

# JVC

## SERVICE MANUAL

### CD PORTABLE SYSTEM

## RC – QW33 C/J/U



Area Suffix	
C.....	Canada
J.....	U.S.A.
U.....	Other areas

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## 8. Main Adjustments

### ■ Test Instruments required for adjustment

1. Low frequency oscillator  
( Frequency range: 50Hz to 20kHz )  
( Output : 0 dBs across 600  $\Omega$  terminating resistor )
2. Attenuator( Impedance : 600  $\Omega$  )
3. Test Tapes  
VTT712 ..... For tape speed,wow and flutter measurement  
VTT724 .....For playback output level measurement  
VTT736 ..... For playback frequency response check response check  
VTT703 ..... For head azimuth adjustment
4. Blank tapes  
Normal : UR  
Chrome : AC224
5. Electronic voltmeter,
6. Distortion meter
7. Frequency counter
8. Wow and flutter meter
9. Torque gauge : CTG – K  
( Cassette type ) ..... For mechanism adjustment

### ■ Measuring conditions (Amplifier section)

Supply voltage .....AC120V (60Hz):C/J version  
AC110~127/220~240V(50/60Hz):U Version

Reference output level :Speaker  
0 dBs (0.775V) / 3  $\Omega$   
: Headphone  
– 10 dBs (0.245V)/ 32  $\Omega$

Reference input level : – 21dBs supplied to test point

Standard test frequency..... 1kHz

Output measuring point ..... Speaker terminal  
: Dummy load 3  $\Omega$  ,Test point CN993  
or headphone(32  $\Omega$  )

### ● Standard position of switches

Function switch ..... TAPE  
Mode switch ..... STEREO

### ● Standard position of controls

Tone..... Flat position  
Super Bass ..... ON  
Main volume adjust ..... 0 dBs output position

### ● Test remarks

1. Negative side of the input and output terminals of the testing set, shall be isolated from each other. The negative side should not be commonly connect ed when a 2channel electronic voltmeter is connected.
2. A dummy load shall be connected to the output terminal and the lead wires of dummy load shall be as thick as possible.

### ■ Measuring condition (Tuner section)

Power supply voltage to tuner..... DC 5.7V  
Reference output ..... Speaker : 50mW(0.39 V / 3  $\Omega$  )  
Headphon : 0.06V/ 32  $\Omega$   
AM modulation ..... 400Hz, 30%  
FM modulation .....400Hz deviation 22.5kHz

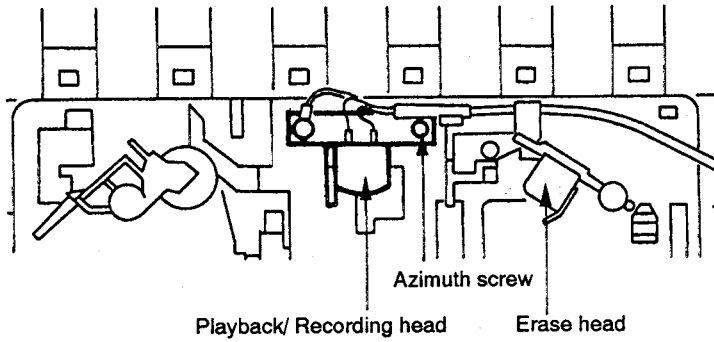
### ● Standard position of switches and controllers

Function.....RADIO  
Mode ..... STEREO

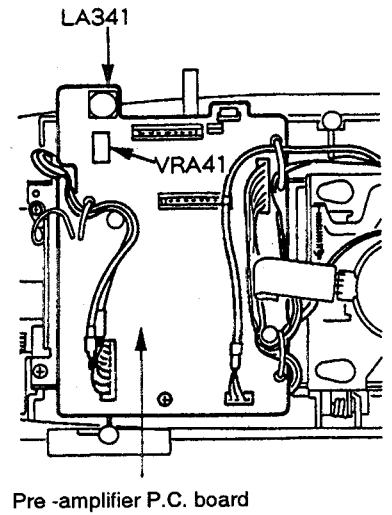
### ● Remarks for alignment

1. Connect 30 pF capacitor and 33 k  $\Omega$  resistor to the output terminal of the IF sweeper in series while 0.082  $\mu$  F capacitor and 100k  $\Omega$  resistor to the input terminal in series.
- 2.Set the output level of the IF sweeper as low as adjustable.
- 3.IF alignment is not necessary for both AM and FM MPX alignment is not necessary either. All IFTs and MPX coil are non – adjusting type.

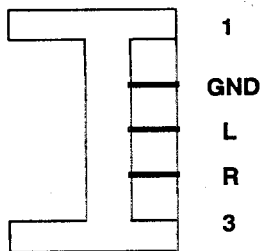
● Cassette mechanism (A)



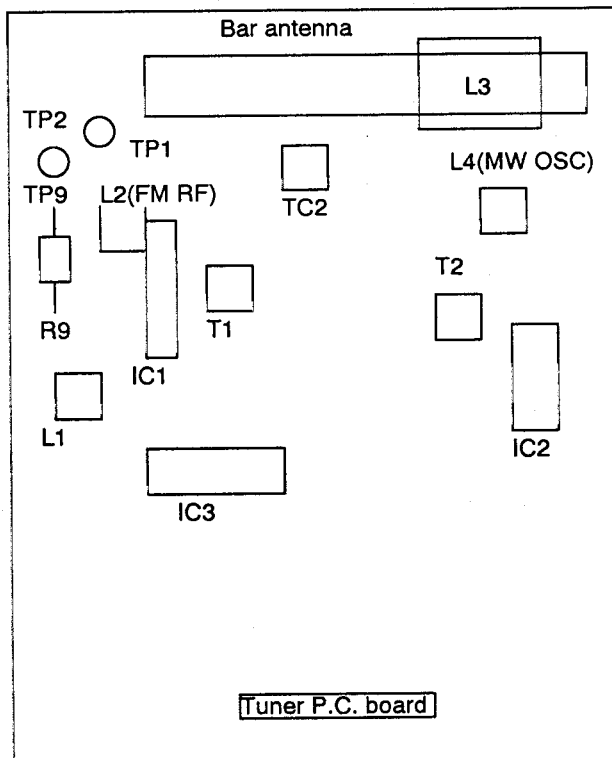
● Pre-Amplifier P.C. board



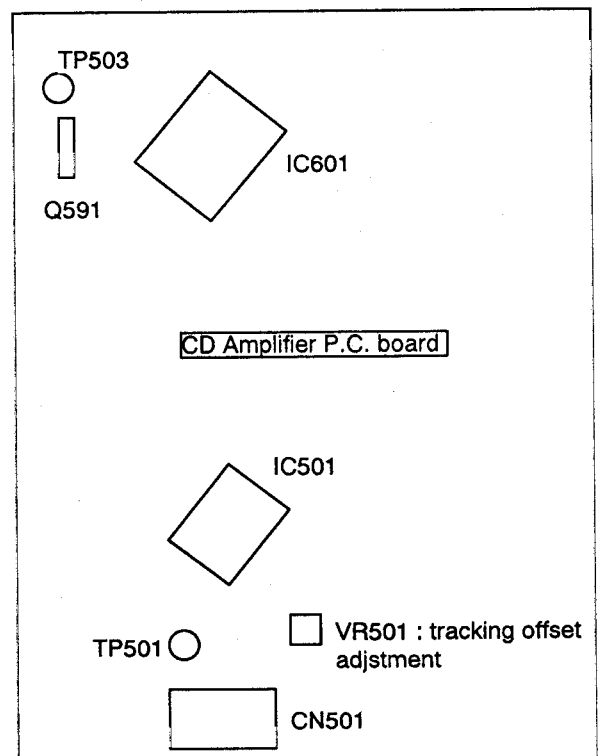
◎ Test point : CN301( Power amplifier P.C. board Top view )



● Tuner P.C. board



● CD Amplifier P.C. board



### ■ Mechanism & Amplifier Sections

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Head azimuth adjustment	Test tape :VTT703 (10kHz) Measuring point :Headphone ( Dummy load 32 $\Omega$ ) A,B Mechanism	Adjust the azimuth screw so that the output level is within 2 dB from the peak output level and the phase difference becomes minimum. Apply "NEJI ROCK" around the azimuth screw.	Output :maximum Phase difference :minimum	Head azimuth screw
Tape speed adjustment	Test tape : VTT712(3kHz) Measuring point : Headphone ( Dummy load 32 $\Omega$ )	<ul style="list-style-type: none"> <li>• NORMAL SPEED Play back test tape VTT712 (3kHz) near the tape end . Adjust the VRA61 for normal tape end.</li> <li>• HIGHT SPEED Confirm the tape speed after the normal tape speed adjustment.</li> </ul>	Normal speed :3000 $\pm$ 10Hz  High speed 5400 $\pm$ 400Hz	VRA61
Wow and flutter check	Test tape :VTT712(3kHz) Measuring point :Headphone (Dummy load 32 $\Omega$ )	Play test tape VTT712(3kHz) at tape start, middle and end positions. Wow and flutter should be within the following allowance at the three positions.	Playback less than 0.38% (JIS UNWTD)	—
Playback output level check	Test tape :VTT724(1kHz) Measuring point : Headphone ( Dummy load 32 $\Omega$ )	<ul style="list-style-type: none"> <li>① Playback the test tape VTT712.</li> <li>② Output at headphone : - 30dBs <math>\pm</math> 3dB</li> </ul>	- 30dBs $\pm$ 3dB	
Playback Frequency response check	Test tape :VTT – 736 Measuring point : Headphone ( Dummy load 32 $\Omega$ )	Shift tape select to Normal and adjust volume at level 13 position. Play test tape VTT736 then compare the level between 1 kHz and 63Hz , 1 kHz and 10kHz.  The defference level should be within 7dB $\pm$ 4 dB and 1dB $\pm$ 4dB respectively.	63 Hz/ 1 kHz level : within 7 $\pm$ 4dB 1kHz / 10kHz : within 7 $\pm$ 4dB	—

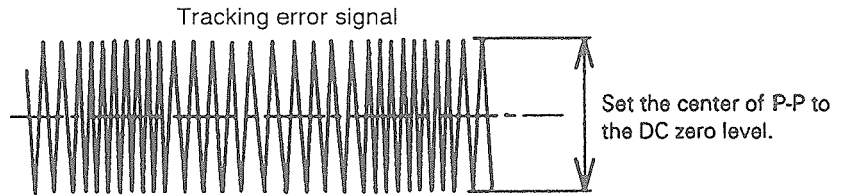
Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Bias frequency adjustment	•Mode: TUNER Test tape : AC224	Switch tape select to Normal position. In case that the bias frequency is out of specification, LA341 should be readjusted to standard and set to Tuner Rec. position for alignment. ① Adjust bias frequency at FM mode. ② Confirm bias frequency at AM mode.	Bias frequency :FM / Bias frequency ; 101.0kHz $\pm$ 0.15kHz ; AM531kHz ; 97.2kHz $\pm$ 0.5kHz	LA341
Recording /playback frequency response check and adjustment	Test tape : AC224 Standard frequency : 1kHz (REF. – 20dB) Measuring input : CN301 Measuring output : Headphone	Select function to tape mode . Reference level of – 20 dB, (1 kHz and 10kHz) perform the REC/PB function. Play back the recorded signals, Adjust VRA41 so that the level of the 10 kHz signal is 0 dB $\pm$ 1 dB to the level of the 1 kHz signal.	10 kHz : 0 $\pm$ 1 dB	VRA41
Recording /playback sensitivity check	Test tape : AC224 Measuring Input : CN301 A Mechanism	Supply 1 kHz signal to the Test point CN301 and record it. Play it back while checking that the level is within 1 $\pm$ 3 dB to the monitor level.	Reference level :Within 1 $\pm$ 3 dB	–
Recording / playback distortion check	Test tape : AC224 Measuring Input : CN301 Test signal :1kHz, – 21dBs	Supply 1 kHz, – 21dBs signal to the Test point CN301 and record it. Play it back while checking that distortion is less than 6 %.	Less than 6 %	–

### ■ Tuner Sections

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
AM Tracking adjustment	<ul style="list-style-type: none"> <li>• Band: AM</li> <li>• Signal input : Standard loop antenna</li> </ul>	<p>Confirme that the terminal voltage of the TP9 is <math>5.4 \pm 0.03V</math>. If the voltage exceeds the limit, adjust the L4 for the proper voltage.</p> <p><b>RC – Qw33C/J</b></p> <p>① Adjust the L3 for the maximum output while receiving 600kHz signal.</p> <p>② Adjust the TC2 for the maximum output while receiving 1500kHz signal.</p> <p>③ Repeat the above steps for no further improvement.</p> <p><b>RC – QW33U</b></p> <p>① Adjust the L3 for the maximum output while receiving 603kHz signal.</p> <p>② Adjust the TC2 for the maximum output while receiving 1404kHz signal.</p> <p>③ Repeat the above steps for no further improvement.</p>	Output level : Maxmum	<p>L3</p> <p>TC2</p> <p>L3, TC2</p> <p>L3</p> <p>TC2</p> <p>L3, TC2</p>
FM Tracking adjustment	<ul style="list-style-type: none"> <li>• Band : FM</li> <li>• Signal input : TP1( Positive) : TP2(Negative)</li> </ul>	Adjust the L2 for the maximum output while receiving 88.0MHz signal.	Output level : Maxmum	L2

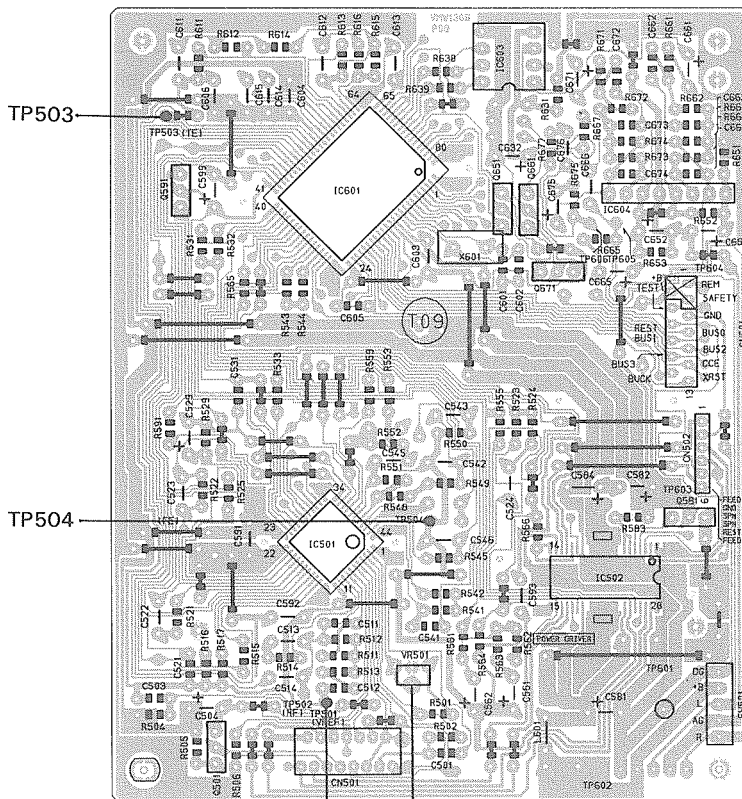
■ CD player Section

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Tracking offset adjustment	Test disc :CTS1000 Oscilloscope	① Connect an oscilloscope across the test points TP503 (hot side) . ② Play the test disc CTS1000. ③ Shortcircuit the TP504 to the TP501 while playing , then the tracking error signal will be emitted for about 3 seconds. ④ Adjust the VR501 so that the waveform of the tracking error signal on the oscilloscope becomes symmetrical to the DC zero level. ⑤ Repeat the steps 2, 3, and 4 for the best result since the tracking error signal appears on the screen just for 3 seconds.	Set the center of P – P to the DC zero level.	VR501



Note : The oscilloscope shall be connected by DC coupling.

■ Arrangement of adjusting positions: CD Amplifier P.C. board



TP501 VR501: Tracking offset adj.

