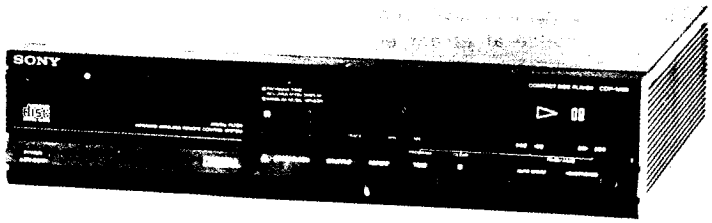
CDP-M30

SERVICE MANUAL

AEP Model
UK Model



COMPACT disc DIGITAL AUDIO

SPECIFICATIONS

COMPACT DISC PLAYER

System	Compact disc digital audio system
Disc	Compact disc
Laser	Semiconductor laser (λ = 780 nm)
Laser output	Max. 0.4 mW*
	* This ouput is the value measured at a distance of about 1.6 mm from the objective lens surface on the Optical Pick-up Block.
Spindle speed	200 r.p.m. to 500 r.p.m. (CLV)
Scan velocity	1.2 - 1.4 m/sec. Constant
Error correction	Sony Super Strategy Cross Interleave Reed Solomon Code
Number of channels	2
D-A conversion	16-bit linear
Frequency response	2 Hz – 20 kHz ($^{+0.5}_{-1.0}$ dB)
Signal to noise ratio	More than 95 dB
Dynamic range	More than 93 dB
Harmonic distortion	Less than 0.005% (at 1 kHz)
Channel separation	More than 90 dB
Wow and flutter	Below measurable limit (±0.001% W PEAK)

	Type	Output level	Load impedance
LINE OUT	Phono jack	2 V (50 kilohms)	more than 10 kilohms
HEADPHONES	Stereo jack	4.5 mW (32 ohms)	—

Note

This appliance conforms with EEC Directives 76/889 and 82/499 regarding interference suppression.

General

Power requirements
UK model: 240 V AC
AEP model: 220 V AC

Supplied accessories

Power cord	1
Connecting cord (2 phono plugs ⟷ 2 phono plugs)	1
Remote commander	1
R6 (size AA) batteries	2
Remote control cord	—
AC plug adaptor	1

REMOTE COMMANDER RM-D50

Remote control system	Infrared control
Power requirements	3 V DC with two IEC R6 (size AA) batteries
Dimensions	43 × 20 × 175 mm (w/h/d) ($1^{3}/_{4} \times {}^{13}/_{16} \times 7$ inches)
Weight	101 g (4 oz) including batteries

MICROFILM

COMPACT DISC PLAYER
SONY

AUD

BESKYTTELSE AF ØJNE MOD LASERSTRÅLING UNDER SERVICE

I dette apparat anvendes laserlys. Derfor skal nedenstående instruktioner nøje følges under service.

Følg iøvrigt instruktionerne i servicemanualen.

ADVARSEL!!

Under service må øjnene ikke komme nær objektiv-linsen på den optiske pick-up enhed. I tilfælde af at det er nødvendigt at kontrollere udsendelsen af laserlys, skal det ske i en afstand af mere end 30 cm fra den optiske pick-up.

1. Data for Laser Diode
   - Materiale: Ga-As
   - Bølgelængde: 780 nm
   - Udstråling: Kontinuerlig
   - Laser Output: max. 0.4 mW*

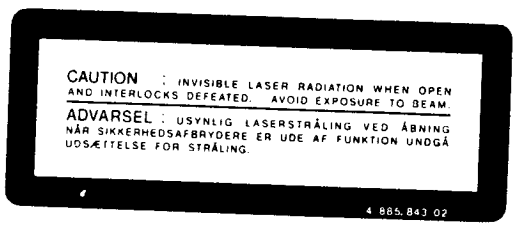
     * målt i 1.6 mm afstand fra overfladen af objektiv-linsen på den optiske pick-up enhsd.
   - Klassifikation: Svarende til klasse IIIb

2. Adskil aldrig den optiske pick-up enhed under service, og juster ikke APC kredsløbet (Automatic Power Control). Hvis APC kredsløbet (incl. laser-dioden) bryder ned, skal hele den optiske pick-up enhed (incl. APC printkortet) udskiftes.

LASER ADVARSEL MÆRKNING

Følgende mærkning findes indvendig i apparatet:

1. Advarsel Mærkning



VAROITUS: Laite sisältää, laserdiodin, joka lähettää (näkymätöntä) silmille vaarallista lasersateilyä.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

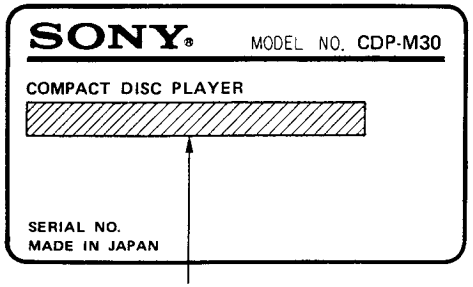
Table of Contents

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

MODEL IDENTIFICATION

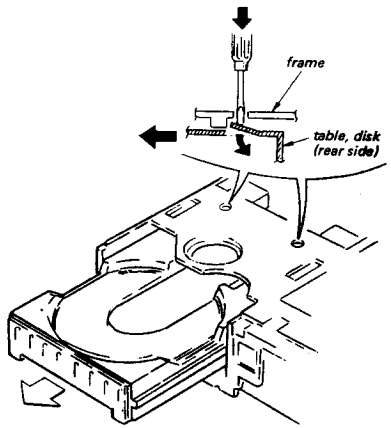
– Specifications Labels –



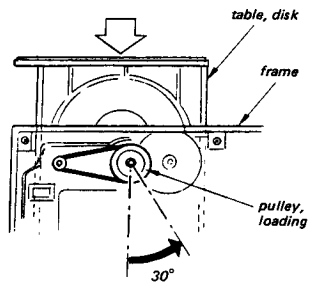
- AEP model: AC: 220 V – 50/60 Hz 12 W
- UK model: AC: 240 V – 50/60 Hz 12 W

NOTES ON REPAIR

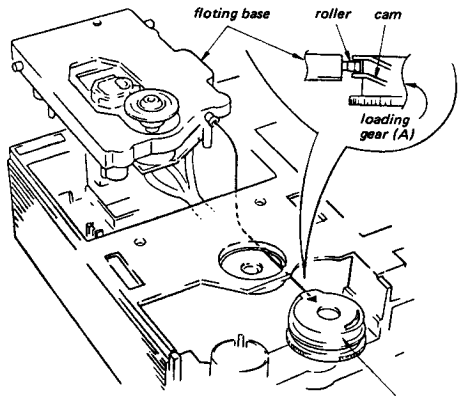
- When removing the disk-table, put the small screwdriver into the hole.
  Pull off the disk-table toward you while pushing the screwdriver. See figure (A).
- When re-assembling the disk-table, rotate the loading pulley by 30-degree in the direction of the arrow by finger, and put the table slowly. See figure (B).
- When re-assembling the floating base, set it so that the floating-base roller is engaged with the cam of the loading gear (A). See figure (C).



