. ALL E-CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE (μF)/RATED VOLTAGE (V).
6. SI DIODES (▷|) ARE ALL 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.
7. PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.
   Q1 2SC2814/4-5/-X Q2.Q3 2SC2412K/R/-X
   Q4.Q5 DTA114YKA-X
8. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.





N732 OF FM8-012-1

SHEET 4/9

Tr NO.	Q1			Q5					
PIN NO.	E	C	B	E	C	B			
FM 87.5MHz 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

30	
2.7	
2.7	
2.1	

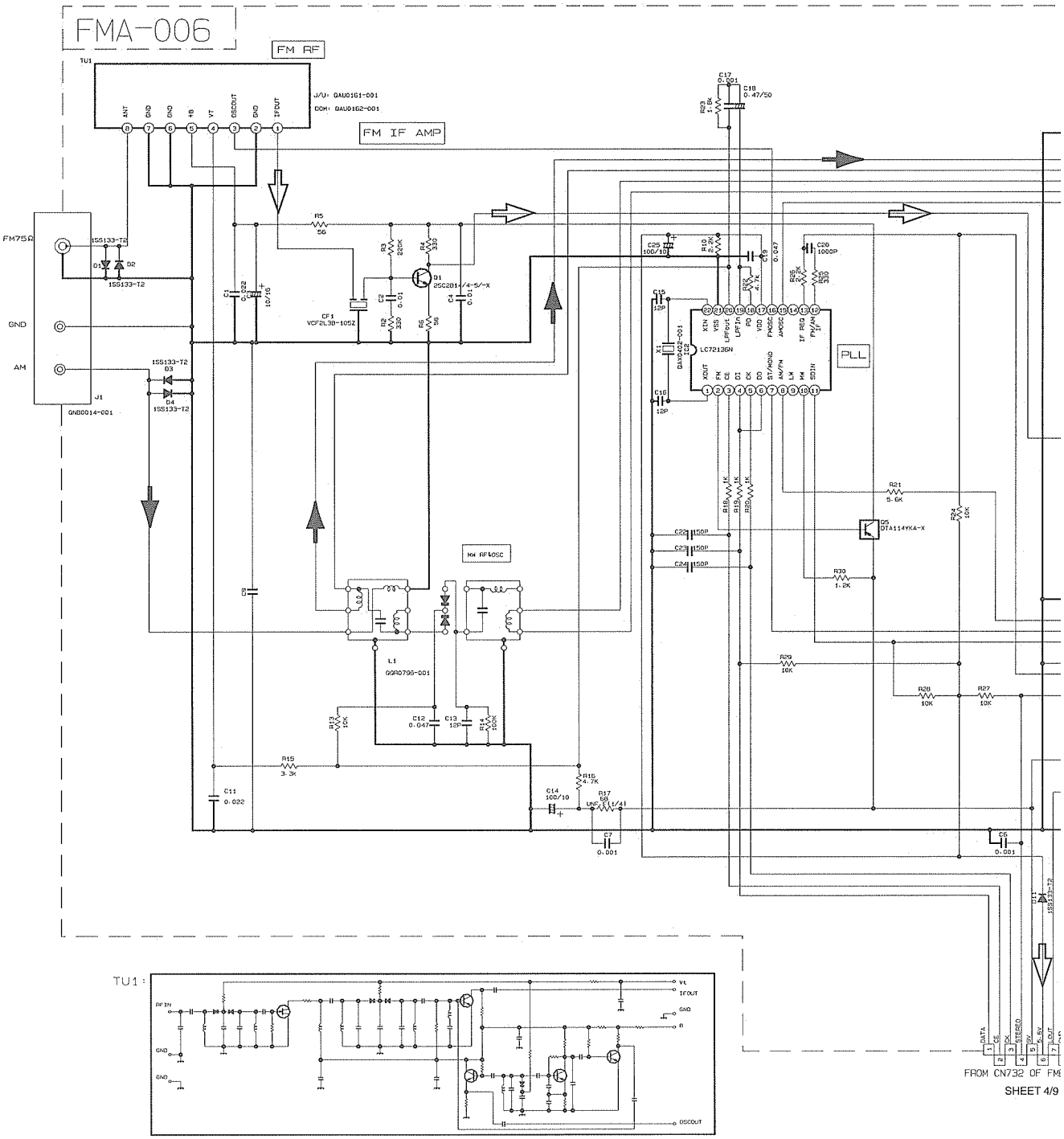
⇨ FM/TUNER signal

➡ AM signal

SHEET 8/9

D E F G H

■ Tuner section (Only Ver J. C. U)