# 9. Block Diagram

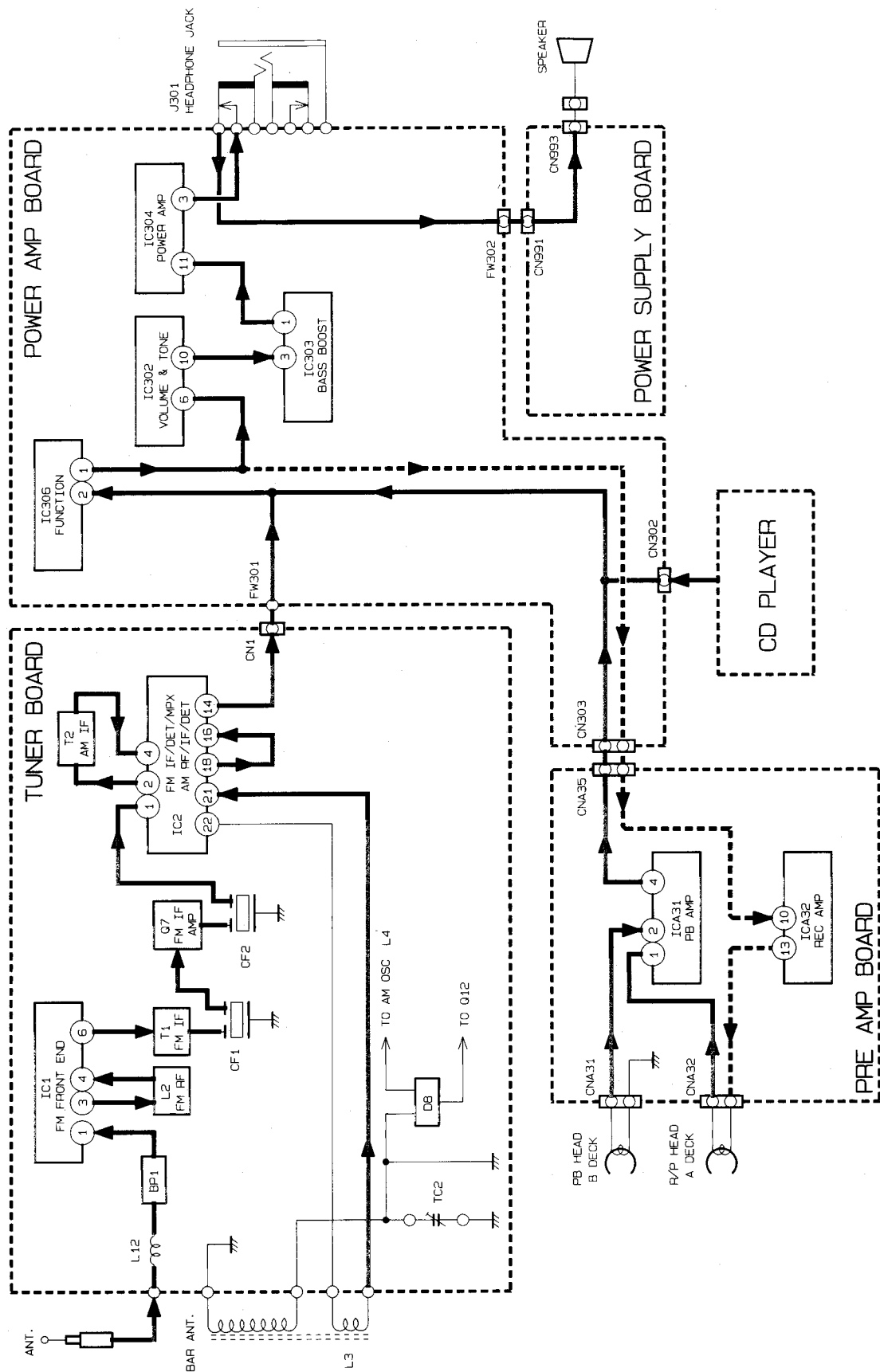


Fig. 9-1



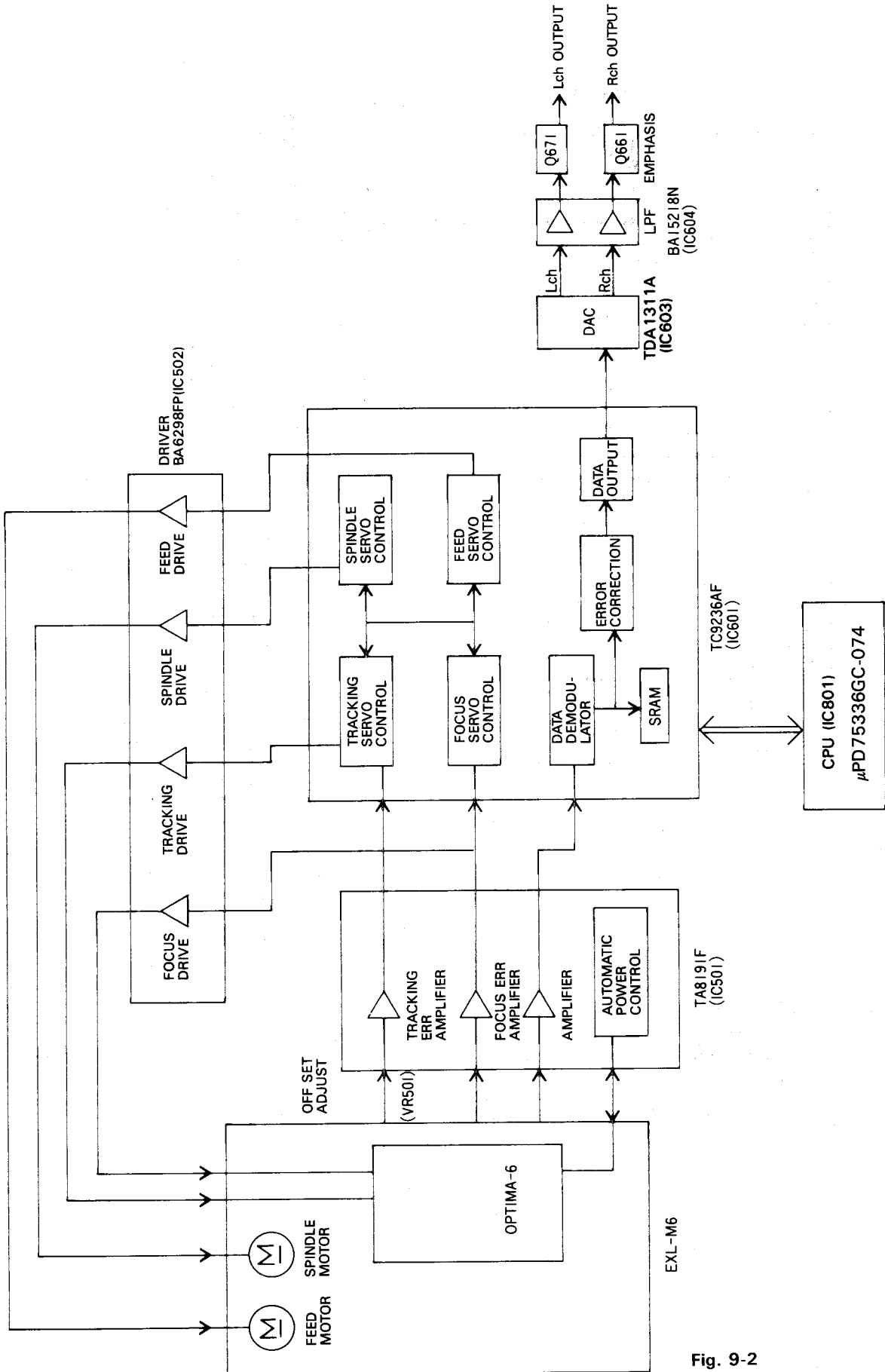
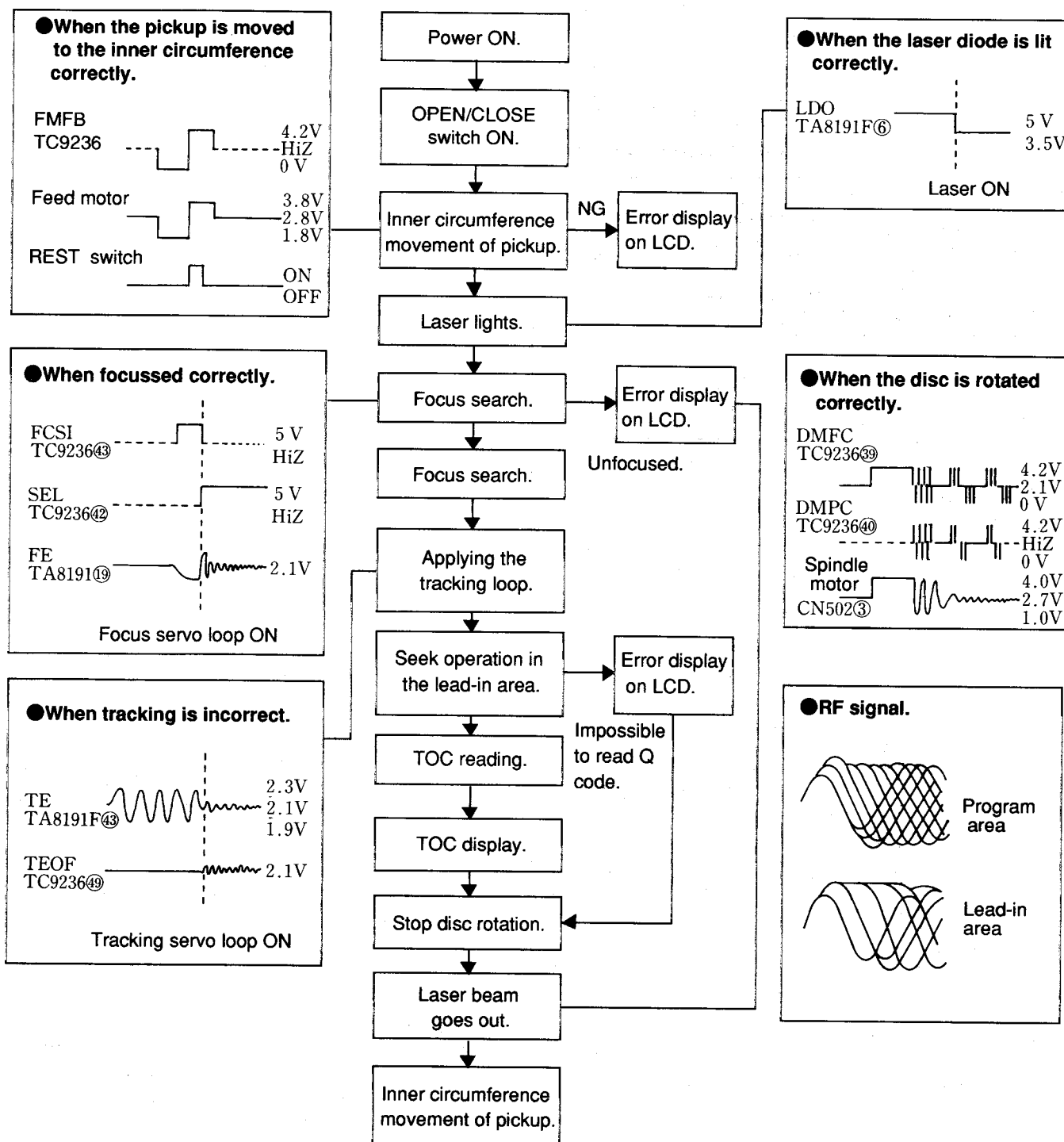


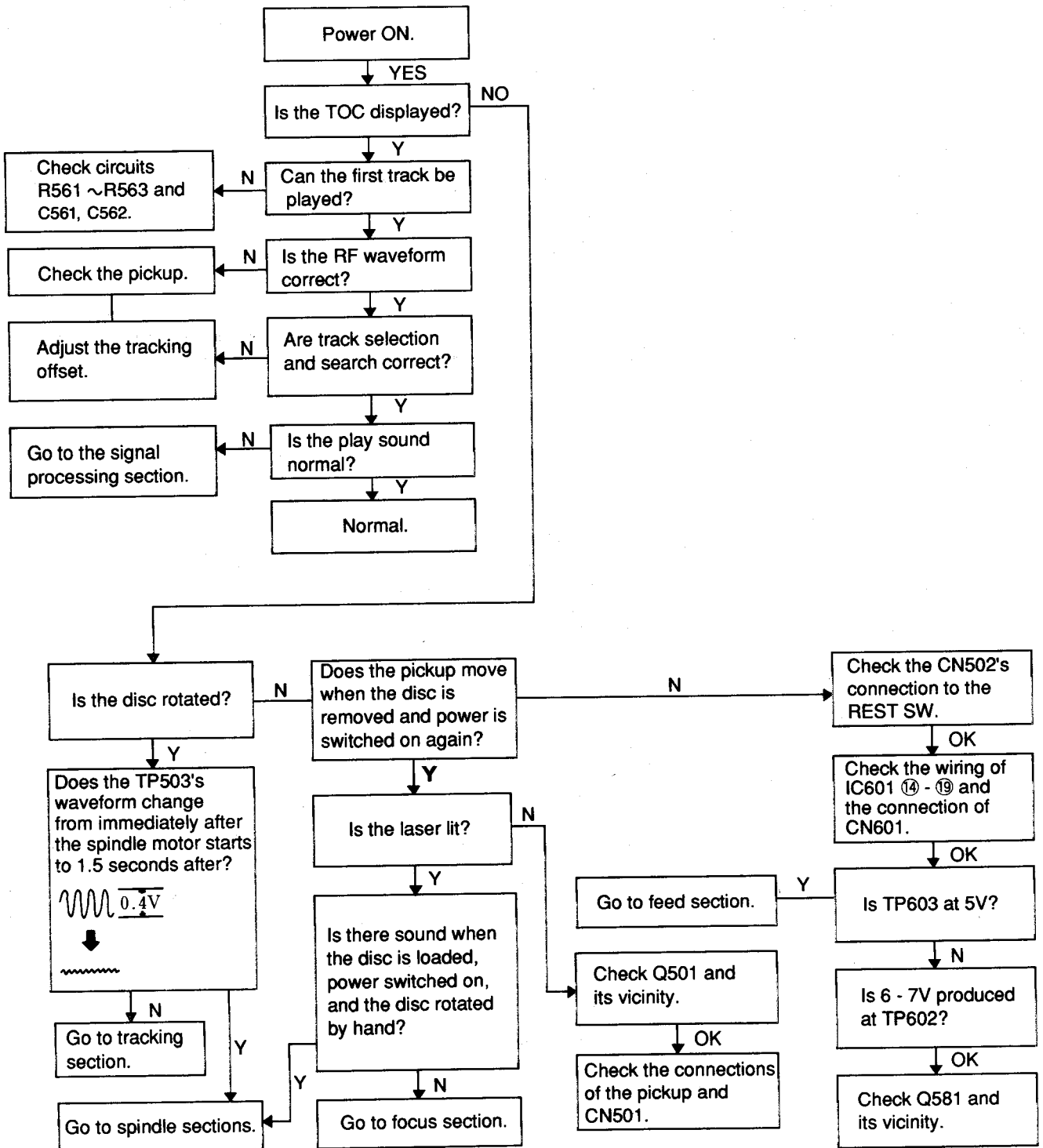
Fig. 9-2

# 10. Troubleshooting

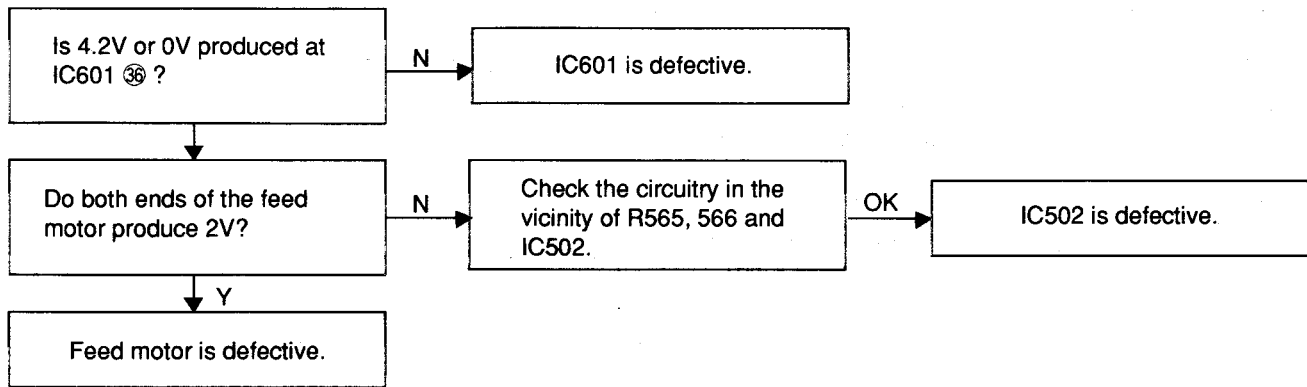
## General descriptions of TOC (Table of Contents) readings