(A)



(B)



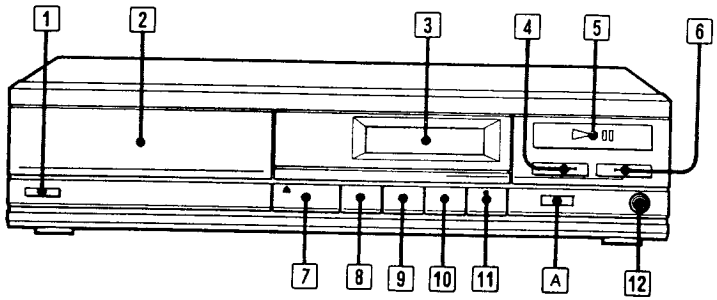
(C)

MEMO

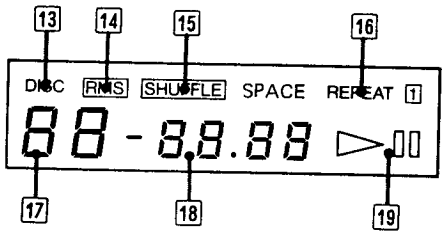
SECTION 1
OUTLINE

LOCATION AND FUNCTION OF CONTROLS

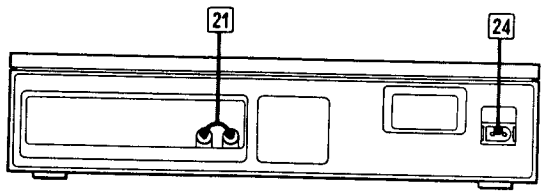
Front panel



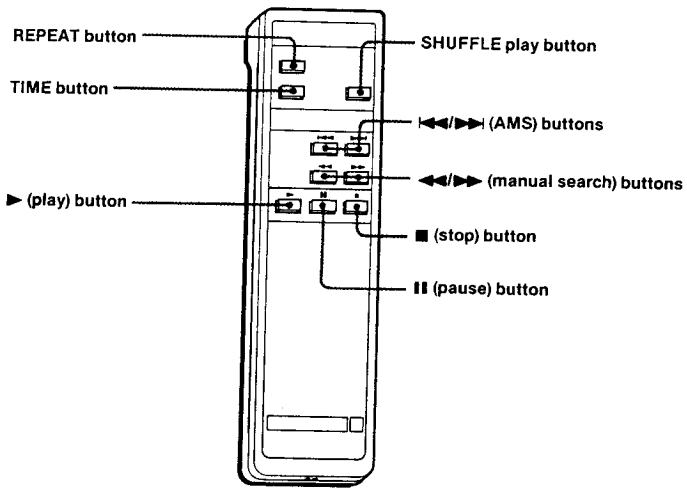
Display window



Rear panel



REMOTE CONTROL



Front panel

1 POWER switch

2 Disc compartment

3 Display window

4 ⏮ ◀◀ (AMS/manual search) button
Press momentarily to locate the beginning of the selection being played.
Keep the button pressed to go back at high speed.

5 ► II (play/pause) button
Press to play during stop.
Press to pause during play.
Press to play during pause.

6 ▶▶ ⏭ (AMS/manual search) button
Press momentarily to skip to the beginning of the next selection.
Keep the button pressed to go ahead at high speed.

7 ⏏ OPEN/CLOSE button
Press to open or close the disc compartment.

8 SHUFFLE button
Press to start shuffle play.
To release, press again.

9 REPEAT button
Press once to repeat play.

10 TIME/PROGRAM button
Press once during play to display the index number of the selection being played, and press again to display the remaining time of the whole disc or program.
Press during stop to program the desired selection.

11 ■/CLEAR (stop/clear) button
Press to stop the disc play.
Press to clear the memory of the programmed selections one by one.

A AUTO SPACE button and indicator
Press to insert 3 seconds of blank space between selections.

12 HEADPHONES jack

13 DISC indicator
Lights up when a compact disc is inside or when the disc compartment is opened.

14 RMS indicator
Lights up during programming of the selections and program play.

15 SHUFFLE indicator
Lights up during shuffle play.

16 REPEAT indicator
REPEAT 1: Lights up during repeat play of the selection being played.
REPEAT : Lights up during repeat play of the whole disc, program play or shuffle play.

17 TRACK indication
Shows the track number of the selection being played. When a disc is inserted, this indication shows the total selection number of the disc for a while.

18 TIME counter
Shows the elapsed playing time of the selection being played in minutes and seconds. When the disc is inserted, this indication shows the total playing time of the disc for a while.