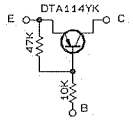


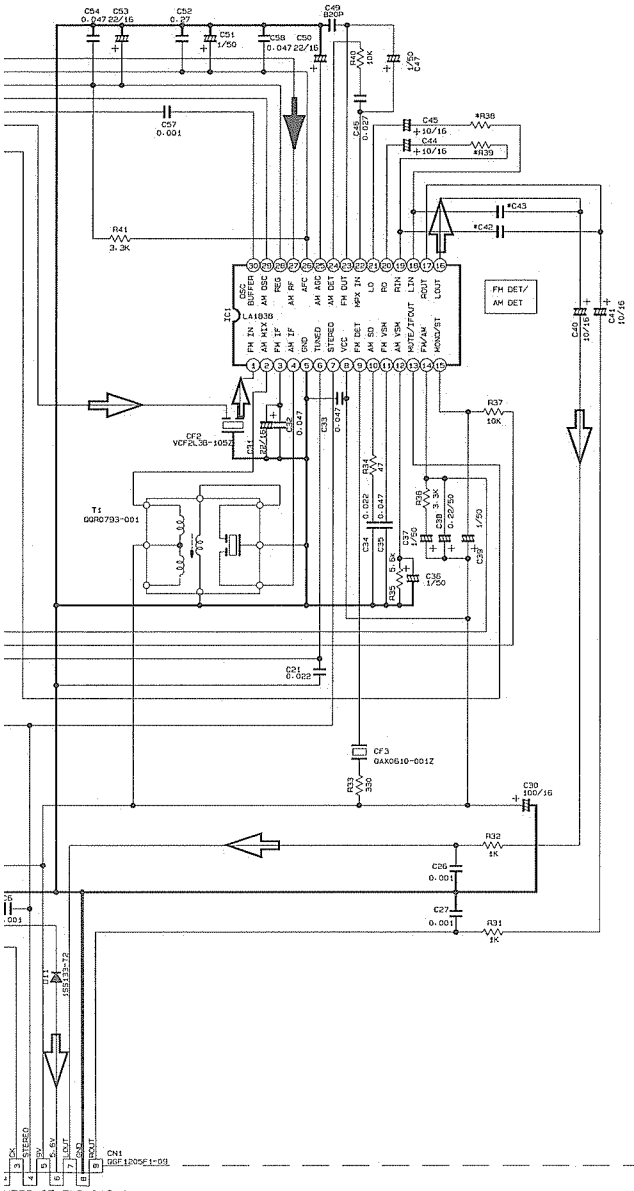
TU1 :

	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
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
	FM 60dB 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
	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
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							

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 μF(P=pF).
5. ALL E.CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE (μF)/RATED VOLTAGE (V).
6. SI DIODES (▶|) ARE ALL 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.
7. PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.
   Q1 2SC2814/4-5/-X Q2,Q3 2SC2412K/R/-X
   Q4,Q5 DTA114YKA-X
8. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.





	VERSION	
	J/C	U/DDM
R38	523	633
R39	623	623
C42	0.0022	0.0015
C43	0.0022	0.0015

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SHEET 4/9

	28	29	30
5	3.6	3.6	2.7
5	3.6	3.6	2.7
5	3.6	3.6	2.1

Tr NO.	Q1			Q5					
PIN NO.	E	C	B	E	C	B			
FM 87.5MHz 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

SHEET 9/9