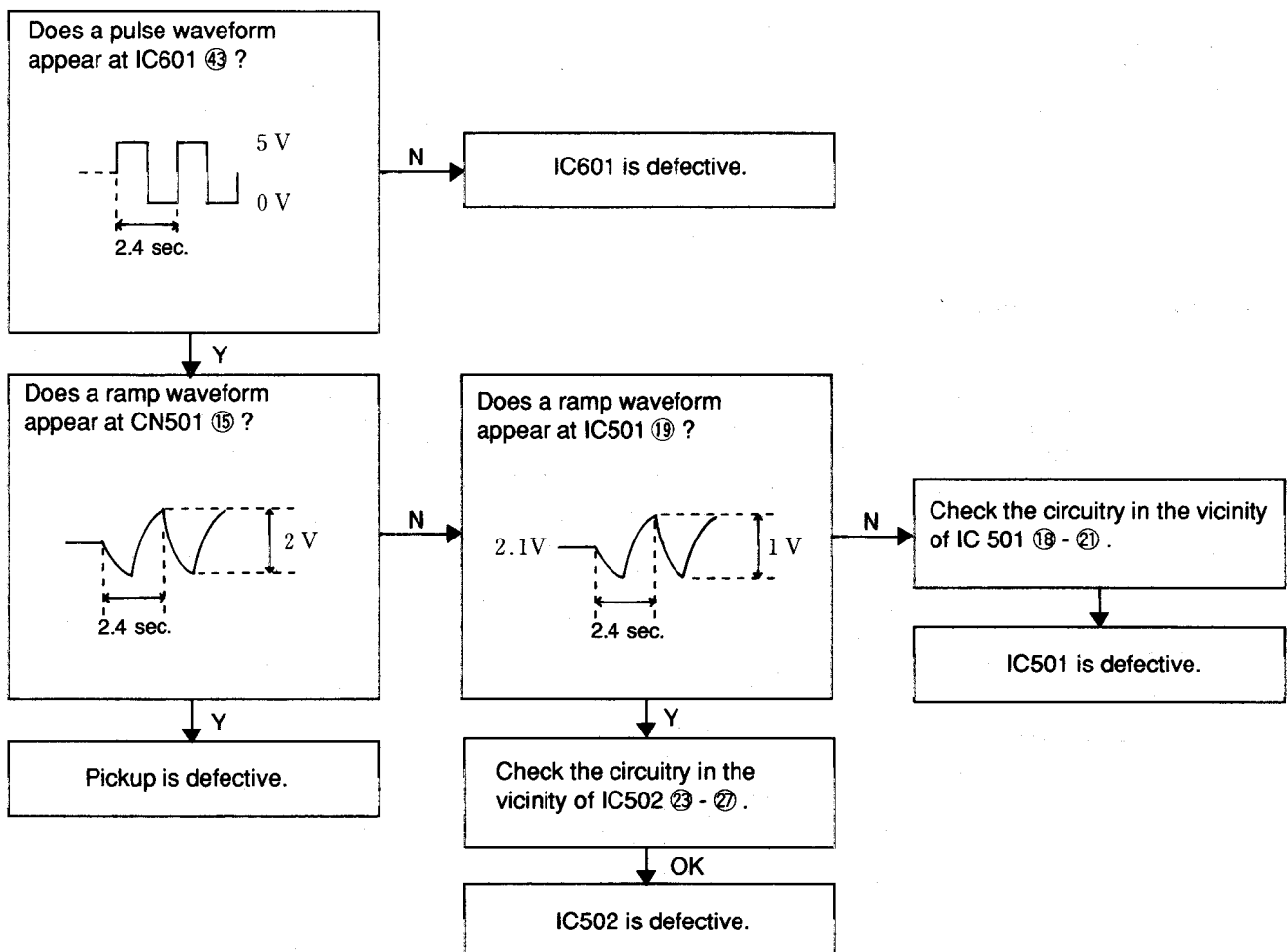
■ General section



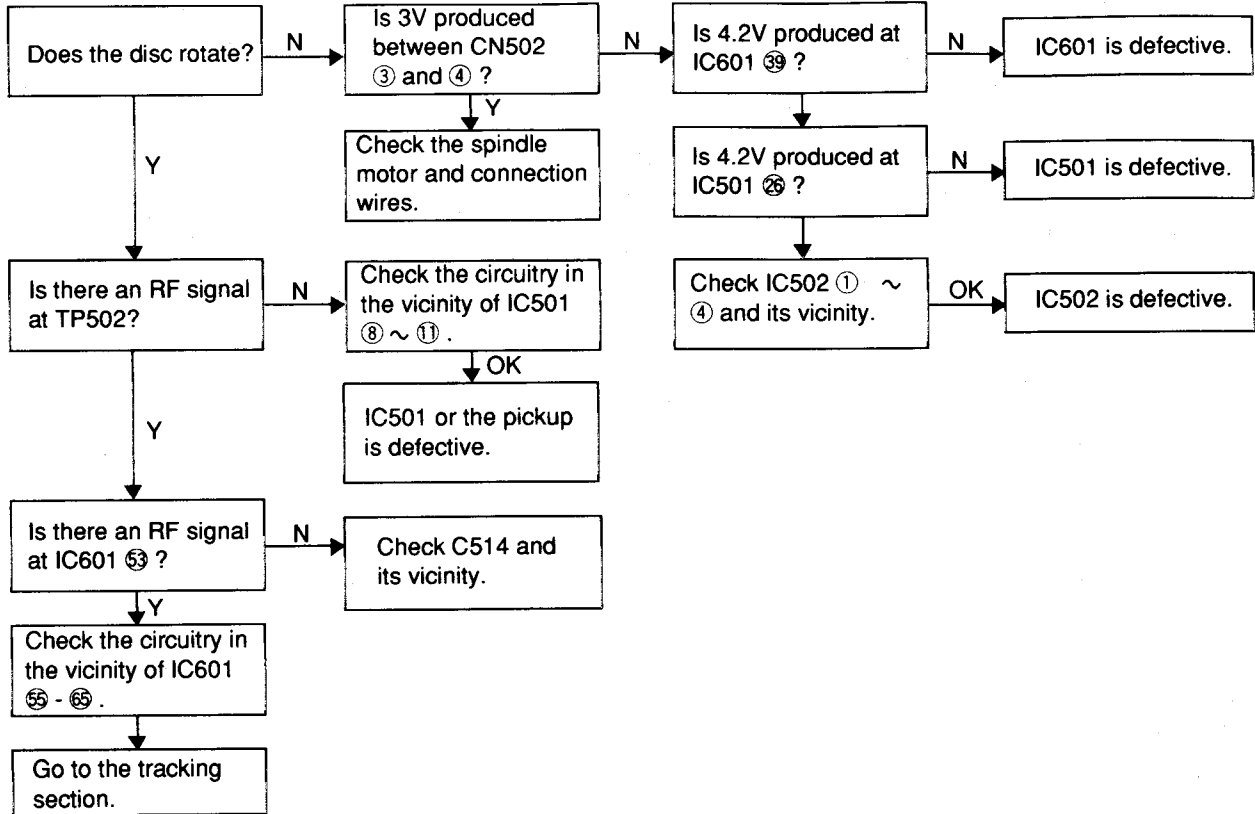
■ Feed section



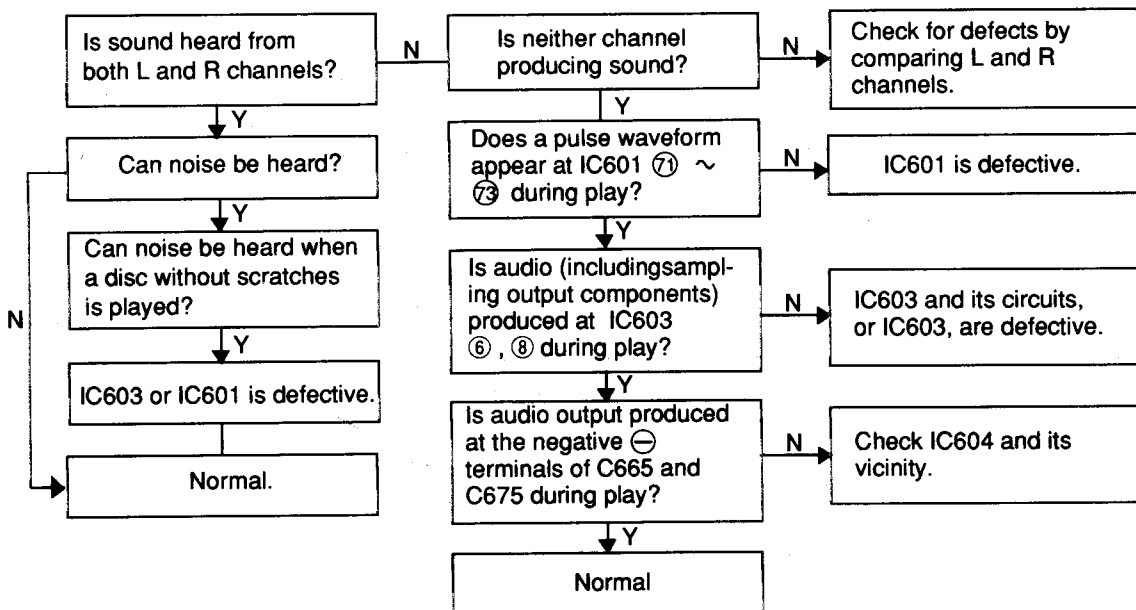
■ Focus section



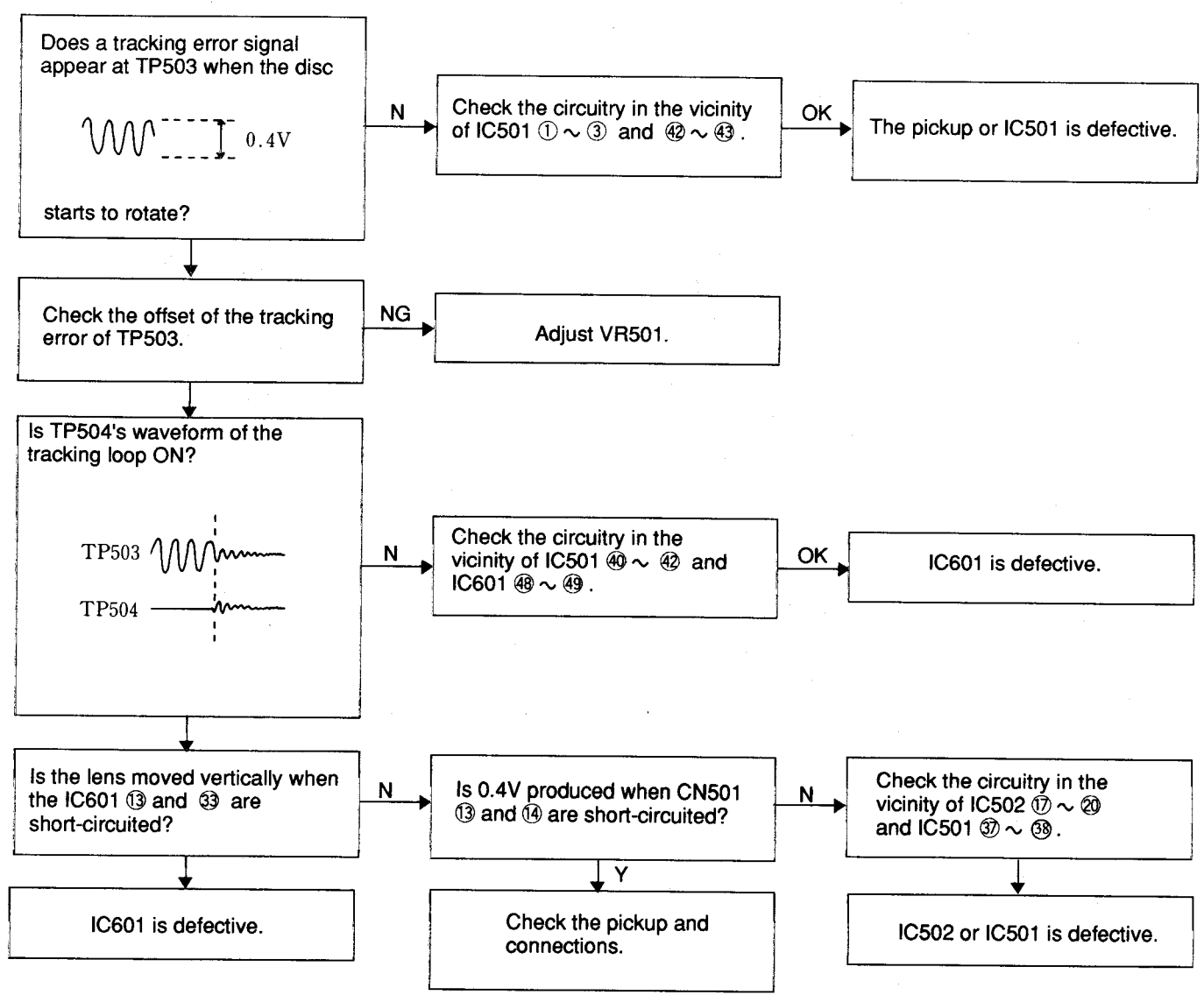
■ Spindle motor section



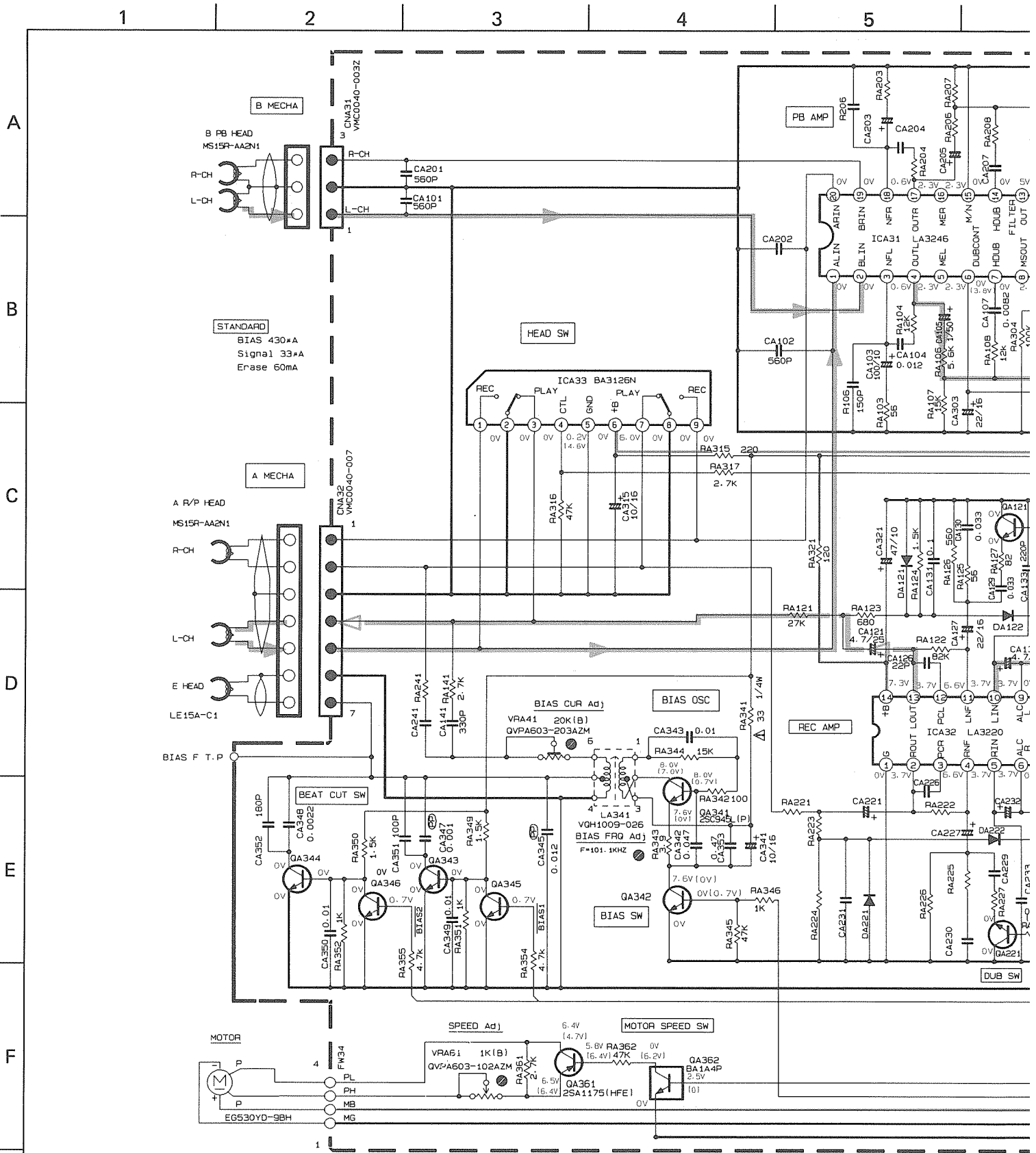
■ Signal processing section



### Tracking section



# 12. Standard Schematic Diagrams ■ Pre-Amplifier Circuit: Drawing No. VDH5182-005



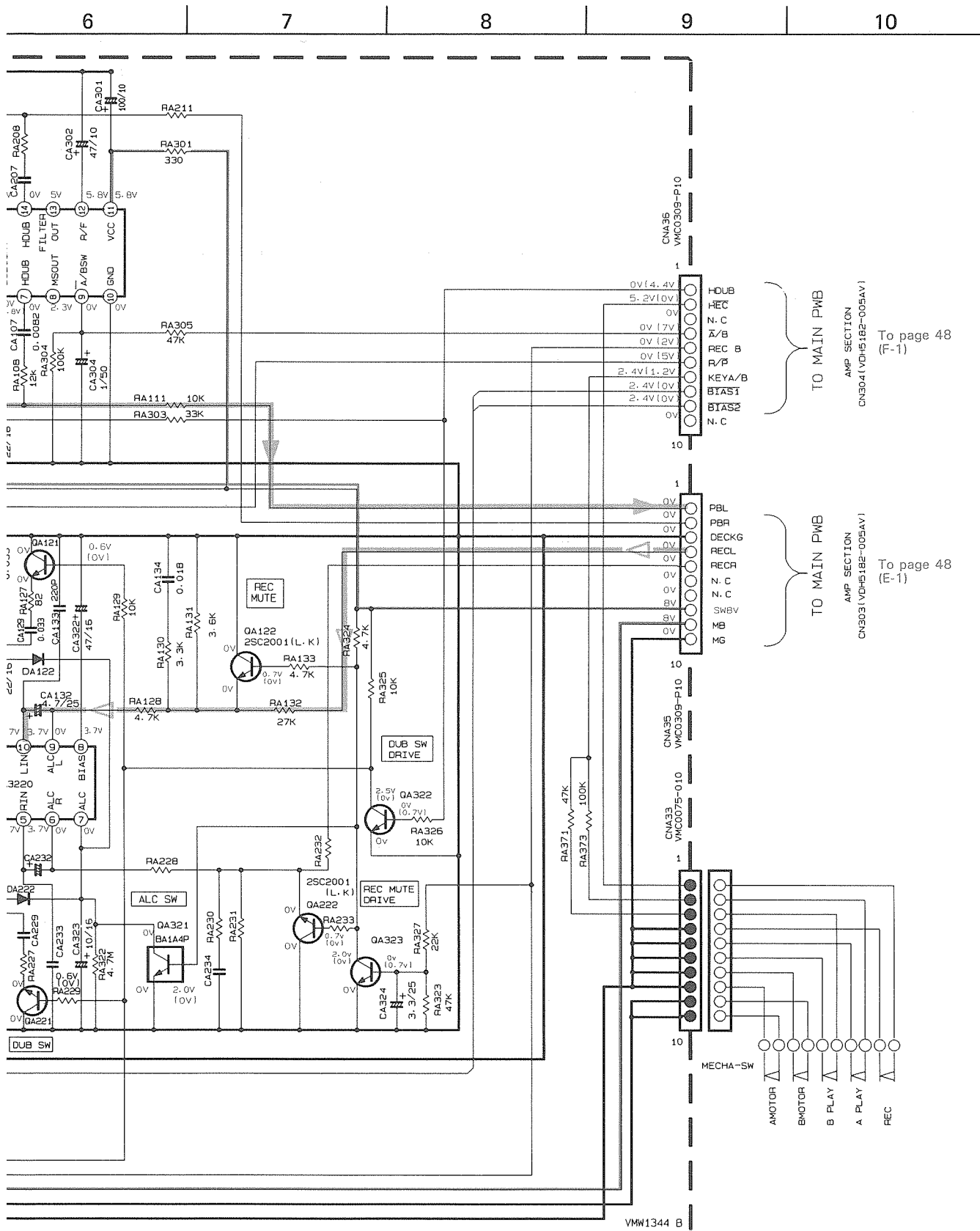
### NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.  
 CONDITION : TAPE MODE A MECHA PB.  
 CONDITION : HIGH SPEED DUBBING IN ( ) OR INVERTMODE IN ( )

2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/6W ±5% CARBON RESISTOR.  
 ALL RESISTANCE VALUES ARE IN Ω(M|G).  
 ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.  
 ALL CAPACITANCE VALUES ARE IN \*F(P=PF).  
 ALL INDUCTANCE VALUES ARE IN \*H(M=MH).  
 ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (AF)/RATED VOL.  
 ALL DIODES ARE MA165 OR 1SS133T  
 ALL TRANSISTORS ARE 2SC2785(E.F)  
 ⊕ POLYPROPYLENE CAPACITOR

Fig. 12-1

2-005PW



RESISTOR

REF	PARTS	R1	R2
QA321	BA1A4P		
QA362	OR		
	DTC114YSTP	10k	47k

1/2 RATED VOLTAGE (V).

+B LINE

Tape playback signal

REC Signal



TO MAIN PWB

AMP SECTION  
CNA304 (VDH5182-005AV)

To page 48  
(F-1)

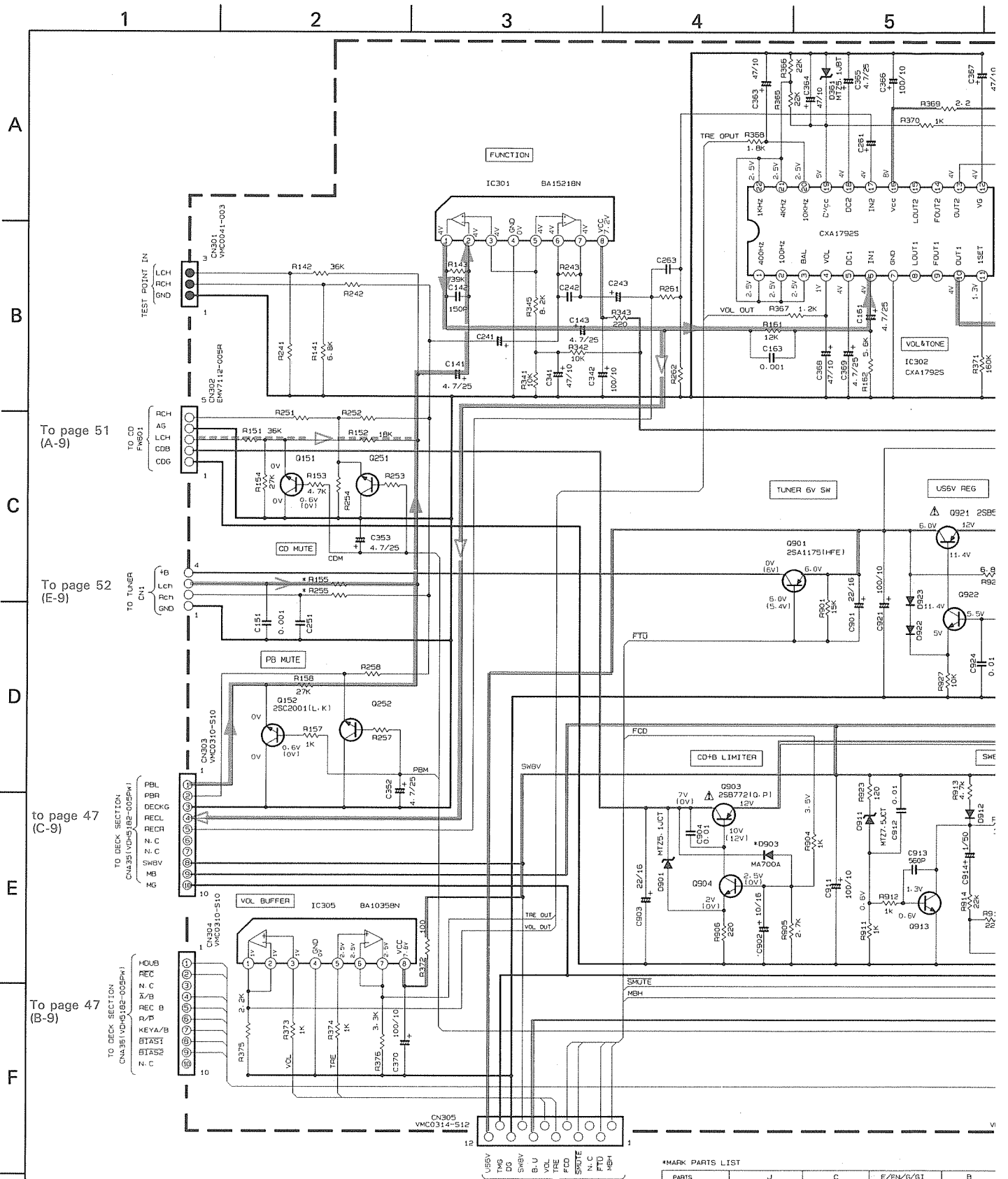
TO MAIN PWB

AMP SECTION  
CNA303 (VDH5182-005AV)

To page 48  
(F-1)



Power Amplifier Circuit: Drawing No. VDH5182-005AV (RC-QW33 C/J)



- NOTES**
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.  
CONDITION --- CD STOP MODE AT DC 12V  
I ) IS INVERT MODE
  - UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/8W ±5% CARBON RESISTOR.  
ALL RESISTANCE VALUES ARE IN OHM(Ω).  
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.  
ALL CAPACITANCE VALUES ARE IN PPF(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 1SS133T OR MA165  
ALL 1HPN TRANSISTORS ARE RSC2785(F-E).

**\*MARK PARTS LIST**

PARTS	J	C	E/EN/G/GI	B
J991	QMC8251-V01	QMC0263-004		
T991	VTP57A2-12K	VTP5712-120		
F992	QMF51N2-3R0J1	QMF51E2-3R15J1		
F993	SHORT (BB673)	QMF51N2-3R0J1	SHORT (BB673)	SHORT (BB66)
R155, R255	22K		16K	
POWER CORD	QMP1350-1B3	QMP1230-1B3	QMP39F0-1B3	QMP5520-1
D903	NO USE	MA700A		
AC VOLTAGE	120V/60HZ		230V / 50/60HZ	240V / 50/

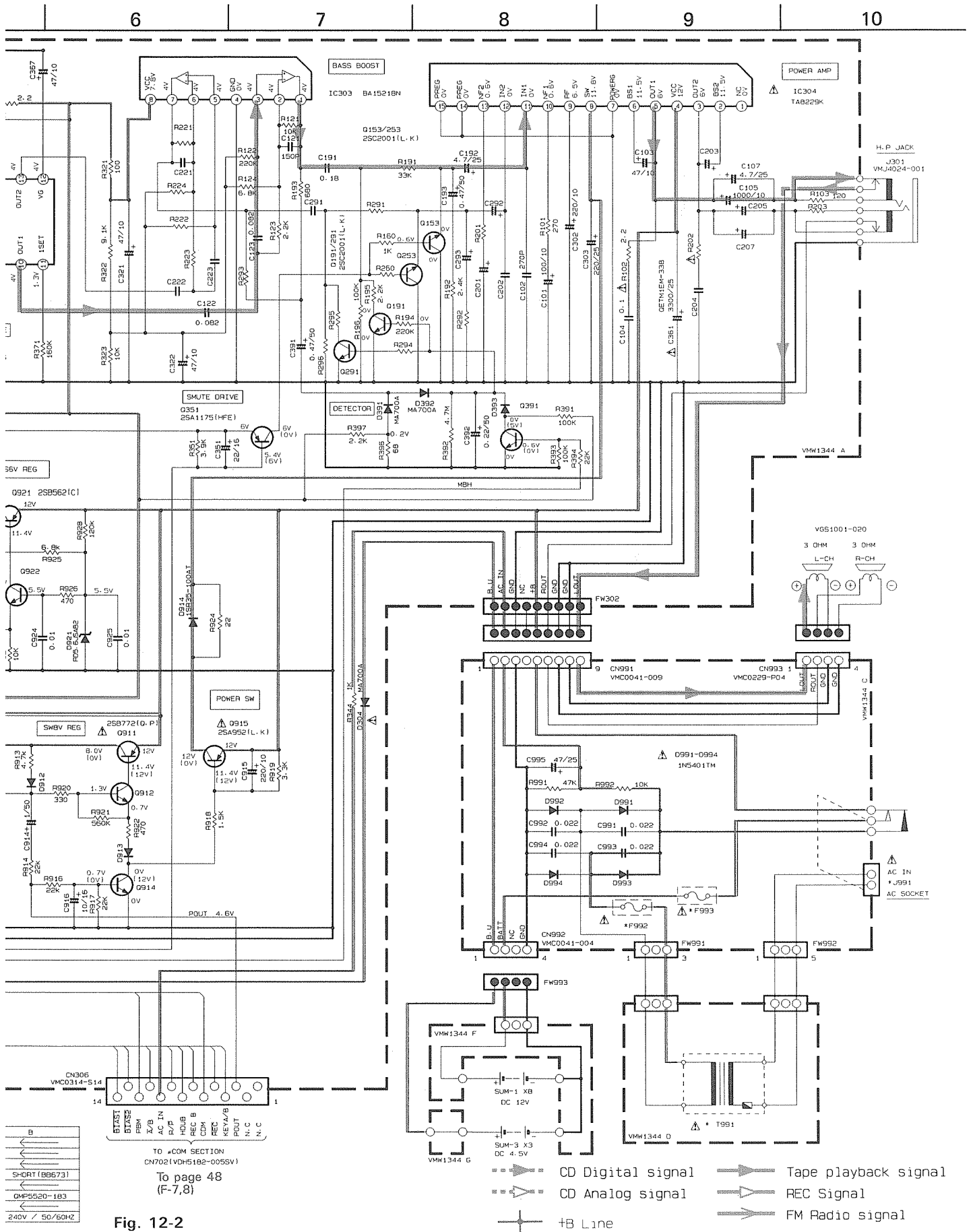


Fig. 12-2

To page 48 (F-7,8)

■ Power Amplifier Circuit: Drawing No. VDH5182-007AV (RC-QW33 U)

11

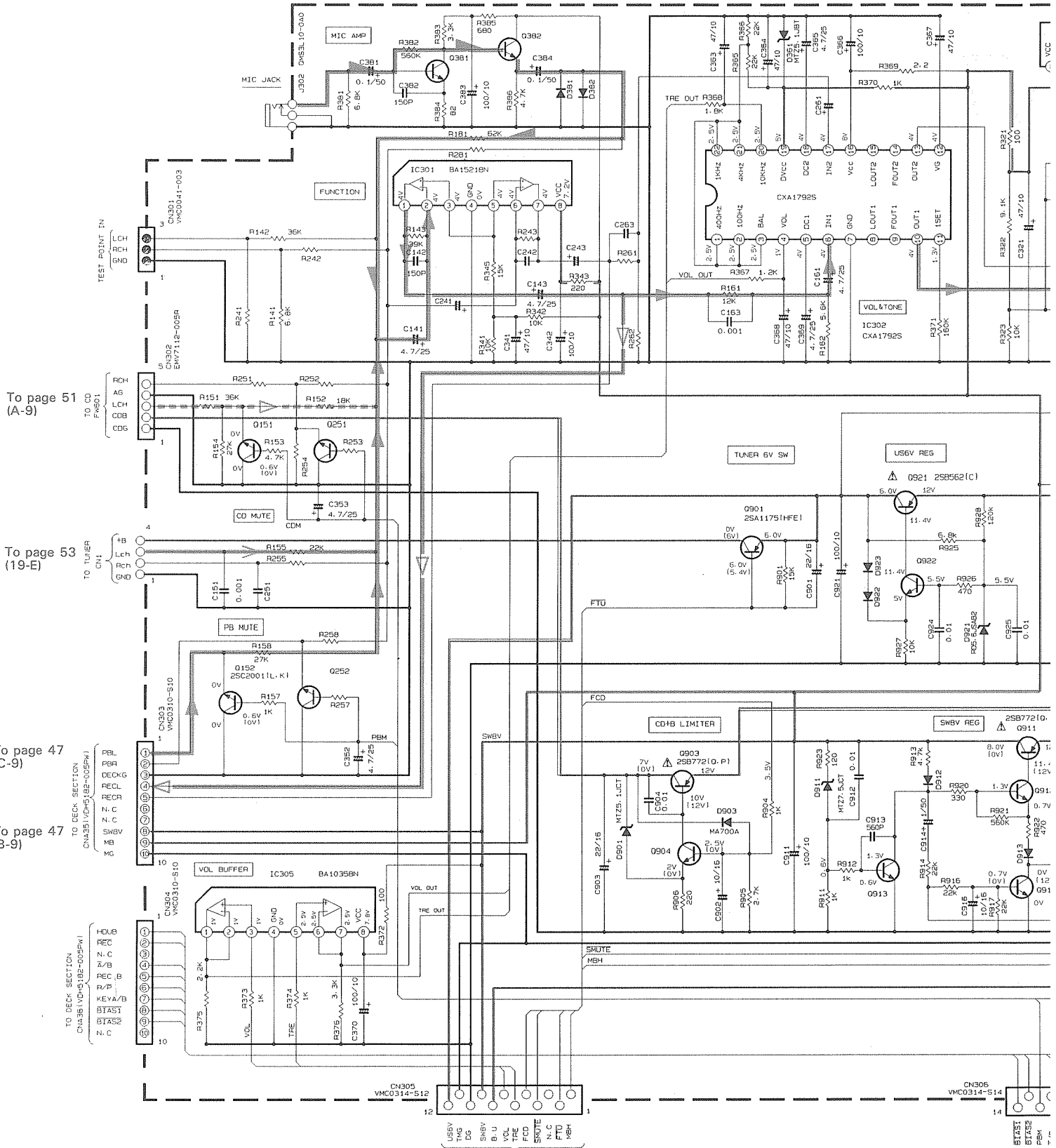
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13

14

15

1



- NOTES**
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.  
CONDITION --- CD STOP MODE AT DC 12V  
INVERT MODE
  2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/6W ±5% CARBON RESISTOR.  
ALL RESISTANCE VALUES ARE IN Ω(M).  
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.  
ALL CAPACITANCE VALUES ARE IN nF(pF).  
ALL INDUCTANCE VALUES ARE IN μH(mH).  
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (nF)/RATED VOLTAGE (V).  
ALL DIODES ARE 1N51331 OR MA165.  
ALL NPN TRANSISTORS ARE 2SC2705(F, E, 1).