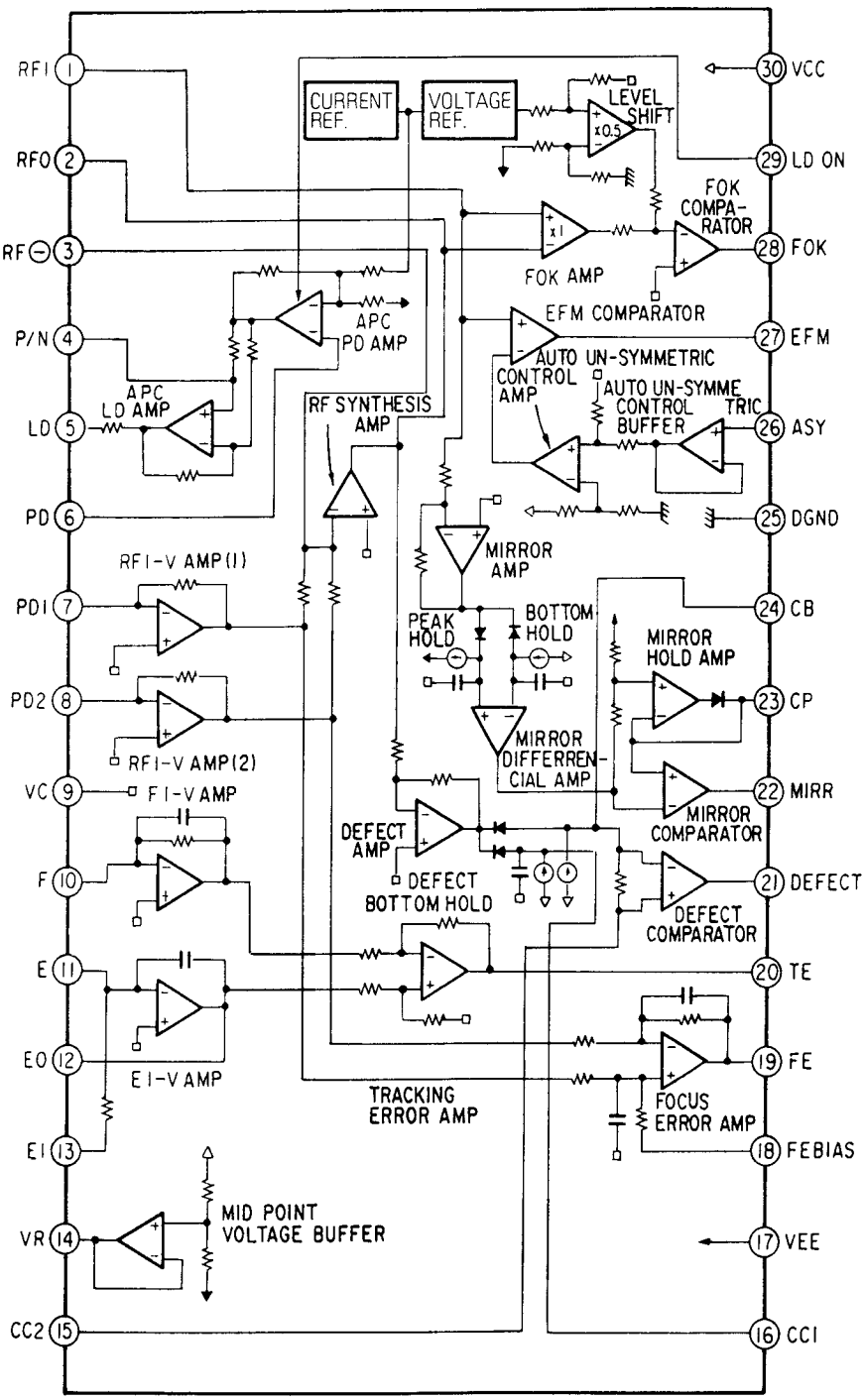
19 ► indicator
Lights up during play.
► II indicator
Lights up during pause.

21 LINE OUT (left/right) terminal

24 AC IN jack

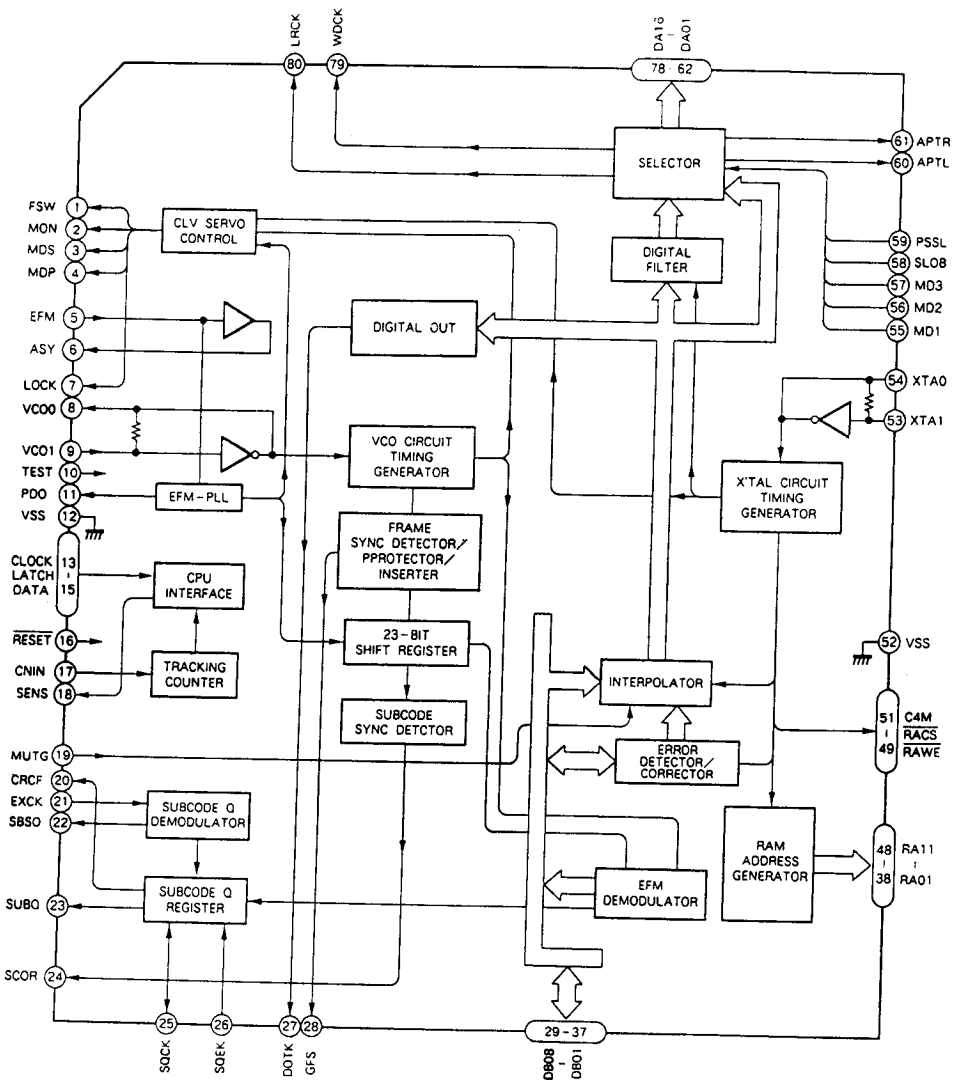
SECTION 2
IC BLOCK DIAGRAM

- IC1
  CXA-1081M (RF AMP/SIGNAL PROCESSOR/LASER ON CIRCUIT/MID POINT VOLTAGE GENERAT)