Fig. 12-3

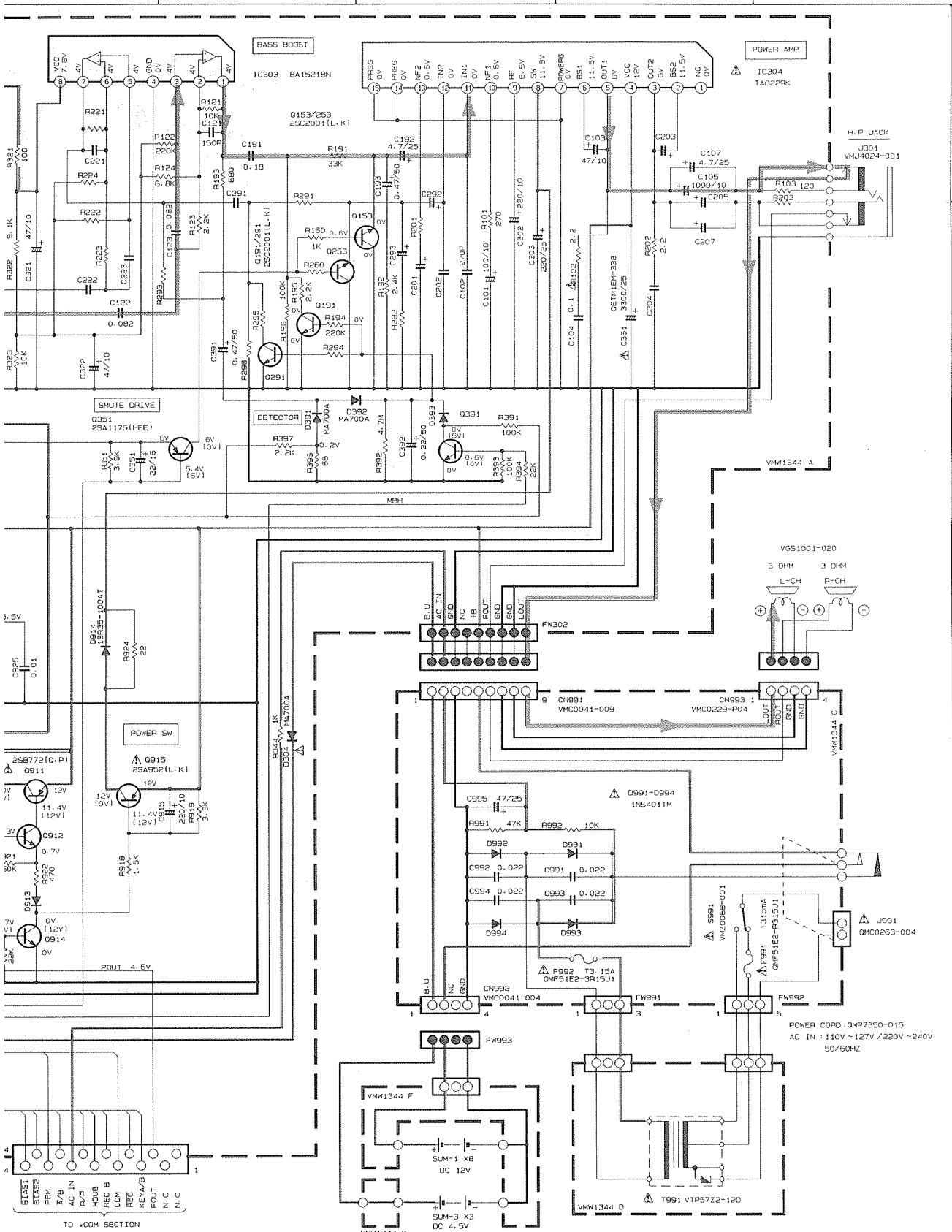
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17

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19

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A

B

C

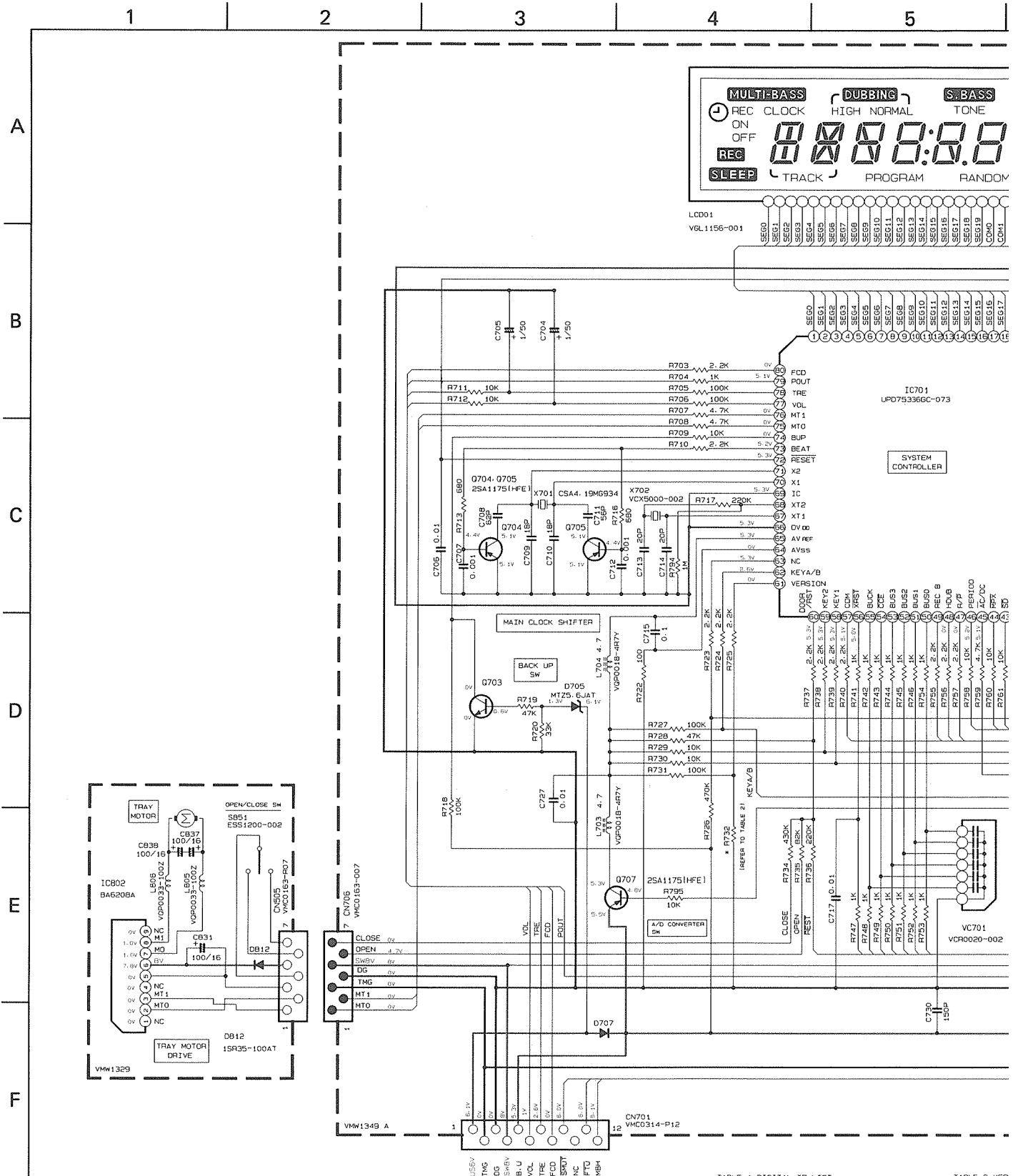
D

E

F

- ⊕ CD Digital signal
- ⊖ CD Analog signal
- ⊕ +B Line
- ⊕ Tape playback signal
- ⊖ REC Signal
- ⊕ FM Radio signal

System Microcomputer Circuit: Drawing No. VDH5182-005SV



TO POWER AMP SECTION  
CN305 (VDH5182-005SV)  
To page 47  
(F-3)

TABLE 1 DIGITAL TR LIST

0701		BA1A4Z
05302		OR DTC114T5

TABLE 2 VER

VERSION	PAI
E/EN/B/G/G1	
J/C	
U	
VX	

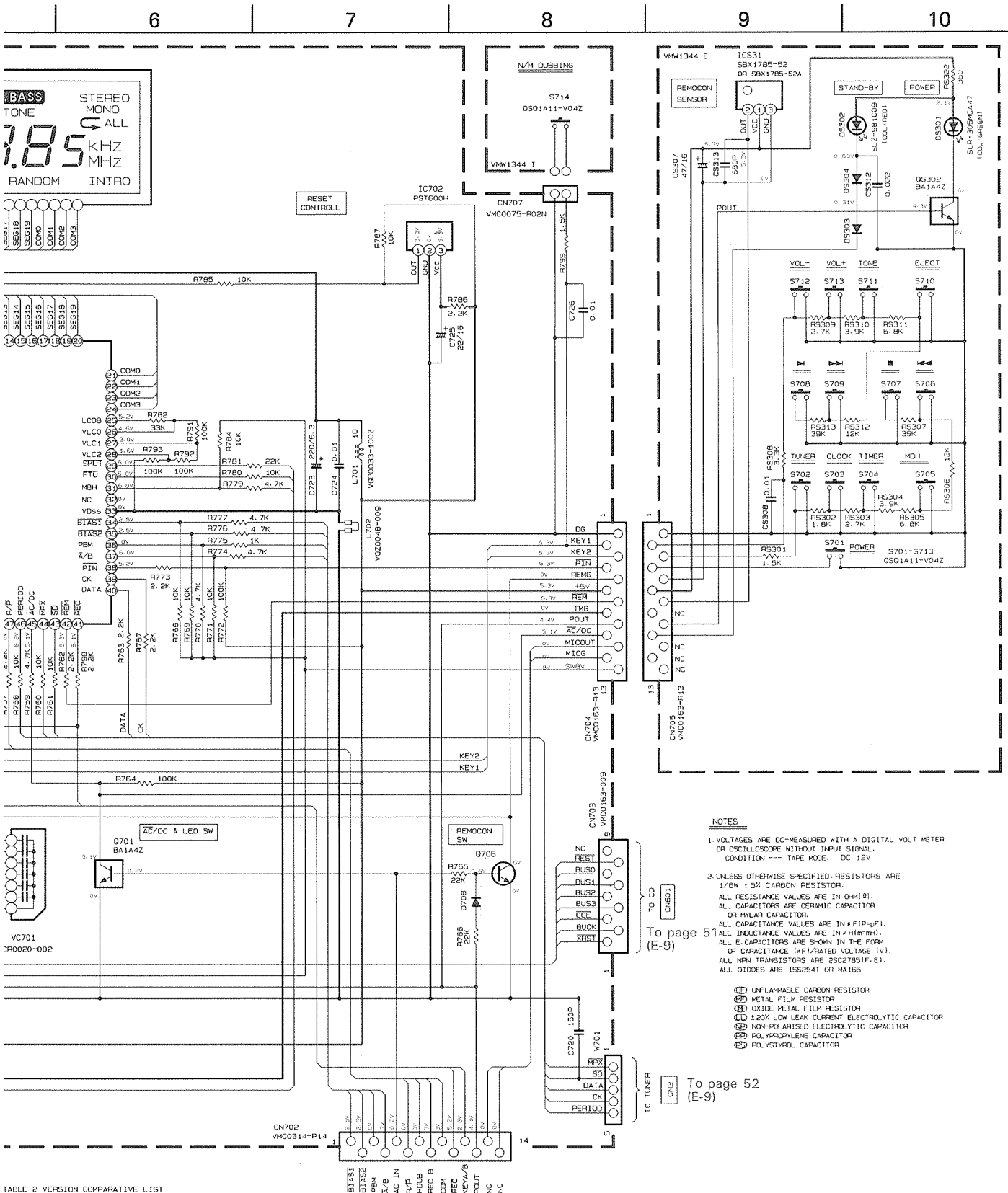


TABLE 2 VERSION COMPARATIVE LIST

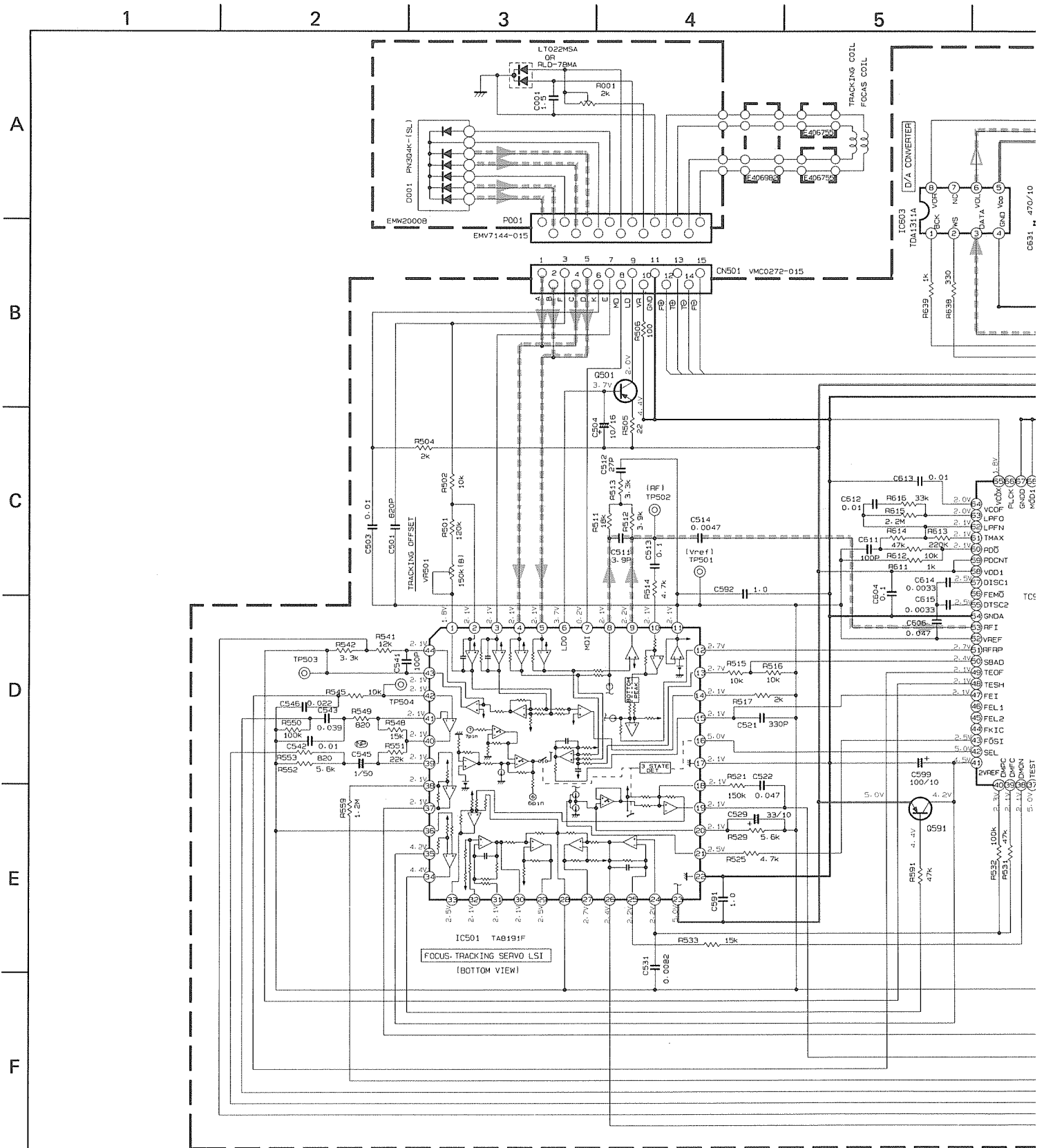
PARTS	R732
N/B/G/GI	NO USE (OPEN)
J/C	120K
U	5K
VX	15K

TO POWER AMP SECTION  
CN306 (VDH51B2-005AV)  
To page 48  
(F-6,7)

- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION --- TAPE MODE. DC 12V
  - UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/8W 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 μH (μH). ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V). ALL NPN TRANSISTORS ARE 2SC2785 (F.E.). ALL DIODES ARE 1S5254T OR HA105
- Ⓛ UNFLAMMABLE CARBON RESISTOR
  - Ⓜ METAL FILM RESISTOR
  - Ⓞ OXIDE METAL FILM RESISTOR
  - Ⓟ 120V LOW LEAK CURRENT ELECTROLYTIC CAPACITOR
  - Ⓠ NON-POLARISED ELECTROLYTIC CAPACITOR
  - Ⓡ POLYPROPYLENE CAPACITOR
  - Ⓢ POLYSTYRENE CAPACITOR

Fig. 12-4

CD Amplifier Circuit: Drawing No. VDH5182-001CV

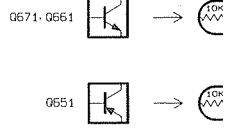


NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER IN PLAYBACK
2. UNLESS OTHERWISE SPECIFIED - RESISTORS ARE 1/6W ±5% CARBON RESISTOR.  
 ALL RESISTANCE VALUES ARE IN OHMS[Ω].  
 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 1/2F/RATED VOLTAGE (V).

- Ⓜ UNFLAMMABLE CARBON RESISTOR
- Ⓜ METAL FILM RESISTOR
- Ⓜ OXIDE METAL FILM RESISTOR
- Ⓜ 1.20% LOW LEAK CURRENT ELECTROLYTIC CAPACITOR
- Ⓜ NON-POLARISED ELECTROLYTIC CAPACITOR
- Ⓜ POLYPROPYLENE CAPACITOR
- Ⓜ POLYSTYROL CAPACITOR

0501	2SA952(L, K1)
0581	
0591	2SA1309(R, S1) OR 2SA1175(HFE) OR 2SA933S(RS1)
0551	DTA114TS OR BN1A4Z
0561	
0671	DTC114TS OR BA1A4Z



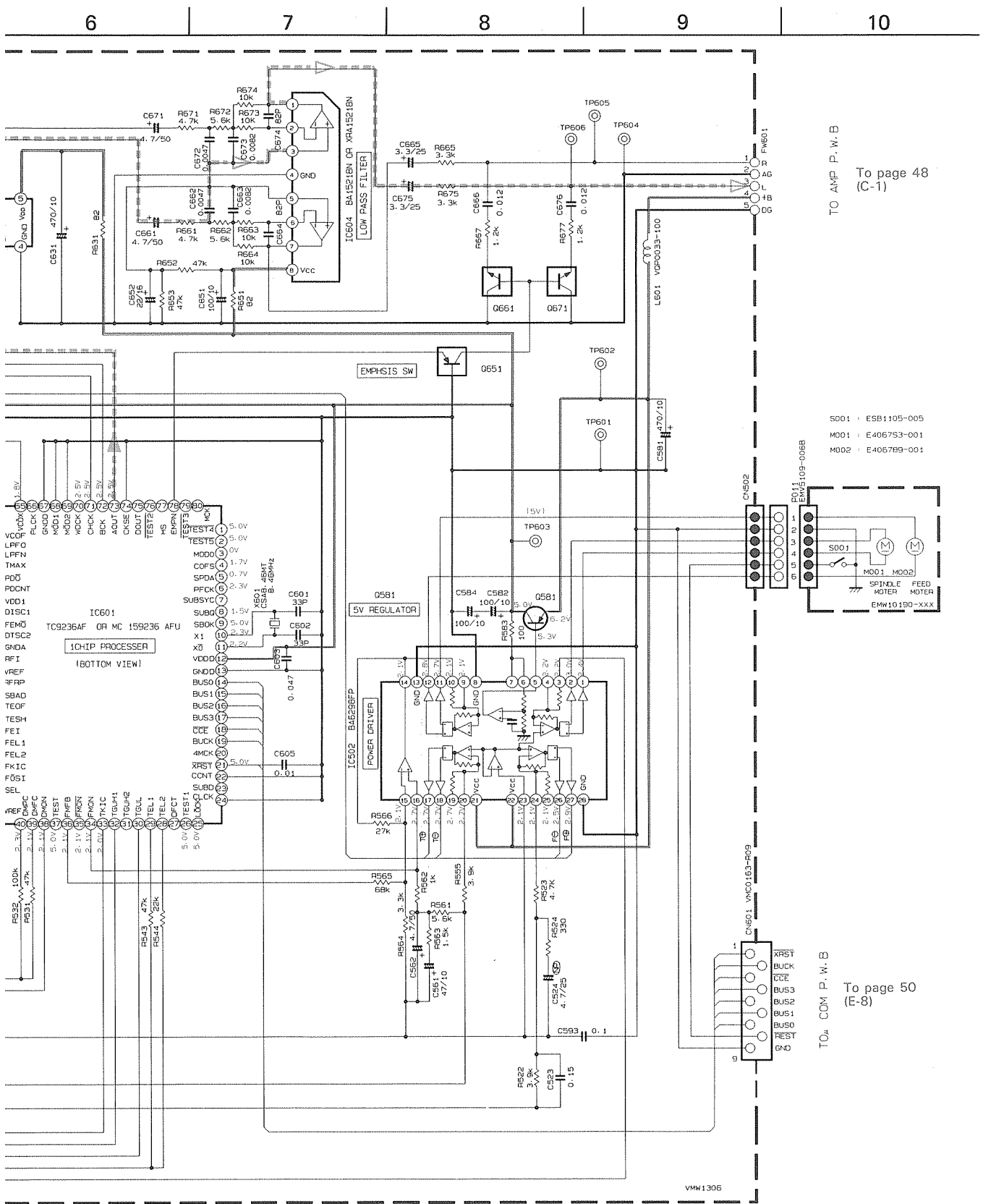
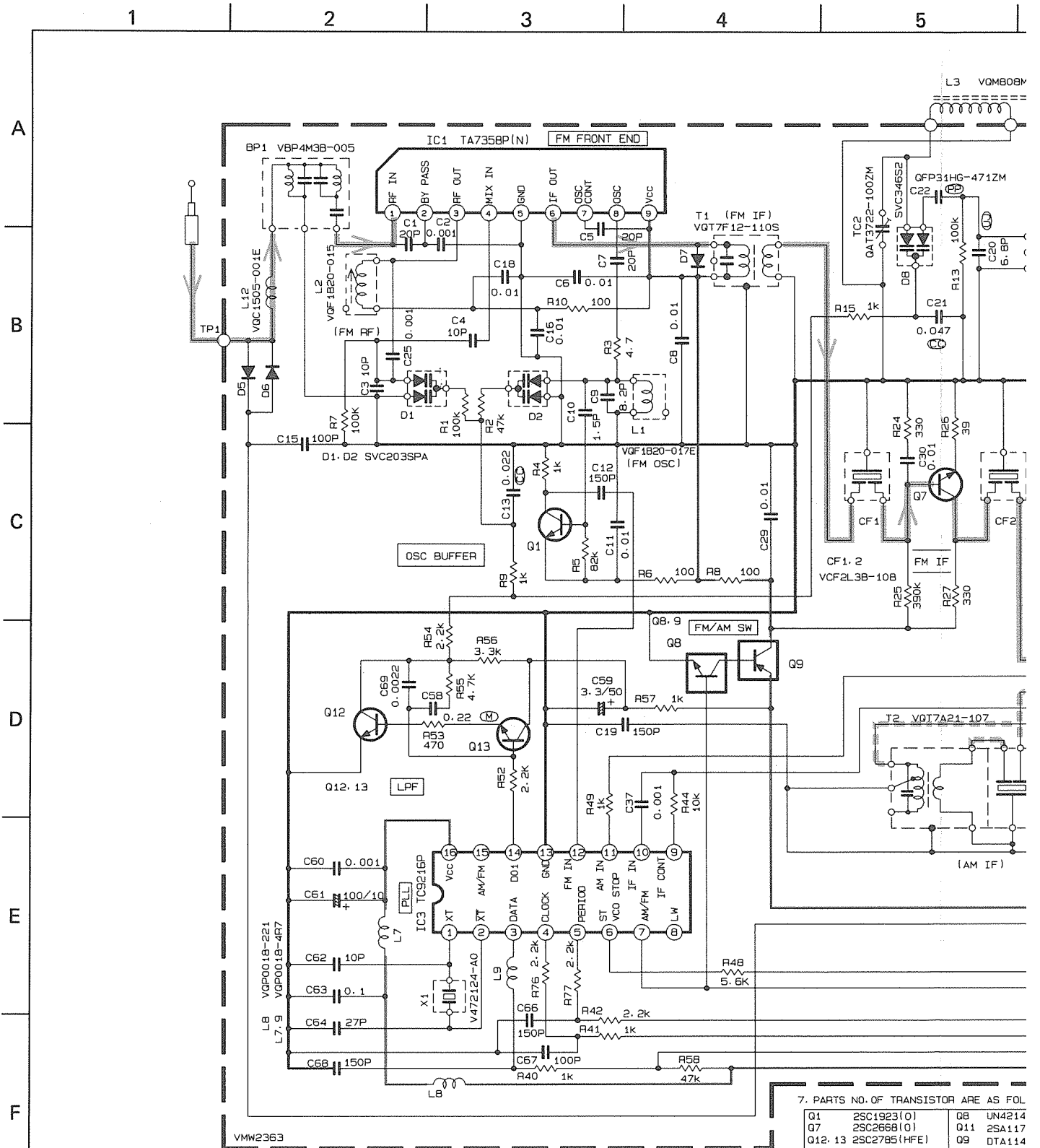


Fig. 12-5



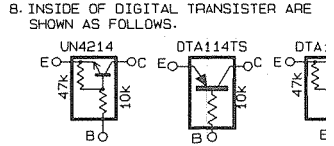
■ Tuner Circuit: Drawing No. VDH5182-006TW (RC-QW33 C/J)

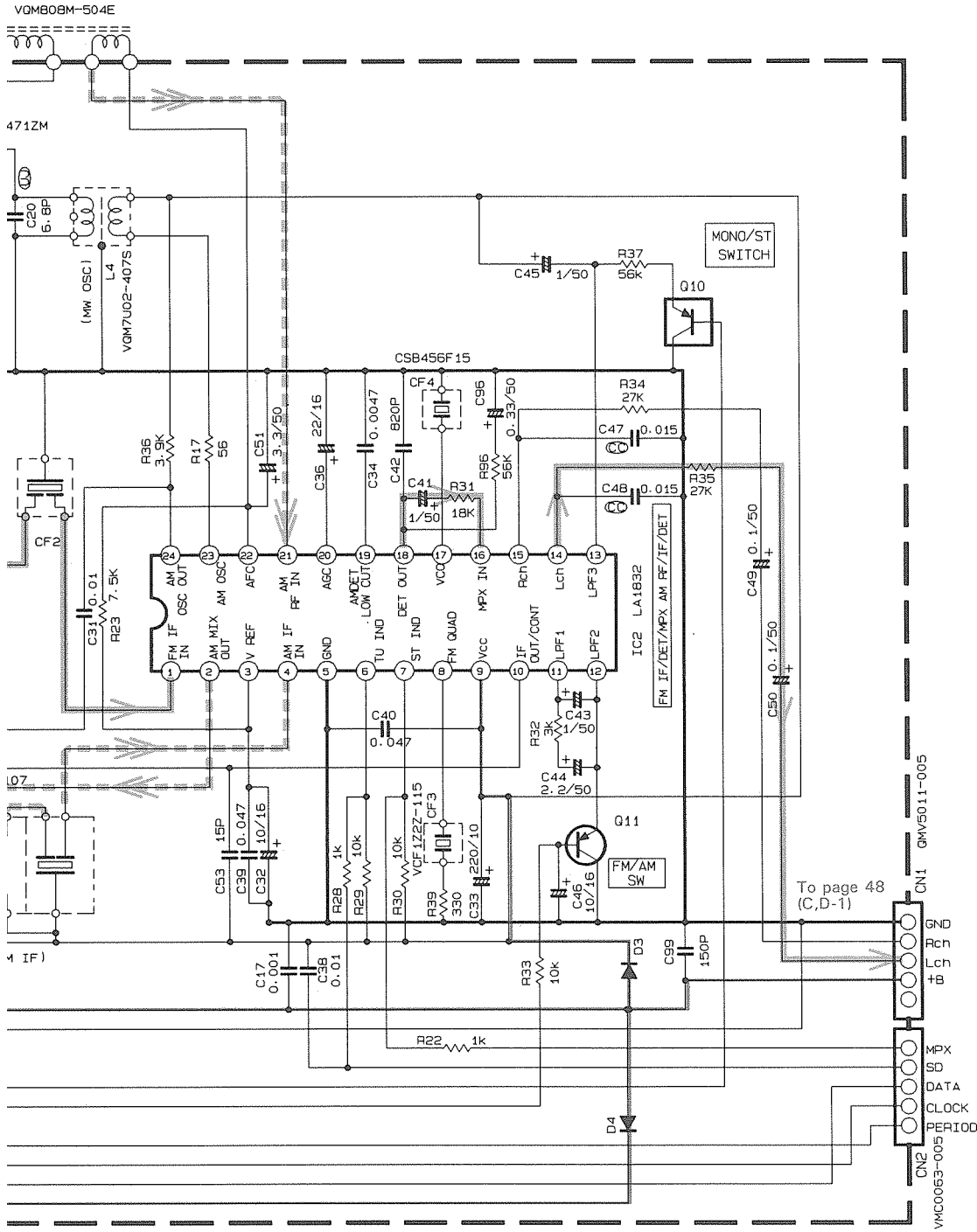


7. PARTS NO. OF TRANSISTOR ARE AS FOL

Q1	2SC1923(O)	Q8	UN4214
Q7	2SC2668(O)	Q11	2SA117
Q12, 13	2SC2785(HFE)	Q9	DTA114
		Q10	DTA114'

- NOTES**
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
  2. ALL . RESISTORS ARE 1/8W ±5% CARBON RESISTOR.
  3. ALL . RESISTANCE VALUES ARE IN OHM (Ω).
  4. ALL CAPACITANCE VALUES ARE IN μF (P=pF).
  5. ALL E- CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE 1/μF/RATED VOLTAGE (V).
  6. S1. DIODES (D) ARE ALL MA165 THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS 1SS254T OR HSS104JT.





- AS FOLLOWS.
- UN4214 or BA1A4P
  - 2SA1175(HFE)
  - DTA114YS or BN1A4P
  - DTA114TS or BN1A4Z
- TER ARE
- OC DTA114YS
- 47K 10K
9. LAST NO.
- R96 C96 Q15 D8 L12
  - BLANK NO.
  - R 11, 12, 14, 16, 19-21, 38, 45-47, 50, 51, 59-95
  - C 14, 23, 24, 26-28, 52, 55-57, 70-95
  - Q 2-6, 14
  - L 5, 6, 10, 11
10. C47 AND C48 ARE ±10% GCC CAPACITOR.

FM Radio signal

AM Radio signal

+B Line

TR NO.	PIN NO.	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
FM 87.5MHz NO SIGNAL	IC1	F	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E
	IC2	F	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E
AM 522kHz NO SIGNAL	IC3	F	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E
	IC3	F	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E

Fig. 12-6

■ Tuner Circuit: Drawing No. VDH5182-007TW (RC-QW33 U)

11

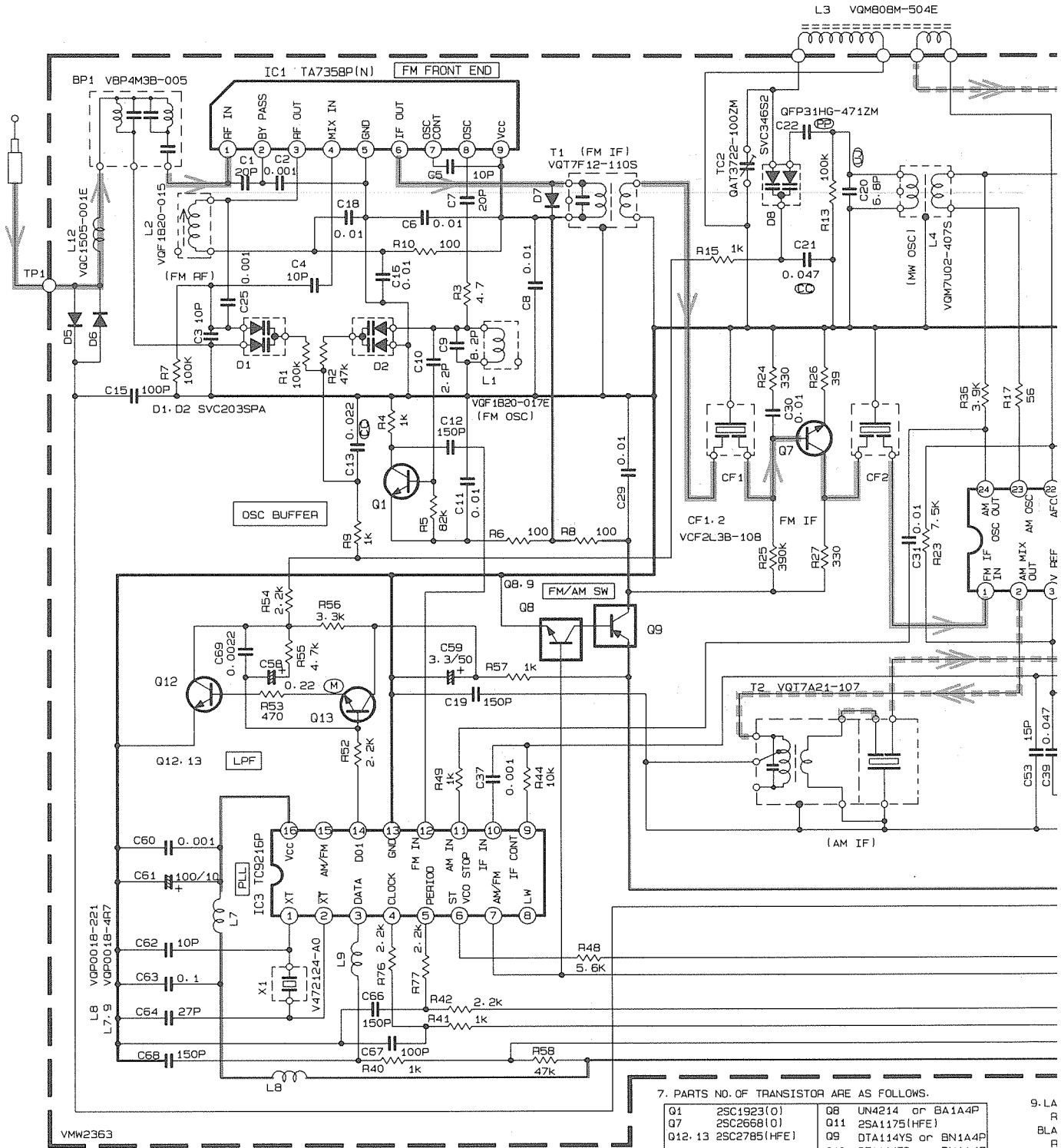
12

13

14

15

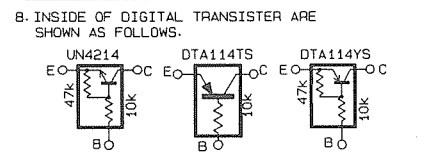
16



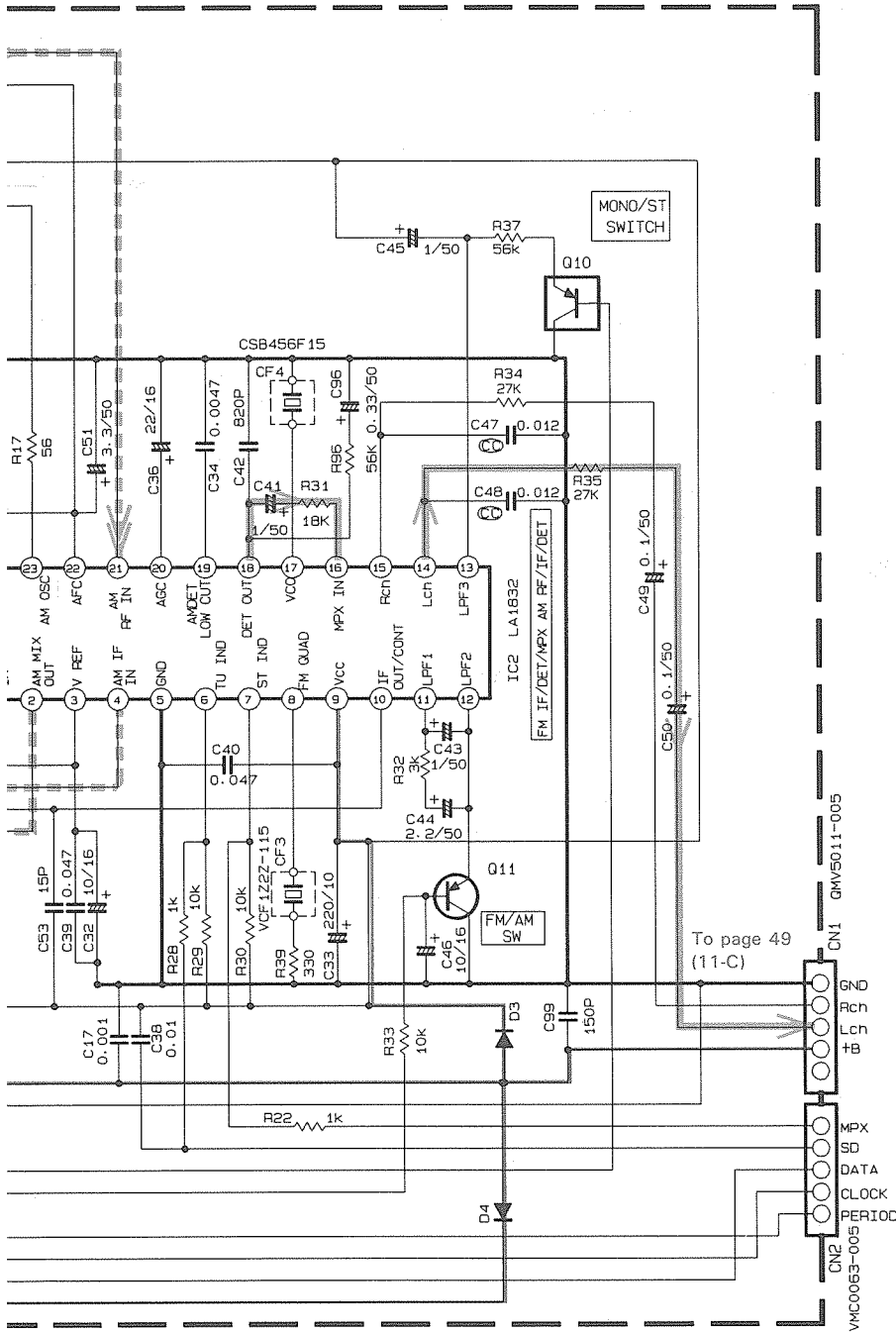
7. PARTS NO. OF TRANSISTOR ARE AS FOLLOWS.

Q1	2SC1923(O)	Q8	UN4214 or BA1A4P	9. LA
Q7	2SC2668(O)	Q11	2SA1175(HFE)	R
Q12-13	2SC2785(HFE)	Q9	DTA114YS or BN1A4P	BLA
		Q10	DTA114TS or BN1A4Z	R C Q L

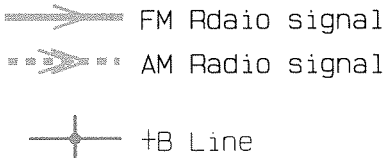
- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
  2. ALL .RESISTORS ARE 1/8W ±5% CARBON RESISTOR.
  3. ALL RESISTANCE VALUES ARE IN OHM (Ω).
  4. ALL CAPACITANCE VALUES ARE IN μF(P=pF).
  5. ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
  6. SI. DIODES( D ) ARE ALL MA165 THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS 1SS254T OR HSS104JT.



16 17 18 19 20



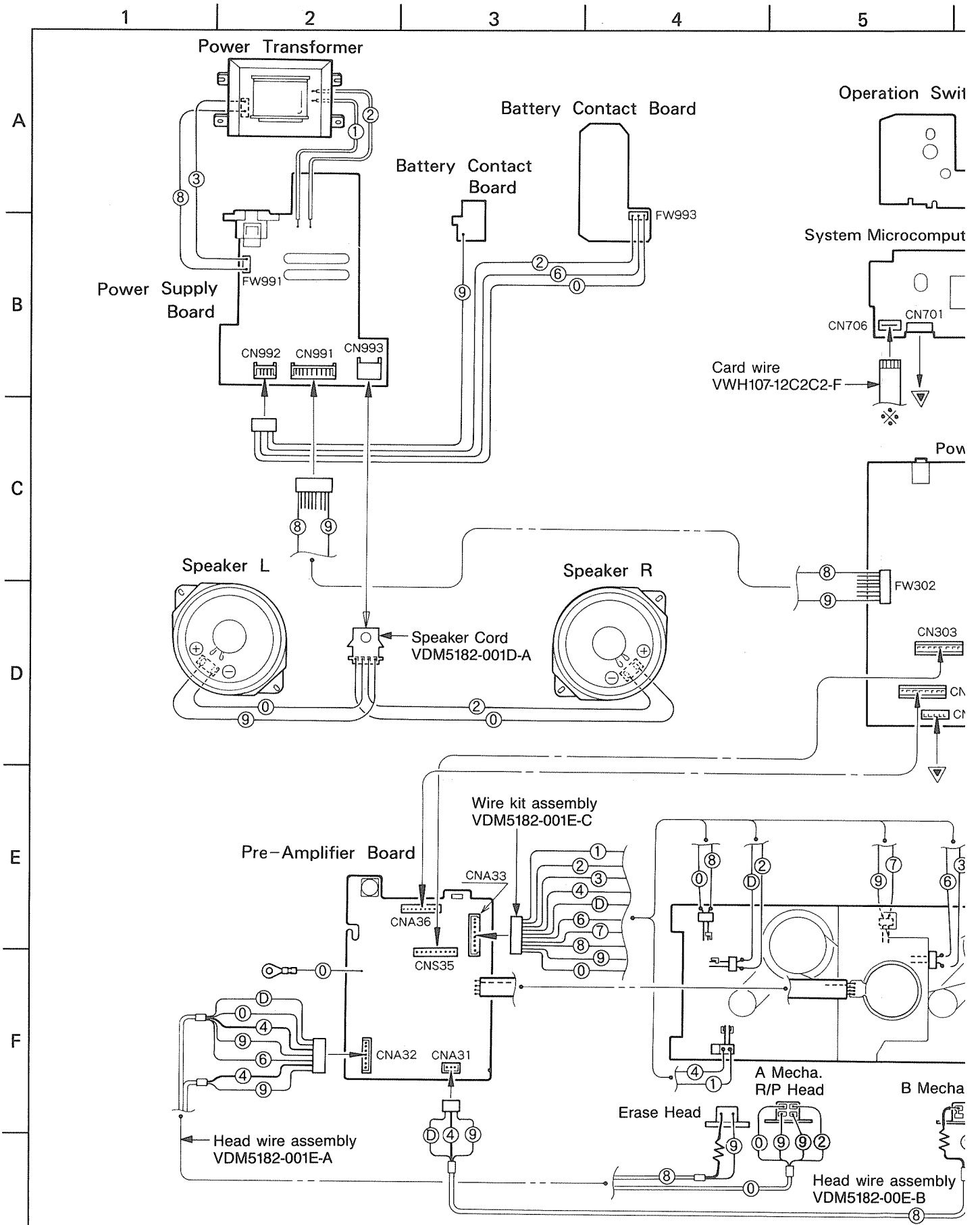
- 9. LAST NO.  
R96 C96 Q15 O8 L12
- BLANK NO.  
R 11-12, 14, 16, 19-21, 38, 45-47, 50, 51, 59-95  
C 14, 23, 24, 26-28, 52, 55-57, 70-95  
Q 2-6, 14  
L 5, 6, 10, 11
- 10. C47 AND C48 ARE  
±10% GCC CAPACITOR.