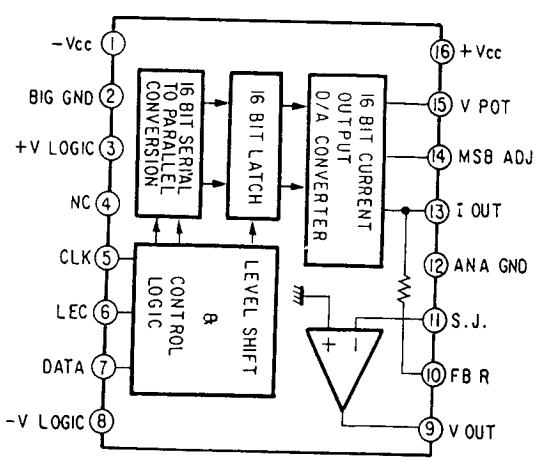
- **IC3**

CXD-1135Q (DIGITAL SIGNAL PROCESSOR/CLV SERVO)



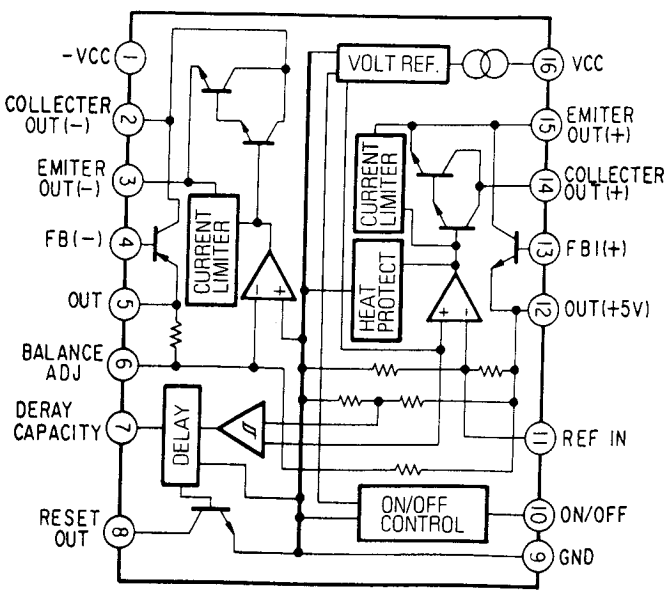
- **IC10**

PCM56P-S (D/A CONVERTER)