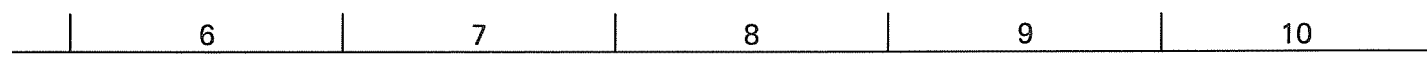


TR NO.	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24
	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
PIN NO.																								
FM 87.5MHZ NO SIGNAL	1	9	4	7	0	3	7	0	4	7	3	7	0	1	0	0	0	0	0	0	0	0	0	0
AM 522KHZ NO SIGNAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FM 87.5MHZ NO SIGNAL																								
AM 522KHZ NO SIGNAL																								

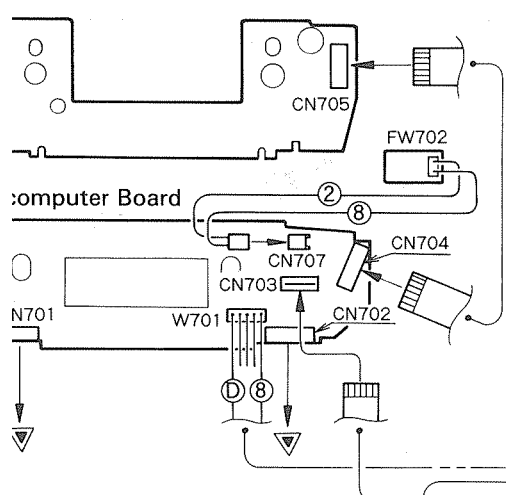
Fig. 12-7

# 13. Wiring Connections

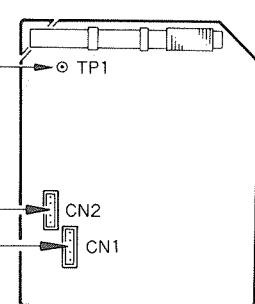




1 Switch Board



Tuner Board

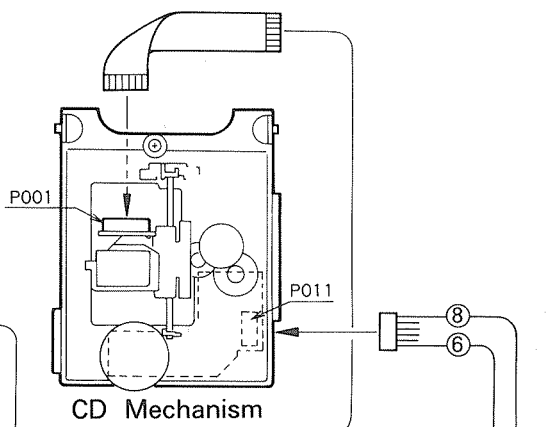
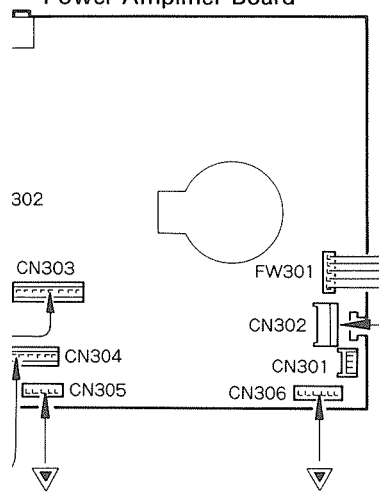


Color codes are shown below.

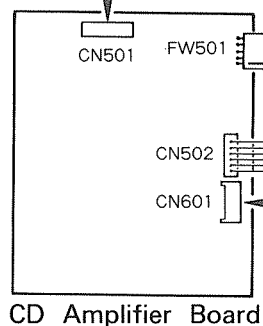
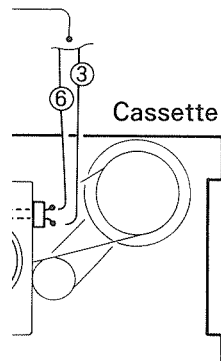
- 1 ..... Brown
- 2 ..... Red
- 3 ..... Orange
- 4 ..... Yellow
- 5 ..... Green
- 6 ..... Blue
- 7 ..... Violet
- 8 ..... Gray
- 9 ..... White
- 0 ..... Black
- D ..... Pink
- C ..... Light Blue

Card wire  
VWH109-18C2C2-F

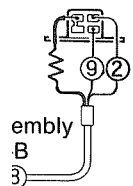
Power Amplifier Board



Cassette Mechanism



Mecha. PB Head



Loading Motor Board

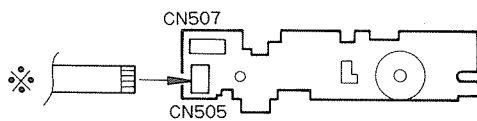


Fig. 13-1

# 14. IC Block Diagram

■ Tuner P.C. Board

- IC1 (FM FRONT END): TA7358P(N)

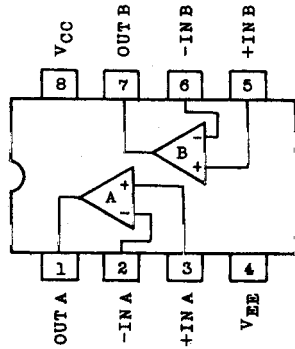


Fig. 14-1

- IC3 (PLL): TC9216P

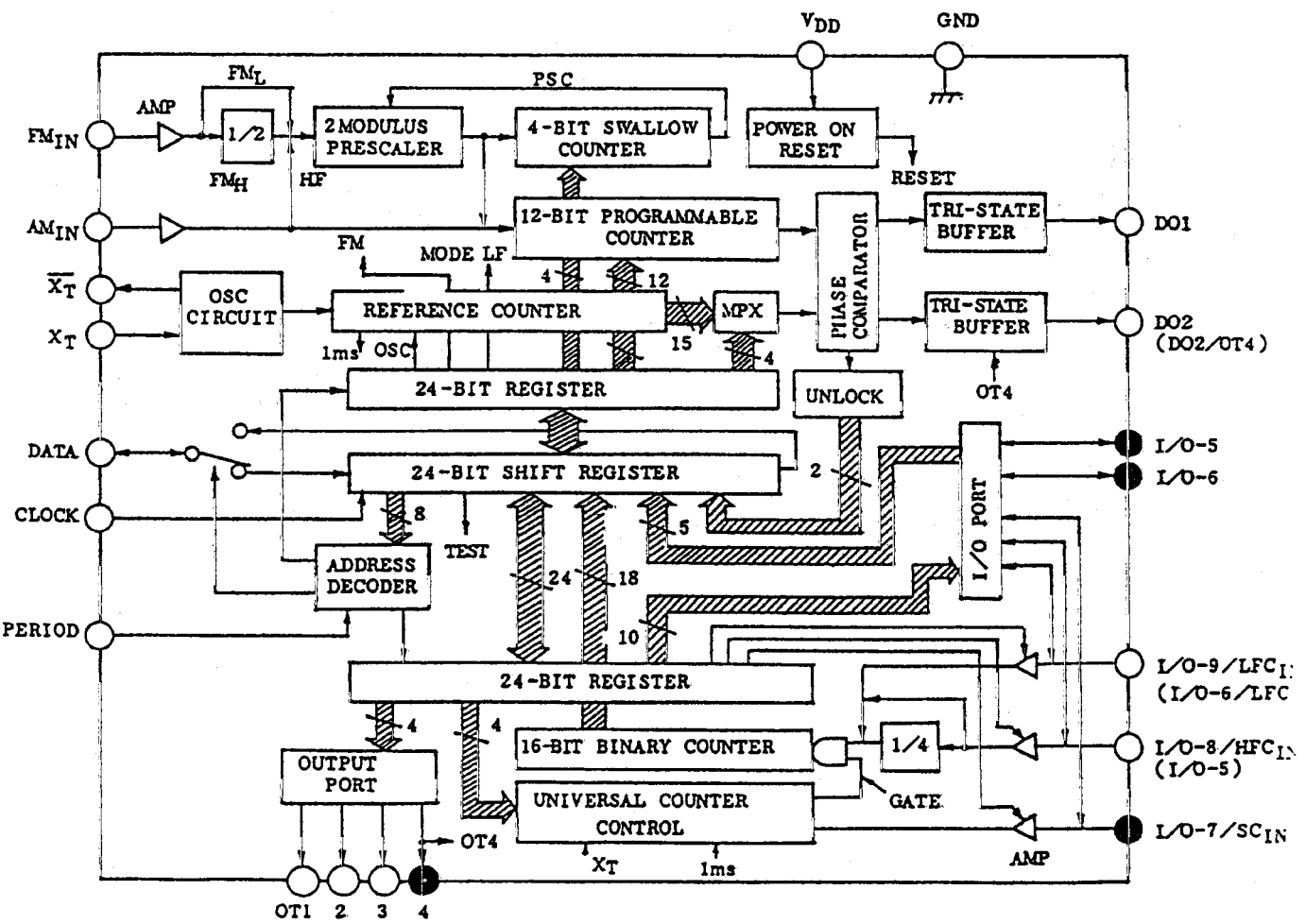


Fig. 14-2

■ Pre Amplifier P.C. Board

- ICA31 (PLAYBACK AMPLIFIER): LA3246

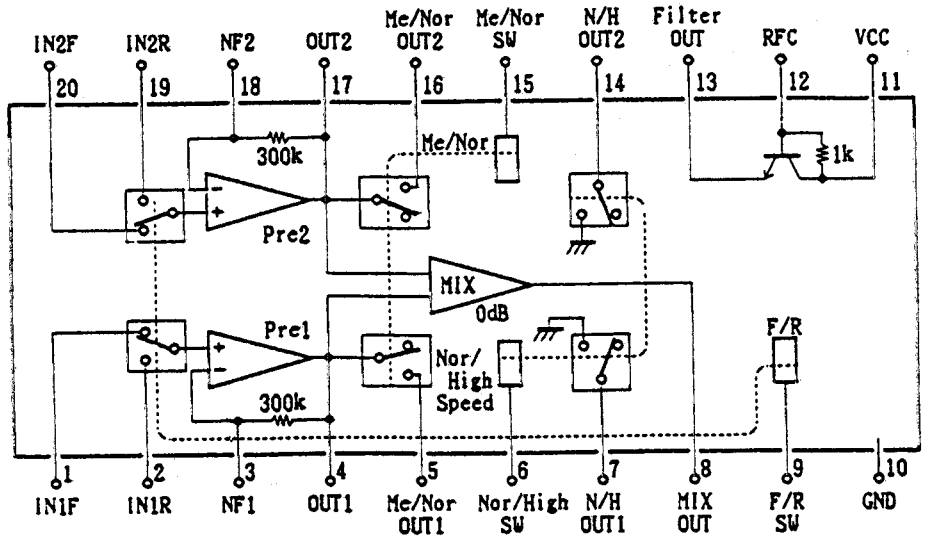


Fig. 14-3

- ICA32 (RECORDING AMPLIFIER): LA3220

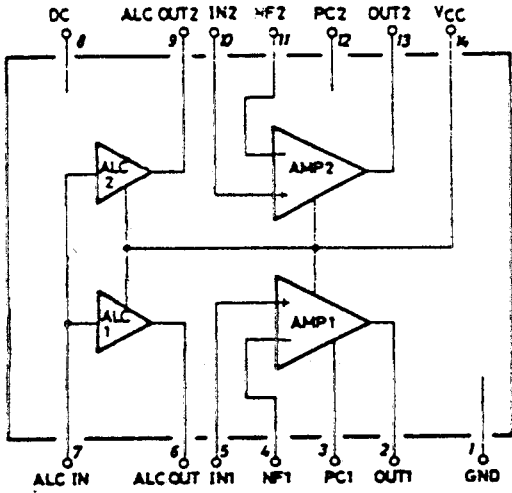


Fig. 14-4

- LCA33 (HEAD SWITCH): BA3126N

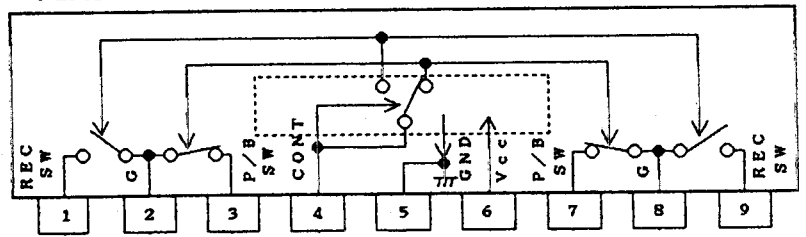


Fig. 14-5

■ Power Amplifier P.C. Board

- IC304 (POWER AMPLIFIER): TA8229K

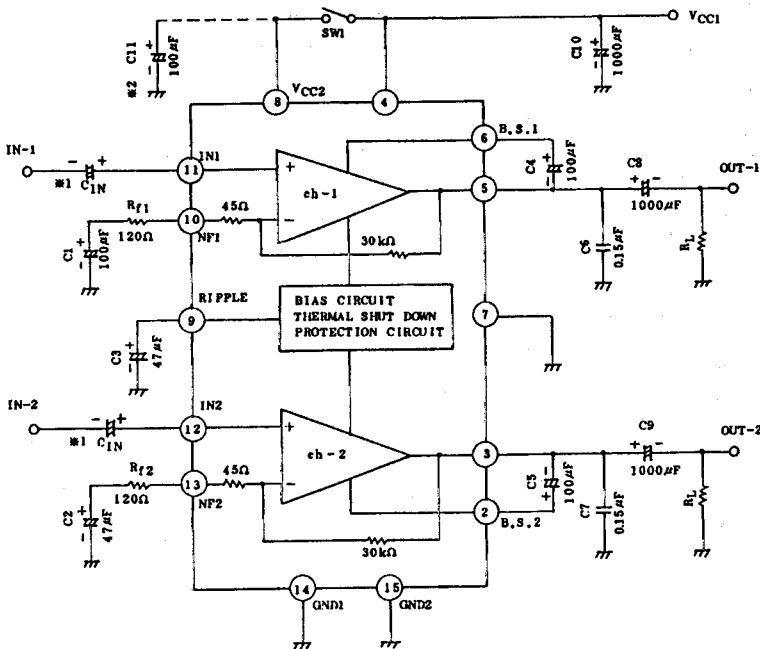


Fig. 14-6

- IC302 (VOLUME & TONE): CXA1792S

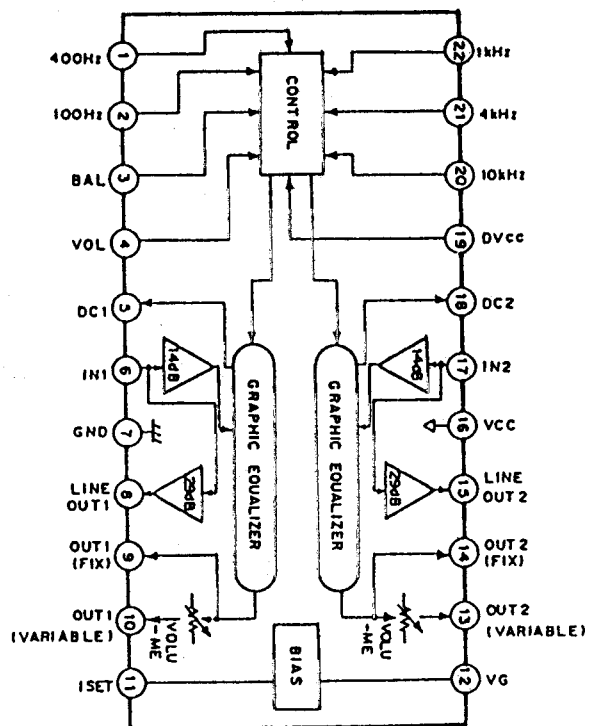
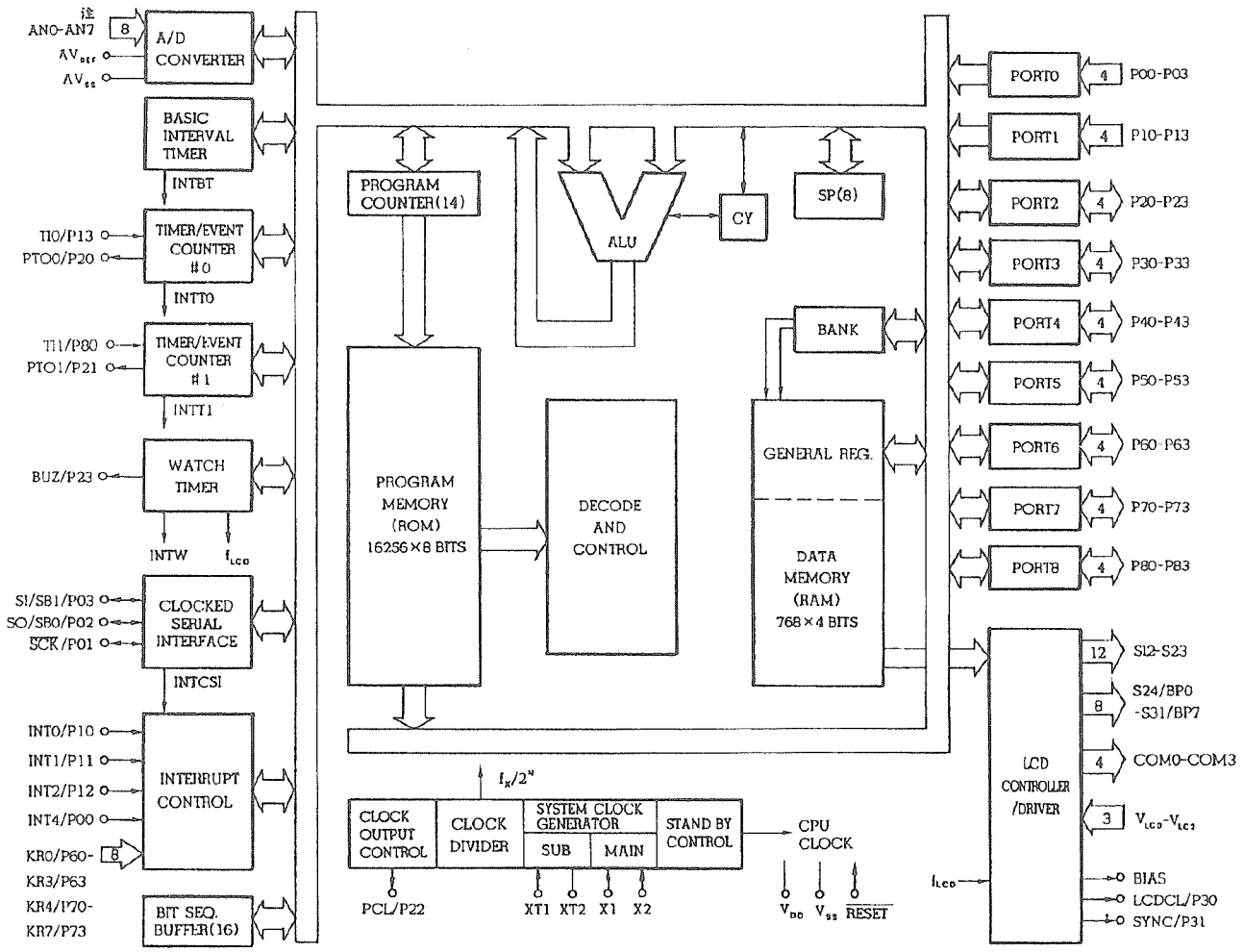


Fig. 14-7



■ System Microcomputer P.C. Board

- IC701 (SYSTEM CONTROLLER)
- :  $\mu$ PD5336GC-070



注 AN6/P82, AN7/P83

Fig. 14-8

# 16. Electrical Parts List

## Tuner P.C. Board Parts List

BLOCK NO. 01		BLOCK NO. 02		
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
BP 01	VBPAM38-005	B.PASS FILTER		
C 001	QCS11HJ-200	C.CAPACITOR	20PF 5% 50V	
C 002	QCS11HJ-100	C.CAPACITOR	1000PF 10% 50V	
C 003	QCS11HJ-100	C.CAPACITOR	10PF 5% 50V	
C 004	QCS11HJ-100	C.CAPACITOR	10PF 5% 50V	
C 005	QCS11HJ-200	C.CAPACITOR	20PF 5% 50V	
C 006	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 007	QCS11HJ-200	C.CAPACITOR	20PF 5% 50V	
C 008	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 009	QCSB1HK-8R2Y	C.CAPACITOR	8.2PF 10% 50V	
C 010	QCSB1HK-1R5Y	C.CAPACITOR	1.5PF 20% 50V	
C 011	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 012	QCSB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C 013	QCC11EM-223V	C.CAPACITOR	.022MF 20% 25V	
C 015	QCSB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
C 016	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 017	QCSB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 018	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 019	QCSB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C 020	QCT30UJ-6R8Y	C.CAPACITOR	6.8PF 5% 50V	
C 021	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
C 022	QFP31HG-4712M	PP.CAPACITOR	470PF 2% 50V	
C 025	QCSB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 029	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 030	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 031	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 032	QET41CM-106	E.CAPACITOR	10MF 20% 16V	
C 033	QET41AM-227	E.CAPACITOR	220PF 20% 10V	
C 034	QCSB1HK-472Y	C.CAPACITOR	4700PF 20% 16V	
C 036	QET41CM-226	E.CAPACITOR	22MF 20% 16V	
C 037	QCSB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 038	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 039	QCFB1HZ-473Y	C.CAPACITOR	.047MF +80: -20%	
C 040	QCFB1HZ-473Y	C.CAPACITOR	.047MF +80: -20%	
C 041	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C 042	QCSB1HK-821Y	C.CAPACITOR	820PF 10% 50V	
C 043	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C 044	QETC1HM-2252N	E.CAPACITOR	2.2MF 20% 50V	
C 045	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C 046	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
C 047	QCC11EK-1532V	C.CAPACITOR	.015MF 10% 25V	
C 048	QCC11EK-1532V	C.CAPACITOR	.015MF 10% 25V	
C 049	QEK41HM-104	E.CAPACITOR	.10MF 20% 50V	
C 050	QETC1HM-1042N	E.CAPACITOR	1.0MF 20% 50V	
C 051	QETC1HM-3352N	E.CAPACITOR	3.3MF 20% 50V	
C 053	QCS11HJ-150	C.CAPACITOR	15PF 5% 50V	
C 058	QFV41HJ-224	FILM CAPACITOR	.22MF 5% 50V	
C 059	QETC1HM-3352N	E.CAPACITOR	3.3MF 20% 50V	
C 060	QCSB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 061	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
C 062	QCS11HJ-100	C.CAPACITOR	10PF 5% 50V	
C 063	QCFB1HZ-104Y	C.CAPACITOR	.10MF +80: -20%	
C 064	QCS11HJ-270	C.CAPACITOR	27PF 5% 50V	
C 066	QCSB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C 067	QCSB1HK-101Y	C.CAPACITOR	100PF 10% 50V	