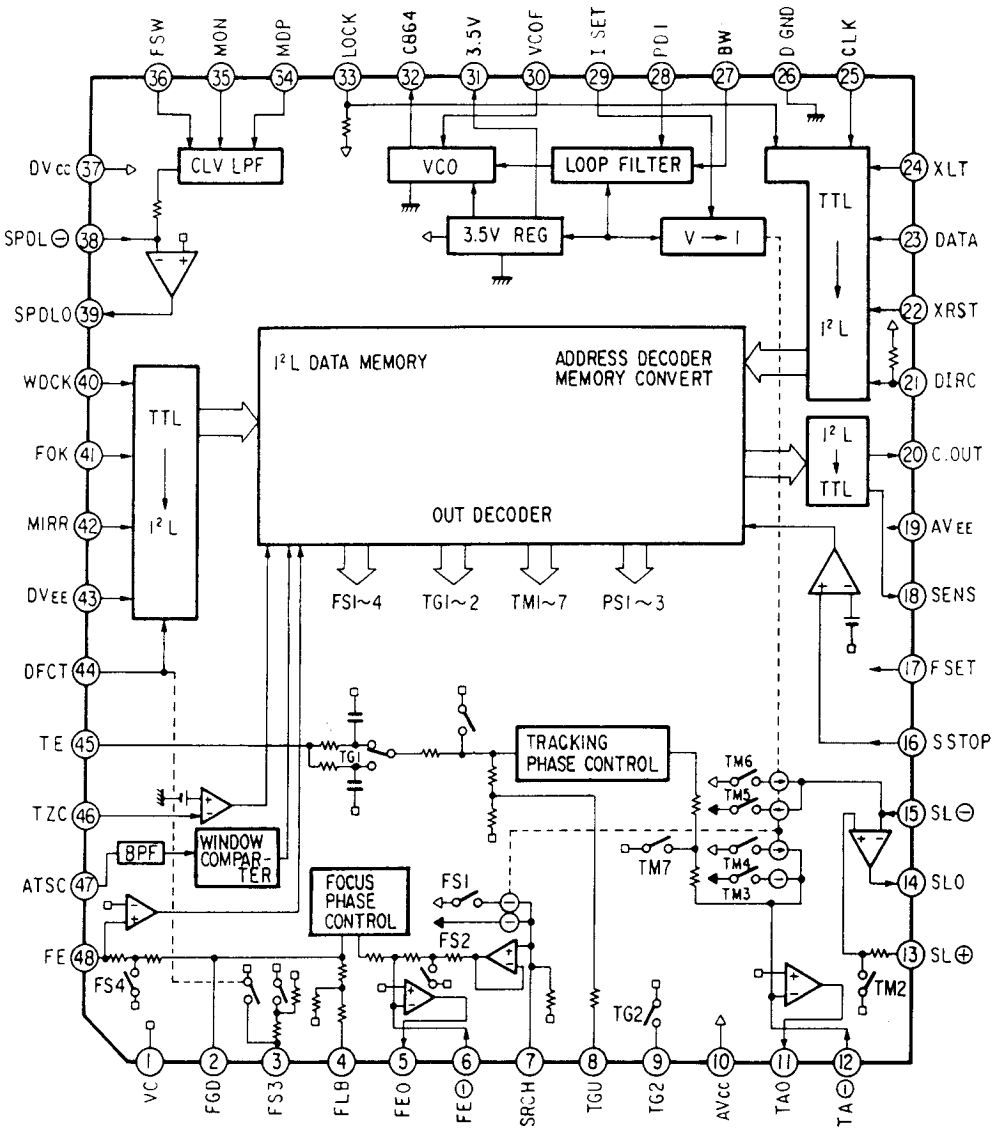


- **IC8**

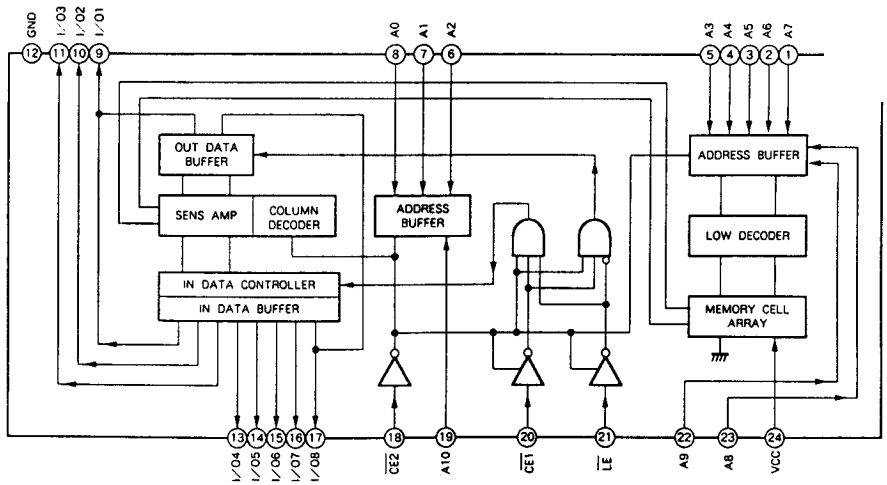
M5290P (POWER)



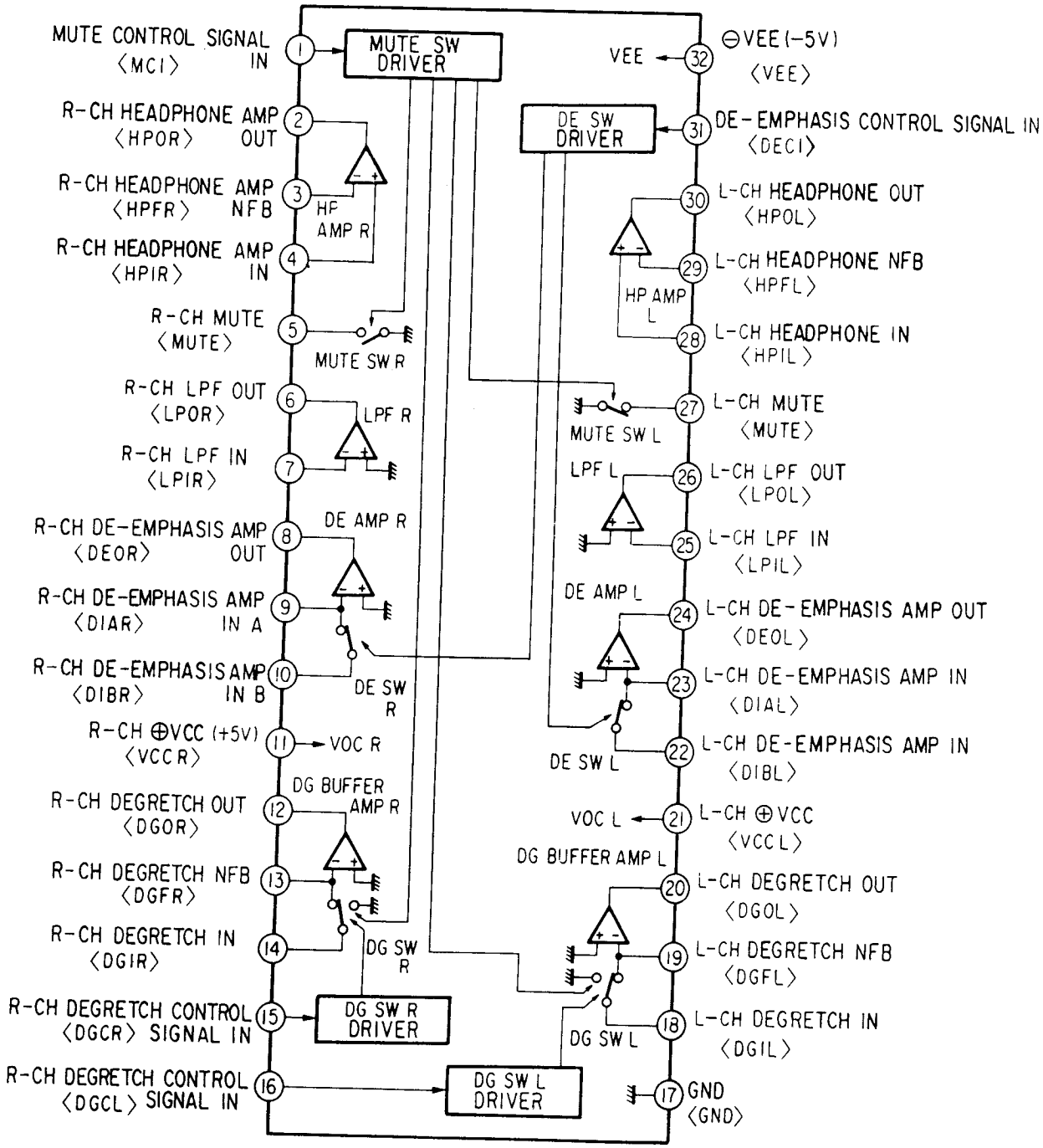
- **IC2**
  CXA-1082AQ (FOCUS/TRACKING/SLED SERVO)



- **IC4**
  LC-3516AML (16K BIT RAM)



- **IC9**
  M51565P (AUDIO)



SECTION 3
ADJUSTMENTS

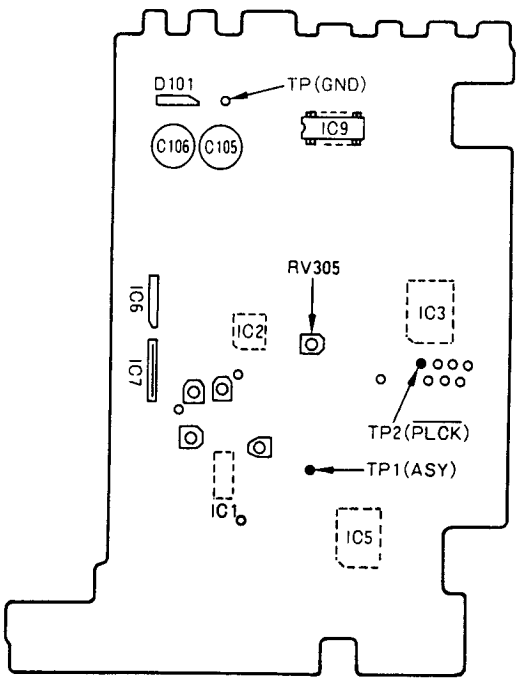
ELECTRICAL ADJUSTMENT

1. Perform adjustments in the order given.
2. Use YEDS-1 disc unless otherwise indicated.
3. Use the osdilloscope with more than 10 MΩ impedance.

RF PLL FREE-RUN FREQUENCY CHECK

1. Ground both test points TP1 (ASY).
2. Press OPEN/CLOSE button and open the disk holder.
3. Check for 4.3218 MHz at test point TP2 (PLCK) using a frequency counter. If not, adjust RV305.

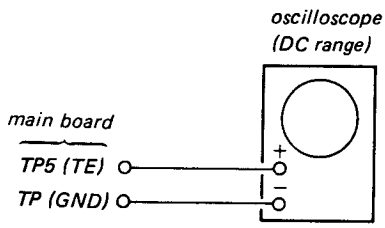
Adjustment Location: main board



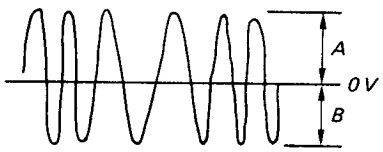
E-F BALANCE ADJUSTMENT

This adjustment should be made when replacing TOP (T-type Optical Pick-up).

Procedure:

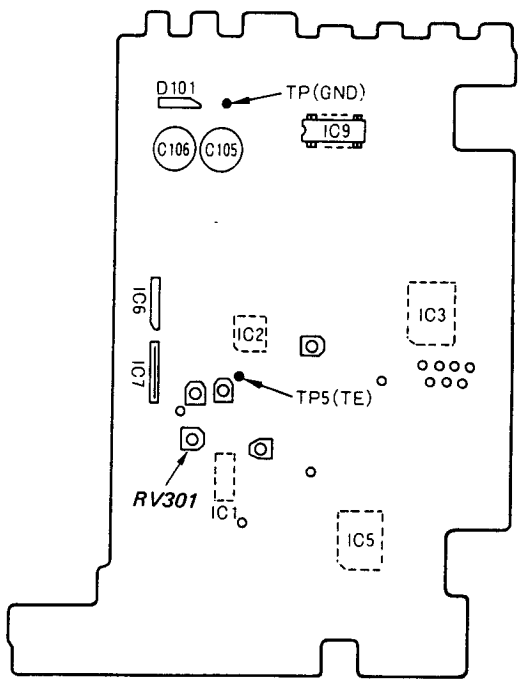


1. Connect oscilloscope to test point TP5 (TE) and ground.
2. Turn POWER switch on.
3. Put disc (YEDS-1) in and press ▷ button.
4. Press ◀◀ FF or ▶▶ REW botton.
5. Adjust RV301 for a vertically-symmetrical waveform as shown below. (A = B).



VOLT/DIV: 1V
TIME/DIV: 1ms

Adjustment Location: main board



TS

ALANCE ADJUSTMENT

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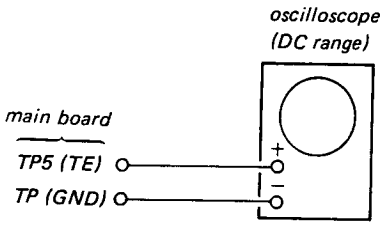

Connect oscilloscope to test point TP5 (TE) and ground.

Turn POWER switch on.

Put disc (YEDS-1) in and press ▷ button.

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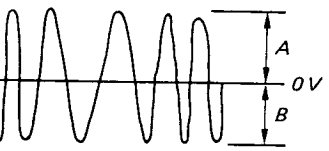
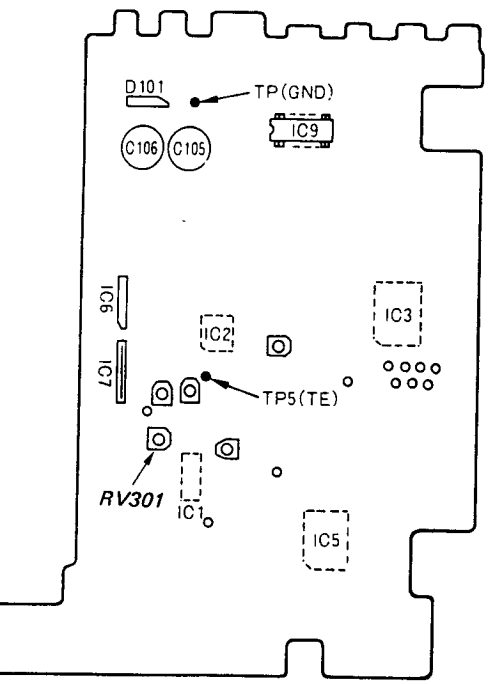
Adjust RV301 for a vertically-symmetrical waveform as shown below. (A = B).



VOLT/DIV: 1V
TIME/DIV: 1ms

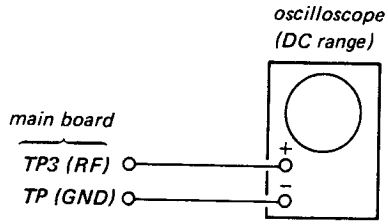
tment Location: main board



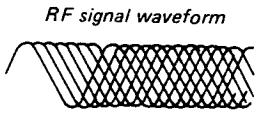
Focus Bias Adjustment

This adjustment should be made when replacing TOP (T-type Optical Pick-up).

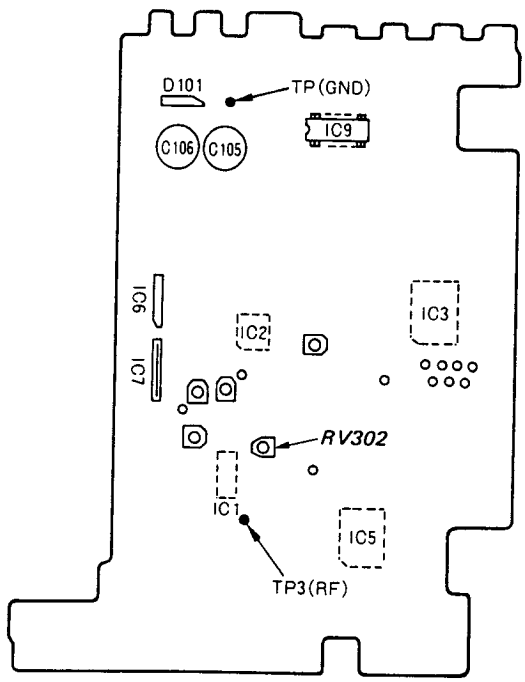
Procedure:



1. Connect oscilloscope to test points TP3 (RF) and ground.
2. Turn POWER switch on.
3. Put disc (YEDS-1) in and press ▷ button.
4. Adjust RV302 for an optimum waveform eye pattern or so that the peak is maximum. Optimum eye pattern means that shape "◇" can be clearly distinguished at the center of the waveform.