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 048	QCSB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C 049	QCSB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C 050	QCSB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
CF 01	VCF2L3B-108Z	CERAMIC FILTER		
CF 02	VCF2L3B-108Z	CERAMIC FILTER		
CF 03	VCF122Z-115Z	CERA LOCK		
CF 04	CS8456F15	CERA LOCK		
CN 01	QMV5011-005	CONNECTOR	TUNER TO MAIN	
CN 02	VCMC063-005	CONNECTOR	TO MICON	
D 001	SVC2035SPA-AB-AL	VARI CAP		
D 002	SVC2035SPA-AB-AL	VARI CAP		
D 003	1SS133	SI DIODE		
D 004	1SS133	SI DIODE		
D 005	1SS133	SI DIODE		
D 006	1SS133	SI DIODE		
D 007	1SS133	SI DIODE		
D 008	SVC346S2-AA	VARI CAP		
IC 01	TAT358P(N)	IC		
IC 02	LA1832	IC		
IC 03	TC9216P	IC		
L 001	VQF1B20-017	OSC COIL	FM OSC	
L 002	VQF1B20-015	OSC COIL	FM RF	
L 003	VQB808M-504E	BAR ANTENA	MW RF	
L 004	VQW7U02-407S	OSC COIL (MW)	MW OSC	
L 007	VQF0018-4R7	INDUCTOR		
L 008	VQF0018-221	INDUCTOR		
L 009	VQF0018-4R7	INDUCTOR		
L 012	VQC1505-001	RF COIL	(=BC38)	
Q 001	2SC1923	TRANSISTOR		
Q 007	2SC2668(O)	TRANSISTOR		
Q 008	BA1A4P	TRANSISTOR		
Q 009	DTA1144YS	TRANSISTOR		
Q 010	DTA1144YS	TRANSISTOR		
Q 011	2SA1175	TRANSISTOR		
Q 012	2SC2785	TRANSISTOR		
Q 013	2SC2785	TRANSISTOR		
R 001	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 002	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 003	GRD161J-4R7	CARBON RESISTOR	4.7 5% 1/6W	
R 004	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 005	GRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
R 006	GRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 007	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 008	GRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 009	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 010	GRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 013	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 015	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 017	GRD161J-560	CARBON RESISTOR	56 5% 1/6W	
R 022	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 023	GRD161J-752	CARBON RESISTOR	7.5K 5% 1/6W	
R 024	GRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 025	GRD161J-394	CARBON RESISTOR	390K 5% 1/6W	
R 026	GRD161J-390	CARBON RESISTOR	39 5% 1/6W	

■ Main P.C. Board Parts List

BLOCK NO. 01		BLOCK NO. 02		
A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 027	QRD161J-331	CARBON RESISTOR	330 5X 1/6W	
R 028	QRD161J-102	CARBON RESISTOR	1.0K 5X 1/6W	
R 029	QRD161J-103	CARBON RESISTOR	10K 5X 1/6W	
R 030	QRD161J-103	CARBON RESISTOR	10K 5X 1/6W	
R 031	QRD161J-183	CARBON RESISTOR	18K 5X 1/6W	
R 032	QRD161J-302	CARBON RESISTOR	3.0K 5X 1/6W	
R 033	QRD161J-103	CARBON RESISTOR	10K 5X 1/6W	
R 034	QRD161J-273	CARBON RESISTOR	27K 5X 1/6W	
R 035	QRD161J-273	CARBON RESISTOR	27K 5X 1/6W	
R 036	QRD161J-322	CARBON RESISTOR	3.9K 5X 1/6W	
R 037	QRD161J-503	CARBON RESISTOR	56K 5X 1/6W	
R 039	QRD161J-331	CARBON RESISTOR	330 5X 1/6W	
R 040	QRD161J-102	CARBON RESISTOR	1.0K 5X 1/6W	
R 041	QRD161J-102	CARBON RESISTOR	1.0K 5X 1/6W	
R 042	QRD161J-222	CARBON RESISTOR	2.2K 5X 1/6W	
R 044	QRD161J-103	CARBON RESISTOR	10K 5X 1/6W	
R 048	QRD161J-502	CARBON RESISTOR	5.6K 5X 1/6W	
R 049	QRD161J-102	CARBON RESISTOR	1.0K 5X 1/6W	
R 052	QRD161J-222	CARBON RESISTOR	2.2K 5X 1/6W	
R 053	QRD161J-471	CARBON RESISTOR	470 5X 1/6W	
R 054	QRD161J-222	CARBON RESISTOR	2.2K 5X 1/6W	
R 055	QRD161J-472	CARBON RESISTOR	4.7K 5X 1/6W	
R 056	QRD161J-332	CARBON RESISTOR	3.3K 5X 1/6W	
R 057	QRD161J-102	CARBON RESISTOR	1.0K 5X 1/6W	
R 058	QRD161J-473	CARBON RESISTOR	47K 5X 1/6W	
R 076	QRD161J-222	CARBON RESISTOR	2.2K 5X 1/6W	
R 077	QRD161J-222	CARBON RESISTOR	2.2K 5X 1/6W	
R 096	QRD161J-363	CARBON RESISTOR	56K 5X 1/6W	
T 001	VQT7F12-110	IFT	FM IF	
T 002	VQT7A21-107	IFT		
TC 02	QAT3722-100M	T-CAPACITOR	MW RF	
TP 01	VMZ0015-002	POST PIN	TO ROD ANT	
X 001	V472124-A0	CRYSTAL		

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 101	QET41AM-107	E-CAPACITOR	100MF 20X 10V	
C 102	QCB1HK-271Y	C-CAPACITOR	270PF 10X 50V	
C 103	QET41AM-476	E-CAPACITOR	BS	
C 104	QFV41HJ-104ZM	FILM CAPACITOR	-10MF 5X 50V	
C 105	QET41AM-108	E-CAPACITOR	OUT CUP	
C 107	QER41EM-475VM	E-CAPACITOR	OUT CUP	
C 121	QCB1HK-151Y	C-CAPACITOR	150PF 10X 50V	
C 122	QFV41HJ-823	FILM CAPACITOR	BOTTOM TYPE	
C 123	QFV41HJ-823	FILM CAPACITOR	BOTTOM TYPE	
C 141	QER41EM-475VM	E-CAPACITOR	4.7MF 20X 25V	
C 142	QCB1HK-151Y	C-CAPACITOR	150PF 10X 50V	
C 143	QER41EM-475VM	E-CAPACITOR	4.7MF 20X 25V	
C 151	QCB1HK-102Y	C-CAPACITOR	1000PF 10X 50V	
C 161	QER41EM-475VM	E-CAPACITOR	4.7MF 20X 25V	
C 163	QFV41HJ-102	M-CAPACITOR	1000PF 5X 50V	
C 191	QFV11HJ-184ZM	FILM CAPACITOR	7599	
C 192	QER41EM-475VM	E-CAPACITOR	4.7MF 20X 25V	
C 193	QEK41HM-474	E-CAPACITOR	7599	
C 201	QET41AM-107	E-CAPACITOR	100MF 20X 10V	
C 202	QCB1HK-271Y	C-CAPACITOR	270PF 10X 50V	
C 203	QET41AM-476	E-CAPACITOR	BS	
C 204	QFV41HJ-104ZM	FILM CAPACITOR	-10MF 5X 50V	
C 205	QET41AM-108	E-CAPACITOR	OUT CUP	
C 207	QER41EM-475VM	E-CAPACITOR	OUT CUP	
C 221	QCB1HK-151Y	C-CAPACITOR	150PF 10X 50V	
C 222	QFV41HJ-823	FILM CAPACITOR	BOTTOM TYPE	
C 223	QFV41HJ-823	FILM CAPACITOR	BOTTOM TYPE	
C 241	QER41EM-475VM	E-CAPACITOR	4.7MF 20X 25V	
C 242	QCB1HK-151Y	C-CAPACITOR	150PF 10X 50V	
C 243	QER41EM-475VM	E-CAPACITOR	4.7MF 20X 25V	
C 251	QCB1HK-102Y	C-CAPACITOR	1000PF 10X 50V	
C 261	QER41EM-475VM	E-CAPACITOR	4.7MF 20X 25V	
C 263	QFV41HJ-102	M-CAPACITOR	1000PF 5X 50V	
C 291	QFV11HJ-184ZM	FILM CAPACITOR	7599	
C 292	QER41EM-475VM	E-CAPACITOR	4.7MF 20X 25V	
C 293	QEK41HM-474	E-CAPACITOR	7599	
C 302	QET41AM-227	E-CAPACITOR	RF	
C 303	QET41AM-227	E-CAPACITOR	SW	
C 321	QET41AM-476	E-CAPACITOR	47MF 20X 10V	
C 322	QET41AM-476	E-CAPACITOR	47MF 20X 10V	
C 341	QET41AM-476	E-CAPACITOR	47MF 20X 10V	
C 342	QEK61AM-107ZM	E-CAPACITOR	100MF 20X 10V	
C 351	QEK41CM-226	E-CAPACITOR	22MF 20X 16V	
C 352	QEK41EM-475	E-CAPACITOR	4.7MF 20X 25V	
C 353	QEK41EM-475	E-CAPACITOR	4.7MF 20X 25V	
C 361	QETM1EM-338	E-CAPACITOR	DECUP	
C 363	QET41AM-476	E-CAPACITOR	DC	
C 364	QET41AM-476	E-CAPACITOR	47MF 20X 10V	
C 365	QEK41EM-475	E-CAPACITOR	4.7MF 20X 25V	
C 366	QET41AM-107	E-CAPACITOR	VCC	
C 367	QET41AM-476	E-CAPACITOR	V6	
C 368	QET41AM-476	E-CAPACITOR	VOL	
C 369	QEK41EM-475	E-CAPACITOR	DC	
C 370	QEK61AM-107ZM	E-CAPACITOR	VOL BUFF	
C 381	QEK61AM-104ZM	AL E-CAPACITOR	-10MF 20X 50V	U

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A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 382	QCBB1HK-151Y	CER-CAPACITOR-S	150PF 10% 50V	U
C 383	QEK61AM-1072M	AL E-CAPACITOR	100MF 20% 10V	U
C 384	QEK61AM-1042N	AL E-CAPACITOR	.10MF 20% 50V	U
C 391	QEK41HM-474	E-CAPACITOR	.47MF 20% 50V	
C 392	QEK41HM-224	E-CAPACITOR	BOTTOM TYPE	
C 901	QEK41HM-226	E-CAPACITOR	22MF 20% 16V	
C 902	QEK41CM-106	E-CAPACITOR	10MF 20% 16V	
C 903	QEK41CM-226	E-CAPACITOR	22MF 20% 16V	
C 904	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V	
C 911	QEK61AM-1072M	E-CAPACITOR	100MF 20% 10V	
C 912	QCVB1CN-103Y	C-CAPACITOR	DECAP	
C 913	QCBB1HK-561Y	C-CAPACITOR	NOISE	
C 914	QEK41HM-105	E-CAPACITOR	PULSE	
C 915	QET41AM-227	E-CAPACITOR	P SW	
C 916	QET41CM-106	E-CAPACITOR	10MF 20% 16V	
C 921	QEK61AM-1072M	E-CAPACITOR	100MF 20% 10V	
C 924	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V	
C 925	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V	
C 991	QCF11HP-223	C-CAPACITOR	.022MF +100: -0%	
C 992	QCF11HP-223	C-CAPACITOR	.022MF +100: -0%	
C 993	QCF11HP-223	C-CAPACITOR	.022MF +100: -0%	
C 994	QCF11HP-223	C-CAPACITOR	.022MF +100: -0%	
C 995	QET41EM-476	E-CAPACITOR	AC IN	
CA101	QCBB1HK-561Y	C-CAPACITOR	560PF 10% 50V	
CA102	QCBB1HK-561Y	C-CAPACITOR	560PF 10% 50V	
CA103	QEK61AM-1072M	E-CAPACITOR	100MF 20% 10V	
CA104	QFV41HJ-123ZM	FILM CAPACITOR	BOTTOM TYPE	
CA105	QEK41HM-105	E-CAPACITOR	1.0MF 20% 50V	
CA106	QCBB1HK-151Y	C-CAPACITOR	150PF 10% 50V	
CA107	QCVB1CM-822Y	C-CAPACITOR	8200PF 20% 16V	
CA121	QEK41EM-475	E-CAPACITOR	4.7MF 20% 25V	
CA126	QGS11HJ-220	C-CAPACITOR	22PF 5% 50V	
CA127	QEK41CM-226	E-CAPACITOR	22MF 20% 16V	
CA129	QFV41HJ-333	FILM CAPACITOR	BOTTOM TYPE	
CA130	QFV41HJ-333	FILM CAPACITOR	BOTTOM TYPE	
CA131	QFV41HJ-1042M	FILM CAPACITOR	.10MF 5% 50V	
CA132	QEK41EM-475	E-CAPACITOR	4.7MF 20% 25V	
CA133	QCBB1HK-221Y	C-CAPACITOR	220PF 10% 50V	
CA134	QCC31EM-1832V	C-CAPACITOR	.018MF 20% 25V	
CA141	QCBB1HK-331Y	C-CAPACITOR	330PF 10% 50V	
CA201	QCBB1HK-561Y	C-CAPACITOR	560PF 10% 50V	
CA202	QCBB1HK-561Y	C-CAPACITOR	560PF 10% 50V	
CA203	QEK61AM-1072M	E-CAPACITOR	100MF 20% 10V	
CA204	QFV41HJ-123ZM	FILM CAPACITOR	BOTTOM TYPE	
CA205	QEK41HM-105	E-CAPACITOR	1.0MF 20% 50V	
CA206	QCBB1HK-151Y	C-CAPACITOR	150PF 10% 50V	
CA221	QEK41EM-475	E-CAPACITOR	8200PF 20% 16V	
CA226	QGS11HJ-220	C-CAPACITOR	4.7MF 20% 25V	
CA227	QEK41CM-226	E-CAPACITOR	22PF 5% 50V	
CA229	QFV41HJ-333	FILM CAPACITOR	22MF 20% 16V	
CA230	QFV41HJ-333	FILM CAPACITOR	BOTTOM TYPE	
CA231	QFV41HJ-1042M	FILM CAPACITOR	.10MF 5% 50V	
CA232	QEK41EM-475	E-CAPACITOR	4.7MF 20% 25V	
CA233	QCBB1HK-221Y	C-CAPACITOR	220PF 10% 50V	

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A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CA234	QCC31EM-1832V	C-CAPACITOR	.018MF 20% 25V	
CA241	QCBB1HK-331Y	C-CAPACITOR	330PF 10% 50V	
CA301	QEK61AM-1072M	E-CAPACITOR	100MF 20% 10V	
CA302	QET41AM-476	E-CAPACITOR	47MF 20% 10V	
CA303	QEK41CM-226	E-CAPACITOR	22MF 20% 16V	
CA304	QEK41HM-105	E-CAPACITOR	1.0MF 20% 50V	
CA315	QET41CM-106	E-CAPACITOR	10MF 20% 16V	
CA321	QET41AM-476	E-CAPACITOR	47MF 20% 10V	
CA322	QEK41CM-476	E-CAPACITOR	47MF 20% 16V	
CA323	QET41CM-106	E-CAPACITOR	10MF 20% 16V	
CA324	QEK61EM-3352M	E-CAPACITOR	3.3MF 20% 25V	
CA341	QEK41CM-106	E-CAPACITOR	10MF 20% 16V	
CA342	QFLC1HJ-4732M	M-CAPACITOR	BOTTOM TYPE	
CA343	QFLC1HJ-1032M	M-CAPACITOR	BOTTOM TYPE	
CA345	QFP32AJ-1232M	PP-CAPACITOR	.012MF 5% 100V	
CA347	QFP31HJ-1022M	PP-CAPACITOR	1000PF 5% 50V	
CA348	QFN41HJ-222	M-CAPACITOR	2200PF 5% 50V	
CA349	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V	
CA350	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V	
CA351	QCS11HJ-101	C-CAPACITOR	100PF 5% 50V	
CA352	QCS11HJ-181	C-CAPACITOR	180PF 5% 50V	
CA353	QFV41HJ-474	FILM CAPACITOR	.47MF 5% 50V	
CNA31	VMCO040-003	CONNECTOR	TO PLAY HEAD	
CNA32	VMCO040-007	CONNECTOR	TO R/P HEAD	
CNA33	VMCO075-010N	CONNECTOR	TO MECHA SW	
CNA35	VMCO309-P10	PWB CONNECTOR	TO MAIN	
CNA36	VMCO309-P10	PWB CONNECTOR	TO MAIN	
CN301	VMCO041-003	CONNECTOR	TEST POINT	
CN302	EMV7112-005R	SOCKET	CD	
CN303	VMCO310-S10	CONNECTOR	MAIN-PRE	
CN304	VMCO310-S10	CONNECTOR	MAIN-PRE	
CN305	VMCO314-S12	CONNECTOR	MAIN-U-COM	
CN306	VMCO314-S14	CONNECTOR	MAIN-U-COM	
CN705	VMCO163-R13	CONNECTOR	TO UCOM	
CN991	VMCO041-009	CONNECTOR	TRANS-MAIN	
CN992	VMCO041-004	CONNECTOR	TRANS-BATT	
CN993	VMCO229-P04	CONNECTOR	SPEAKER	
CS307	QEK41CM-476	E-CAPACITOR	REM DECUP	
CS308	QCVB1CN-103Y	C-CAPACITOR	M.NOIS	
CS312	QCFB1HZ-223	C-CAPACITOR	STB LED	
CS313	QCBB1HK-681Y	C-CAPACITOR	REM OUT	
D 304	MA700A	S.B.DIODE	(FOR B.U)	
D 361	MTZ5.1JB	ZENER DIODE		U
D 381	1SS133	SI.DIODE		U
D 382	1SS133	SI.DIODE		
D 391	MA700A	S.B.DIODE		
D 392	MA700A	S.B.DIODE		
D 393	1SS133	SI DIODE		
D 901	MTZ5.1JC	ZENER DIODE		
D 911	MA6075(M)	ZENER DIODE		
D 912	1SS133	SI DIODE		
D 913	1SS133	SI DIODE		
D 914	1SR35-100	SI DIODE		
D 921	RD5.6JSAB2-T2	ZENER DIODE		
D 922	1SS133	SI DIODE		

BLOCK NO. 02

BLOCK NO. 02

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
QA323	25C1740S(R,S)	TRANSISTOR	R MUTE DRIVE	
QA341	25C945L(P,Q)	TRANSISTOR		
QA342	25C2785	TRANSISTOR		
QA343	25C1740S(R,S)	TRANSISTOR		
QA344	25C1740S(R,S)	TRANSISTOR		
QA345	25C1740S(R,S)	TRANSISTOR		
QA346	25C1740S(R,S)	TRANSISTOR		
QA361	25A1175	TRANSISTOR		
QA362	DTC114YS	TRANSISTOR		
QS302	DTC114TS	TRANSISTOR	P LED SW	
R 101	GRD161J-271	CARBON RESISTOR	270 5% 1/6W	
R 102	GRD161J-282	CARBON RESISTOR	2.2 5% 1/6W	
R 103	GRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R 121	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 122	GRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 123	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 124	GRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 141	GRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 142	GRD161J-363	CARBON RESISTOR	36K 5% 1/6W	
R 143	GRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 151	GRD161J-363	CARBON RESISTOR	36K 5% 1/6W	
R 152	GRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 153	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 154	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 155	GRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 157	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 158	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 160	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 161	GRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R 162	GRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 181	GRD161J-623	C-RESISTOR	62K 5% 1/6W	
R 191	GRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
R 192	GRD161J-242	CARBON RESISTOR	2.4K 5% 1/6W	
R 193	GRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 194	GRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 195	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 196	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 201	GRD161J-271	CARBON RESISTOR	270 5% 1/6W	
R 202	GRD161J-282	CARBON RESISTOR	2.2 5% 1/6W	
R 203	GRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R 221	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 222	GRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 223	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 224	GRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 241	GRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 242	GRD161J-363	CARBON RESISTOR	36K 5% 1/6W	
R 243	GRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 251	GRD161J-363	CARBON RESISTOR	36K 5% 1/6W	
R 252	GRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 253	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 254	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 255	GRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 257	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 258	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 260	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
D 923	1SS133	SI DIODE		
D 991	1N5401TM	SI DIODE		
D 992	1N5401TM	SI DIODE		
D 993	1N5401TM	SI DIODE		
D 994	1N5401TM	SI DIODE		
DA121	MA165	SI DIODE		
DA122	MA165	SI DIODE		
DA221	MA165	SI DIODE		
DA222	MA165	SI DIODE		
DS301	SLR-305MCA47	LED I/M	POWER	
DS302	SL2-981C09-16	LED I/M	ST-BY	
DS303	MA165	SI DIODE	ST-BY	
DS304	MA165	SI DIODE	PB AMP	
ICA31	LA3246	IC		
ICA32	LA3220	IC		
ICA33	BA3126N	IC	HEAD SW	
ICS31	SBX1785-52A	RM RECEIVER		
IC301	BA15218N	IC		
IC302	CXA1792S	IC	AMP	
IC303	BA15218N	IC	AMP	
IC304	TAB229K	IC	POWER AMP	
IC305	BA10358N	IC	VOL BUFF	
J 301	VMJ4024-001	JACK	HP JACK	
J 302	QMSL10-0A0	MIC JACK		U
J 991	QMC0263-004BS	AC SOCKET		U
J 991	QMC251-V01	AC SOCKET		C,J
LA341	VQH1009-026	OSC COIL	COIL	
Q 151	25C1740S(R,S)	TRANSISTOR		
Q 152	25C2001(L,K)	TRANSISTOR		
Q 153	25D1302	TRANSISTOR		
Q 191	25D1302	TRANSISTOR		
Q 251	25C1740S(R,S)	TRANSISTOR		
Q 252	25C2001(L,K)	TRANSISTOR		
Q 253	25D1302	TRANSISTOR		
Q 291	25D1302	TRANSISTOR		
Q 351	25A1175	TRANSISTOR		
Q 381	25C2785	SI TRANSISTOR	MIC AMP	U
Q 382	25C2785	SI TRANSISTOR	MIC AMP	U
Q 391	25C1740S(R,S)	TRANSISTOR		
Q 901	25A1175	TRANSISTOR	TUNER SW	
Q 903	25B772(Q,P)	TRANSISTOR	CD REG	
Q 904	25C1740S(R,S)	TRANSISTOR		
Q 911	25B772(Q,P)	TRANSISTOR	SW 8V REG	
Q 912	25C1740S(R,S)	TRANSISTOR		
Q 913	25C1740S(R,S)	TRANSISTOR		
Q 914	25C1740S(R,S)	TRANSISTOR		
Q 915	25A952(L,K)	TRANSISTOR	POWER SW	
Q 921	25B562(C)	TRANSISTOR	US 6V REG	
Q 922	25C1740S(R,S)	TRANSISTOR		
GA121	25C1740S(R,S)	TRANSISTOR	HDUB EQ	
GA122	25D1302	TRANSISTOR	REC MUTE	
GA221	25C1740S(R,S)	TRANSISTOR	HDUB EQ	
GA222	25D1302	TRANSISTOR	REC MUTE	
QA321	DTC114YS	TRANSISTOR	ALC SW	
QA322	25C1740S(R,S)	TRANSISTOR	DUB SW	