Adjustment Location: main board



REFERENCE

Focus/Tracking G

A frequency order to perform t

However, this slightly off, there perform this adjus

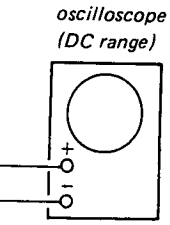
Focus/tracking up (vertical and noise and mechar operate.

However, as th the point where b

- When gain is device operates
- When gain is l mechanical sho
- When gain adju appear.

Symptoms
• The time until mu becomes longer fo →▷PLAY or auto selection (⏮ ⏭ pressed. (Normall about 2 seconds.)
• Music does not sta disc continues to r for STOP→▷PLA automatic selectio ⏭ buttons presse
• Disc table opens sh after STOP→▷PL.
• Sound is interrupte ing PLAY. Or time er display stops pr ing.
• More poise during device operation.

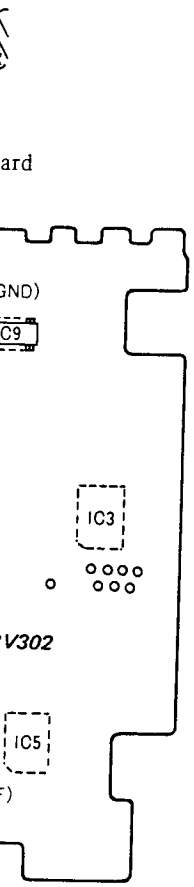
made when replacing



test points TP3 (RF)

press ▷ button.

imum waveform eye
k is maximum. Opti-
hat shape "◇" can be
e center of the wave-



Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

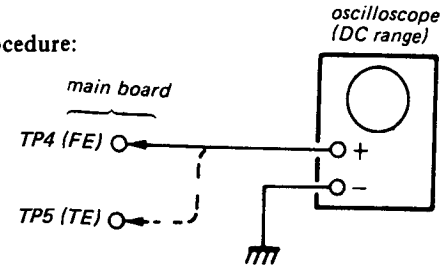
Symptoms \ Gain	Focus	Tracking
• The time until music starts becomes longer for STOP →▷PLAY or automatic selection (⏮ ⏭buttons pressed. (Normally takes about 2 seconds.)	low	low or high
• Music does not start and disc continues to rotate for STOP→▷PLAY or automatic selection (⏮ ⏭ buttons pressed.)	–	low
• Disc table opens shortly after STOP→▷PLAY.	low or high	–
• Sound is interrupted during PLAY. Or time counter display stops progressing.	–	low
• More poise during 2-axis device operation.	high	high

The following is a simple adjustment method.

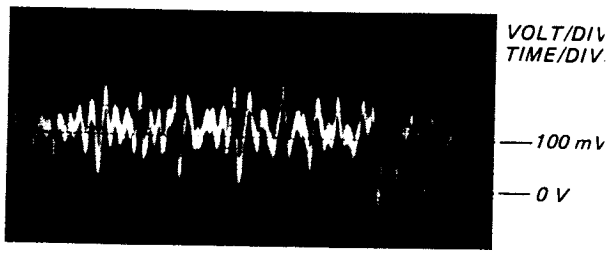
– Simple Adjustment –

Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.

Procedure:



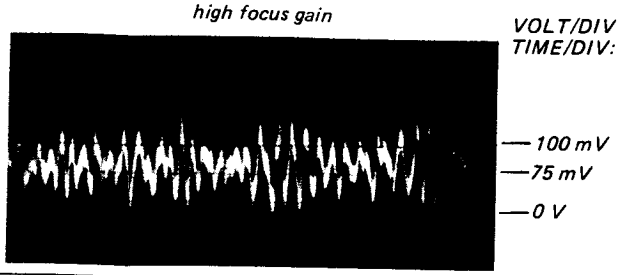
1. Keep the set horizontal.
   (If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2 axis device.)
2. Insert disc (YEDS-1) and press ▷ PLAY button.
3. Connect oscilloscope to main amp board TP4 (FE).
4. Adjustment RV303 so that the waveform is as shown in the figure below. (focus gain adjustment)



- Incorrent Examples (DC level changes more than on adjusted waveform)

low focus gain

high focus gain



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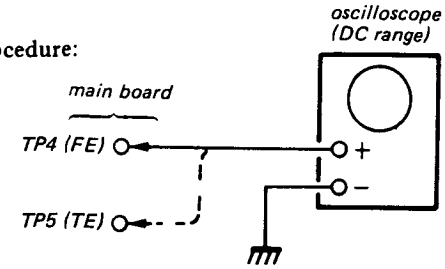

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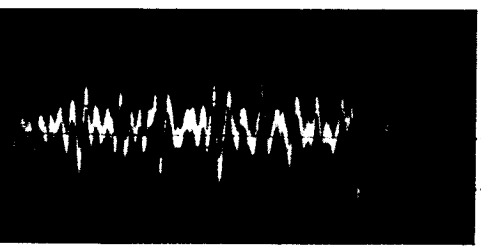

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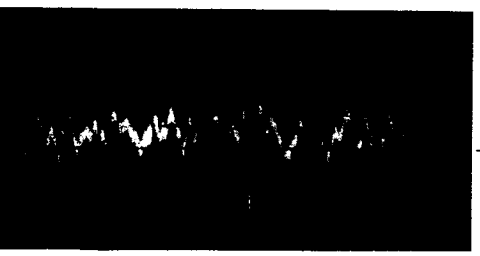
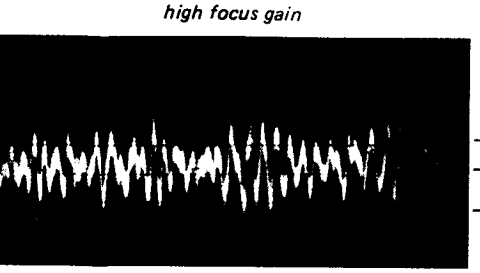