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 921	QRD161J-564	CARBON RESISTOR	560K 5% 1/6W	
R 922	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 923	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R 924	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
R 925	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 926	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 927	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 928	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
R 991	QRD161J-473	CARBON RESISTOR	AC IN	
R 992	QRD161J-103	CARBON RESISTOR	AC IN	
RA103	QRD161J-560	CARBON RESISTOR	56 5% 1/6W	
RA104	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
RA106	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RA107	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RA108	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
RA111	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA121	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RA122	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
RA123	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
RA124	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RA125	QRD161J-560	CARBON RESISTOR	56 5% 1/6W	
RA126	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
RA127	QRD161J-820	CARBON RESISTOR	82 5% 1/6W	
RA128	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA129	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA130	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
RA131	QRD161J-362	CARBON RESISTOR	3.6K 5% 1/6W	
RA132	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RA133	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA141	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RA203	QRD161J-560	CARBON RESISTOR	56 5% 1/6W	
RA204	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
RA206	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RA207	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RA208	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
RA211	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA221	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RA222	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
RA223	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
RA224	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RA225	QRD161J-560	CARBON RESISTOR	56 5% 1/6W	
RA226	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
RA227	QRD161J-820	CARBON RESISTOR	82 5% 1/6W	
RA228	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA229	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA230	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
RA231	QRD161J-362	CARBON RESISTOR	3.6K 5% 1/6W	
RA232	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RA233	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA241	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RA301	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
RA303	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
RA304	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RA305	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RA315	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 261	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R 262	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 281	QRD161J-623	C. RESISTOR	62K 5% 1/6W	U
R 291	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
R 292	QRD161J-242	CARBON RESISTOR	2.4K 5% 1/6W	
R 293	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 294	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 295	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 296	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 321	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 322	QRD161J-912	CARBON RESISTOR	9.1K 5% 1/6W	
R 323	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 341	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 342	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 343	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
R 344	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 345	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
R 351	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 365	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 366	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 367	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 368	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
R 369	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R 370	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 371	QRD161J-164YT	CARBON RESISTOR	160K 5% 1/6W	
R 372	QRD161J-101	CARBON RESISTOR	VOL BUFF	
R 373	QRD161J-102	CARBON RESISTOR	VOL BUFF	
R 374	QRD161J-102	CARBON RESISTOR	VOL BUFF	
R 375	QRD161J-222	CARBON RESISTOR	VOL BUFF	
R 376	QRD167J-332	CARBON RESISTOR	TRE BUFF	
R 381	QRD167J-682	C. RESISTOR	6.8K 5% 1/6W	U
R 382	QRD161J-564	C. RESISTOR	560K 5% 1/6W	U
R 383	QRD167J-332	C. RESISTOR	3.3K 5% 1/6W	U
R 384	QRD161J-820	C. RESISTOR	82 5% 1/6W	U
R 385	QRD161J-681	C. RESISTOR	680 5% 1/6W	U
R 386	QRD161J-472	C. RESISTOR	4.7K 5% 1/6W	U
R 391	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 392	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
R 393	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 394	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 396	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
R 397	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 901	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R 904	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 905	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 906	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
R 911	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 912	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 913	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 914	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 916	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 917	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 918	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 919	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 920	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	

■ System Microcomputer P.C. Board Parts List

BLOCK NO. 023

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 704	QEK41HM-105	E. CAPACITOR	1.0MF 20% 50V	
C 705	QEK41HM-105	E. CAPACITOR	1.0MF 20% 50V	
C 706	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V	
C 707	QCVB1CN-103Y	C. CAPACITOR	1000PF 10% 50V	
C 708	QCSB1HJ-620Y	C. CAPACITOR	62PF 5% 50V	
C 709	QCT30CH-180Y	C. CAPACITOR	18PF 5% 50V	
C 710	QCT30CH-180Y	C. CAPACITOR	18PF 5% 50V	
C 711	QCS11HJ-560	C. CAPACITOR	56PF 5% 50V	
C 712	QCS11HJ-560	C. CAPACITOR	56PF 5% 50V	
C 713	QCB1HK-102Y	C. CAPACITOR	1000PF 10% 50V	
C 714	QCT30CH-200Y	C. CAPACITOR	20PF 5% 50V	
C 715	QCFB1H2-104Y	C. CAPACITOR	104PF 5% 50V	
C 716	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V	
C 717	QCVB1CN-103Y	C. CAPACITOR	150PF 10% 50V	
C 723	QEK40JM-227	E. CAPACITOR	220MF 20% 6.3V	
C 724	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V	
C 725	QEK41CN-226	E. CAPACITOR	22MF 20% 16V	
C 726	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V	
C 727	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V	
C 730	QCB1HK-151Y	C. CAPACITOR	150PF 10% 50V	
CN701	VMC0314-P12	CONNECTOR	MICOM/MAIN	
CN702	VMC0314-P14	CONNECTOR	MICOM/MAIN	
CN703	VMC0163-009	CONNECTOR	TO CD	
CN704	VMC0163-R13	CONNECTOR	TO KEY SW	
CN706	VMC0163-007	CONNECTOR	MOTOR/CD SW	
CN707	VMC0075-R02N	CONNECTOR		
D 705	MTZ5.6JA	ZENER DIODE		
D 707	MA165	SI DIODE		
D 708	MA165	SI DIODE		
IC701	UPD75336GC-073	IC	SYSTEM MICOM	
IC702	PST600H-T	IC	RESET IC	
L 701	VQP0033-100Z	INDUCTOR		
L 702	VQZ0048-009	INDUCTOR		
L 703	VQP0018-4R7	INDUCTOR		
L 704	VQP0018-4R7	INDUCTOR		
LCD01	VGL1156-001	LCD		
Q 701	DFC114TS	TRANSISTOR	AC/DC	
Q 703	2SC1740S(R,S)	TRANSISTOR	BUP SW	
Q 704	2SA1175	TRANSISTOR	CLK SHIFT	
Q 705	2SA1175	TRANSISTOR	CLK SHIFT	
Q 706	2SC1740S(R,S)	TRANSISTOR	REM SW	
Q 707	2SA1175	TRANSISTOR		
R 703	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 704	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 705	QRD161J-104	CARBON RESISTOR	TRE	
R 706	QRD161J-104	CARBON RESISTOR	VOL	
R 707	QRD161J-472	CARBON RESISTOR	MT1	
R 708	QRD161J-472	CARBON RESISTOR	MT0	
R 709	QRD161J-103	CARBON RESISTOR	BUP	
R 710	QRD161J-222	CARBON RESISTOR	BEAT	
R 711	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 712	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 713	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 716	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 717	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	

BLOCK NO. 024

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
RA316	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RA317	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RA321	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
RA322	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
RA323	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RA324	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA325	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA326	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA327	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RA341	QRD141J-330S	CARBON RESISTOR	33 5% 1/4W	
RA342	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RA343	QRD161J-399	CARBON RESISTOR	3.9 5% 1/6W	
RA344	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RA345	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RA346	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RA349	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RA350	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RA351	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RA352	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RA354	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA355	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA361	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RA362	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RA371	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RA373	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RS301	QRD161J-152	CARBON RESISTOR	RUDDER	
RS302	QRD161J-182	CARBON RESISTOR		
RS303	QRD161J-272	CARBON RESISTOR		
RS304	QRD161J-392	CARBON RESISTOR		
RS305	QRD167J-682	CARBON RESISTOR		
RS306	QRD161J-123	CARBON RESISTOR		
RS307	QRD161J-393	CARBON RESISTOR		
RS308	QRD167J-332	CARBON RESISTOR		
RS309	QRD161J-272	CARBON RESISTOR		
RS310	QRD161J-392	CARBON RESISTOR		
RS311	QRD167J-682	CARBON RESISTOR		
RS312	QRD161J-123	CARBON RESISTOR		
RS313	QRD161J-393	CARBON RESISTOR		
RS322	QRD161J-361	CARBON RESISTOR		
S 701	GSQ1A11-V04Z	TACT SWITCH	LED+B	
S 702	GSQ1A11-V04Z	TACT SWITCH	POWER	
S 703	GSQ1A11-V04Z	TACT SWITCH	TUNER	
S 704	GSQ1A11-V04Z	TACT SWITCH	CLOCK	
S 705	GSQ1A11-V04Z	TACT SWITCH	TIMER	
S 706	GSQ1A11-V04Z	TACT SWITCH	S. BASS	
S 707	GSQ1A11-V04Z	TACT SWITCH	DOWN	
S 708	GSQ1A11-V04Z	TACT SWITCH	STOP	
S 709	GSQ1A11-V04Z	TACT SWITCH	PLAY	
S 710	GSQ1A11-V04Z	TACT SWITCH	UP	
S 711	GSQ1A11-V04Z	TACT SWITCH	EJECT	
S 712	GSQ1A11-V04Z	TACT SWITCH	TOUR	
S 713	GSQ1A11-V04Z	TACT SWITCH	VOL-	
S 714	GSQ1A11-V04Z	TACT SWITCH	VOL+	
S 991	VMZ0068-001	SELECT SWITCH	DUBBLING SW	
VR4A1	QVPA603-203M	SEMI-V. RESISTOR	VOLTAGE SELECT	
VR4A1	QVPA603-203M	SEMI-V. RESISTOR	BIAS ADJ	
VR4A1	QVPA603-102	SEMI-V. RESISTOR	SPEED ADJ	

BLOCK NO. 05

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 775	GRD161J-102	CARBON RESISTOR	PBM	
R 776	GRD161J-472	CARBON RESISTOR	BIAS 2	
R 777	GRD161J-472	CARBON RESISTOR	BIAS 1	
R 779	GRD161J-472	CARBON RESISTOR	AHB	
R 780	GRD161J-103	CARBON RESISTOR	FTU	
R 781	GRD161J-233	CARBON RESISTOR	SMUTE	
R 782	GRD161J-333	CARBON RESISTOR	LCDB	
R 784	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 785	GRD161J-103	CARBON RESISTOR	RESET	
R 786	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 787	GRD161J-103	CARBON RESISTOR	PUR	
R 791	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 792	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 793	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 794	GRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
R 795	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 798	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 799	GRD161J-152	CARBON RESISTOR	DUBBING	
VC701	VCR0020-002	C NETWORK	CD BUS	
X 701	CSA4-19MG933	CERA LOCK	MAIN	
X 702	VCA5000-002	CRYSTAL	SUB	

BLOCK NO. 03

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 718	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 719	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 720	GRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
R 722	GRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 723	GRD161J-222	CARBON RESISTOR	KEY B	
R 724	GRD161J-222	CARBON RESISTOR	KEY A	
R 725	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 726	GRD161J-474	CARBON RESISTOR	470K 5% 1/6W	
R 727	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 728	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 729	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 730	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 731	GRD161J-104	CARBON RESISTOR	VERSION	
R 732	GRD161J-124	CARBON RESISTOR	VERSION BD021	
R 734	GRD161J-434YT	CARBON RESISTOR	CLOSE	
R 735	GRD161J-823	CARBON RESISTOR	OPEN	
R 736	GRD161J-224	CARBON RESISTOR	REST	
R 737	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 738	GRD161J-222	CARBON RESISTOR	KEY 2	
R 739	GRD161J-222	CARBON RESISTOR	KEY 1	
R 740	GRD161J-222	CARBON RESISTOR	CDM	
R 741	GRD161J-102	CARBON RESISTOR	CD	
R 742	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 743	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 744	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 745	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 746	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 747	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 748	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 749	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 750	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 751	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 752	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 753	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 754	GRD161J-102	CARBON RESISTOR	CD	
R 755	GRD161J-222	CARBON RESISTOR	RECB	
R 756	GRD161J-222	CARBON RESISTOR	HDUB	
R 757	GRD161J-222	CARBON RESISTOR	R/P	
R 758	GRD161J-103	CARBON RESISTOR	PERIODE	
R 759	GRD161J-472	CARBON RESISTOR	AC/DC	
R 760	GRD161J-103	CARBON RESISTOR	MPX	
R 761	GRD161J-103	CARBON RESISTOR	SD	
R 762	GRD161J-222	CARBON RESISTOR	REM	
R 763	GRD161J-222	CARBON RESISTOR	D I/O	
R 764	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 765	GRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 766	GRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 767	GRD161J-222	CARBON RESISTOR	CK	
R 768	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 769	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 770	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 771	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 772	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 773	GRD161J-222	CARBON RESISTOR	POWER	
R 774	GRD161J-472	CARBON RESISTOR	A/B	



CD Amplifier P.C. Board Parts List

BLOCK NO. 04111111

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 501	QCB81HK-821Y	C-CAPACITOR	820PF 10% 50V	
C 503	QCVB1CM-103Y	C-CAPACITOR	.010MF 20% 16V	
C 504	QET41CM-106	E-CAPACITOR	10MF 20% 16V	
C 511	QCSB1HJ-3R9	C-CAPACITOR	3.9PF 10% 50V	
C 512	QCS11HJ-270	C-CAPACITOR	27PF 5% 50V	
C 513	QFLC1HJ-1042M	M-CAPACITOR	.10MF 5% 50V	
C 521	QFLC1HJ-4722M	M-CAPACITOR	4700PF 5% 50V	
C 524	QCB81HK-331Y	C-CAPACITOR	330PF 10% 50V	
C 522	QFLC1HJ-4732M	M-CAPACITOR	.047MF 5% 50V	
C 523	QFV81HJ-154	FILM CAPACITOR	.15MF 5% 50V	
C 524	QEPG1EM-4752M	NP-E-CAPACITOR	4.7MF 20% 25V	
C 529	QET41AM-3362N	E-CAPACITOR	33MF 20% 10V	
C 531	QCVB1CM-822Y	C-CAPACITOR	8200PF 20% 16V	
C 541	QCB81HK-101Y	C-CAPACITOR	100PF 10% 50V	
C 542	QFLC1HJ-1032M	M-CAPACITOR	.010MF 5% 50V	
C 543	QFV41HJ-3932M	FILM CAPACITOR	.039MF 5% 50V	
C 545	QEN61HM-1052	NP-E-CAPACITOR	1.0MF 20% 50V	
C 546	QFLC1HJ-2232M	M-CAPACITOR	.022MF 5% 50V	
C 561	QET41AM-476	E-CAPACITOR	47MF 20% 10V	
C 562	QET41HM-475	E-CAPACITOR	4.7MF 20% 50V	
C 581	QET41AM-477	E-CAPACITOR	470MF 20% 10V	
C 582	QER41AM-107	E-CAPACITOR	100MF 20% 10V	
C 584	QER41AM-107	E-CAPACITOR	100MF 20% 10V	
C 591	VCPO012-1052	C-CAPACITOR		
C 592	VCPO012-1052	C-CAPACITOR		
C 593	QCC11EM-104V	C-CAPACITOR	.10MF 20% 25V	
C 599	QER41AM-107	E-CAPACITOR	100MF 20% 10V	
C 601	QCS11HJ-330	C-CAPACITOR	FOR CRYSTAL	
C 602	QCS11HJ-330	C-CAPACITOR	FOR CRYSTAL	
C 603	QFV81HJ-473	FILM CAPACITOR	.047MF 5% 50V	
C 604	QCC11EM-104V	C-CAPACITOR	.10MF 20% 25V	
C 605	QCVB1CM-103Y	C-CAPACITOR	.010MF 20% 16V	
C 606	QCC11EM-473V	C-CAPACITOR	.047MF 20% 25V	
C 611	QCS11HJ-101	C-CAPACITOR	100PF 5% 50V	
C 612	QFLC1HJ-1032M	M-CAPACITOR	.010MF 5% 50V	
C 613	QFLC1HJ-1032M	M-CAPACITOR	.010MF 5% 50V	
C 614	QFN41HJ-332	M-CAPACITOR	3300PF 5% 50V	
C 615	QFN41HJ-332	M-CAPACITOR	3300PF 5% 50V	
C 632	QET41AM-477	E-CAPACITOR	470MF 20% 10V	
C 651	QET41AM-107	E-CAPACITOR	100MF 20% 10V	
C 652	QET41CM-226	E-CAPACITOR	22MF 20% 16V	
C 661	QET41HM-475	E-CAPACITOR	4.7MF 20% 50V	
C 662	QCVB1CM-472Y	C-CAPACITOR	4700PF 20% 16V	
C 663	QCVB1CM-822Y	C-CAPACITOR	8200PF 20% 16V	
C 664	QCB81HK-820Y	C-CAPACITOR	82PF 10% 50V	
C 665	QER31EM-3352	E-CAPACITOR	3.3MF 20% 25V	
C 666	QCC11EM-123V	C-CAPACITOR	.012MF 20% 25V	
C 671	QET41HM-475	E-CAPACITOR	4.7MF 20% 50V	
C 672	QCVB1CM-472Y	C-CAPACITOR	4700PF 20% 16V	
C 673	QCVB1CM-822Y	C-CAPACITOR	8200PF 20% 16V	
C 674	QCB81HK-820Y	C-CAPACITOR	82PF 10% 50V	
C 675	QER31EM-3352	E-CAPACITOR	3.3MF 20% 25V	
C 676	QCC11EM-123V	C-CAPACITOR	.012MF 20% 25V	
CM501	VMC0272-015	CONNECTOR	TO PICK UP	
CM601	VMC0163-R09	CONNECTOR	TO CPU	

BLOCK NO. 04111111

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
IC501	TAB191F	IC	SERVO LSI	
IC502	BA6298FP	IC	POWER DRIVER	
IC601	TC9236AF	IC	1 CHIP PROCESSE	
IC603	TD41311A	IC	D/A CONVERTER	
IC604	BA15218N	IC	L.P.F	
L 601	VGP0033-100Z	INDUCTOR	B581	
Q 501	2SA952(L,K)	TRANSISTOR	5V REGULATOR	
Q 581	2SA952(L,K)	TRANSISTOR		
Q 591	2SA1309(RS)	TRANSISTOR		
Q 651	BA1A42-T	TRANSISTOR	EMPHASIS SW	
Q 661	BA1A42-T	TRANSISTOR		
Q 671	BA1A42-T	TRANSISTOR		
R 501	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
R 502	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 504	QRD161J-202	CARBON RESISTOR	2.0K 5% 1/6W	
R 505	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
R 506	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 511	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 512	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 513	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 514	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 515	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 516	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 517	QRD161J-202	CARBON RESISTOR	2.0K 5% 1/6W	
R 521	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
R 522	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 523	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 524	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 525	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 529	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 531	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 532	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 533	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R 541	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R 542	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 543	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 544	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 545	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 548	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R 549	QRD161J-821	CARBON RESISTOR	820 5% 1/6W	
R 550	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 551	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 552	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 553	QRD161J-821	CARBON RESISTOR	820 5% 1/6W	
R 555	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 559	QRD161J-125	CARBON RESISTOR	1.2M 5% 1/6W	
R 561	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 562	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 563	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 564	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 565	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
R 566	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 583	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 591	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 611	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	

■ Loading Motor P.C. Board Parts List

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
			BLOCK NO. 0911111111	
C 831	GEK61CM-107ZN	E-CAPACITOR	100MF 20% 16V	
C 837	GEK61CM-107ZN	E-CAPACITOR	100MF 20% 16V	
C 838	GEK61CM-107ZN	E-CAPACITOR	100MF 20% 16V	
CN505	VNC0163-R07	CONNECTOR	MICOM/TRAY SW	
D 812	ISR35-100	SI DIODE		
IC802	BA6208A	I-C(MONO-ANA)		
L 805	VQP0033-100Z	INDUCTOR		
L 806	VQP0033-100Z	INDUCTOR		
S 851	ESS1200-002	SWITCH	CD OP/CL SW	

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
			BLOCK NO. 0941111111	
R 612	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 613	GRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 614	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 615	GRD161J-225	CARBON RESISTOR	2.2M 5% 1/6W	
R 616	GRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
R 631	GRD161J-820	CARBON RESISTOR	82 5% 1/6W	
R 638	GRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 639	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 651	GRD161J-820	CARBON RESISTOR	82 5% 1/6W	
R 652	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 653	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 661	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 662	GRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 663	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 664	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 665	GRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 667	GRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 671	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 672	GRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 673	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 674	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 675	GRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 677	GRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
VR501	QVZ3523-154AZ	V-RESISTOR	TR OFFSET ADJ.	
X 601	CSA8.46MT	CERAMIC RESONA	8.46MHZ	