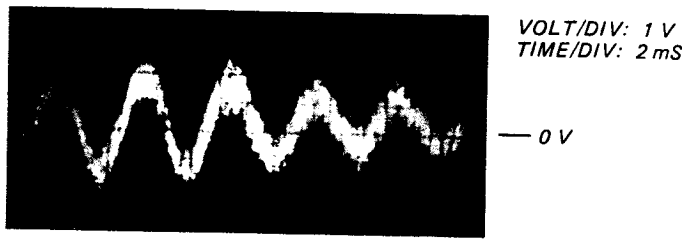
high focus gain



5. Connect oscilloscope to main board TP TE.
6. Adjust RV304 so that the waveform is as shown in the figure below. (tradking gain adjustment)

- Incorrect Examples (fundamental wave appears)

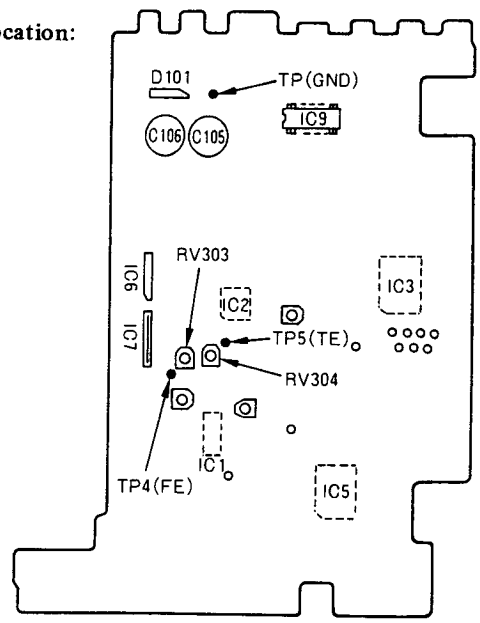
low tracking gain



high tracking gain
(higher fundamental wave than for low gain)

Adjustment Location:

main board

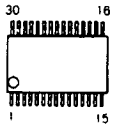


SECTION 4
MOUNTING DIAGRAM

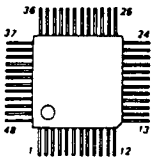
• Semiconductor Lead Layouts

BX1457

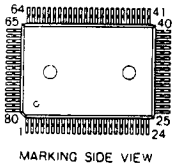
CXA1081M



CXA1082AQ

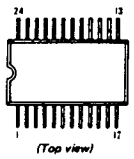


CXD1135Q
M50930-426FP



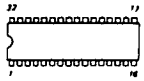
MARKING SIDE VIEW

LC3516AML-15

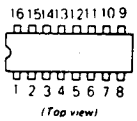


LC4969

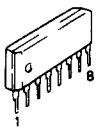
M51565P



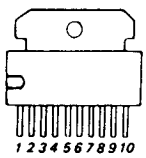
M5290P
PCM56P-S



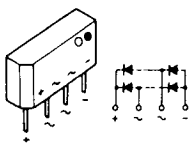
STA341M



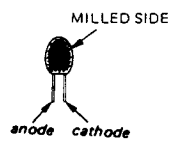
TA7256P



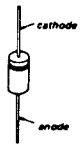
S1VB40



LT8500R1



1SS132

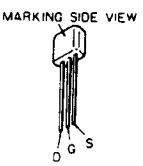


2SB1013

2SB1133-SA
2SD1666-SA

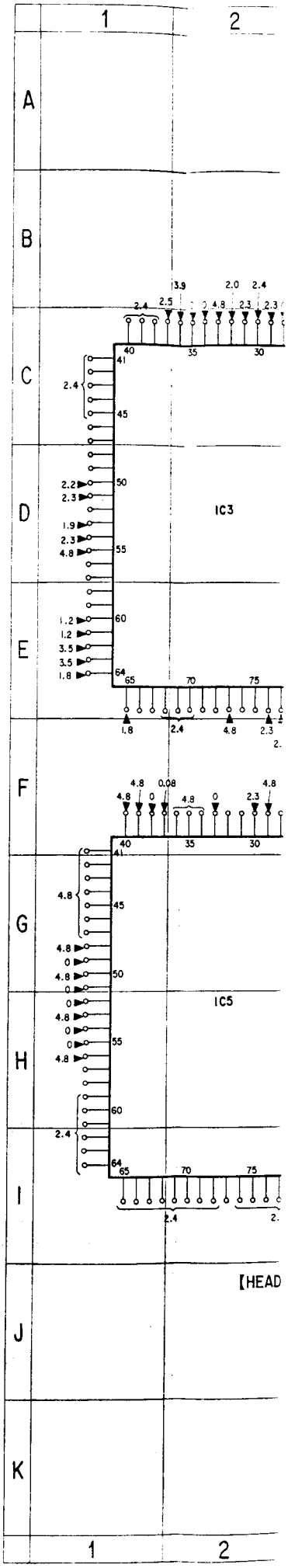
2SC3399
DTA124XS

2SC3623-L

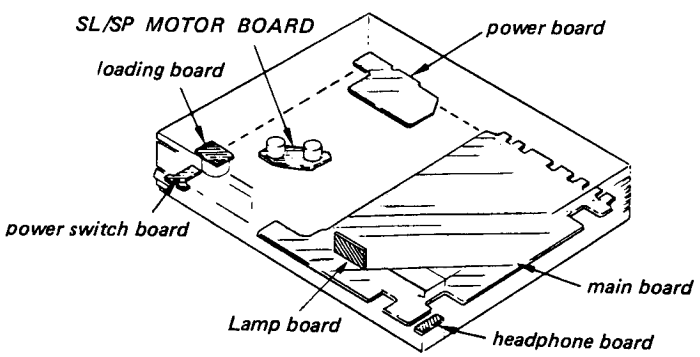


• Semiconductor Locations

Ref. No.	Location
D101	B-9
D201	D-8
D202	C-8
D203	D-8
D204	D-8
D205	C-8
IC1	H-8
IC2	E-8
IC3	E-5
IC4	D-5
IC5	I-6
IC6	E-9
IC7	G-9
IC8	D-9
IC9	C-7
IC10	C-5
IC11	H-11
IC12	C-5
Q1	C-9
Q2	D-9
Q3	I-9
Q4	D-7
Q5	E-7
Q6	J-9
Q7	C-8
Q8	B-5
Q9	B-5
Q10	B-7
Q11	D-7



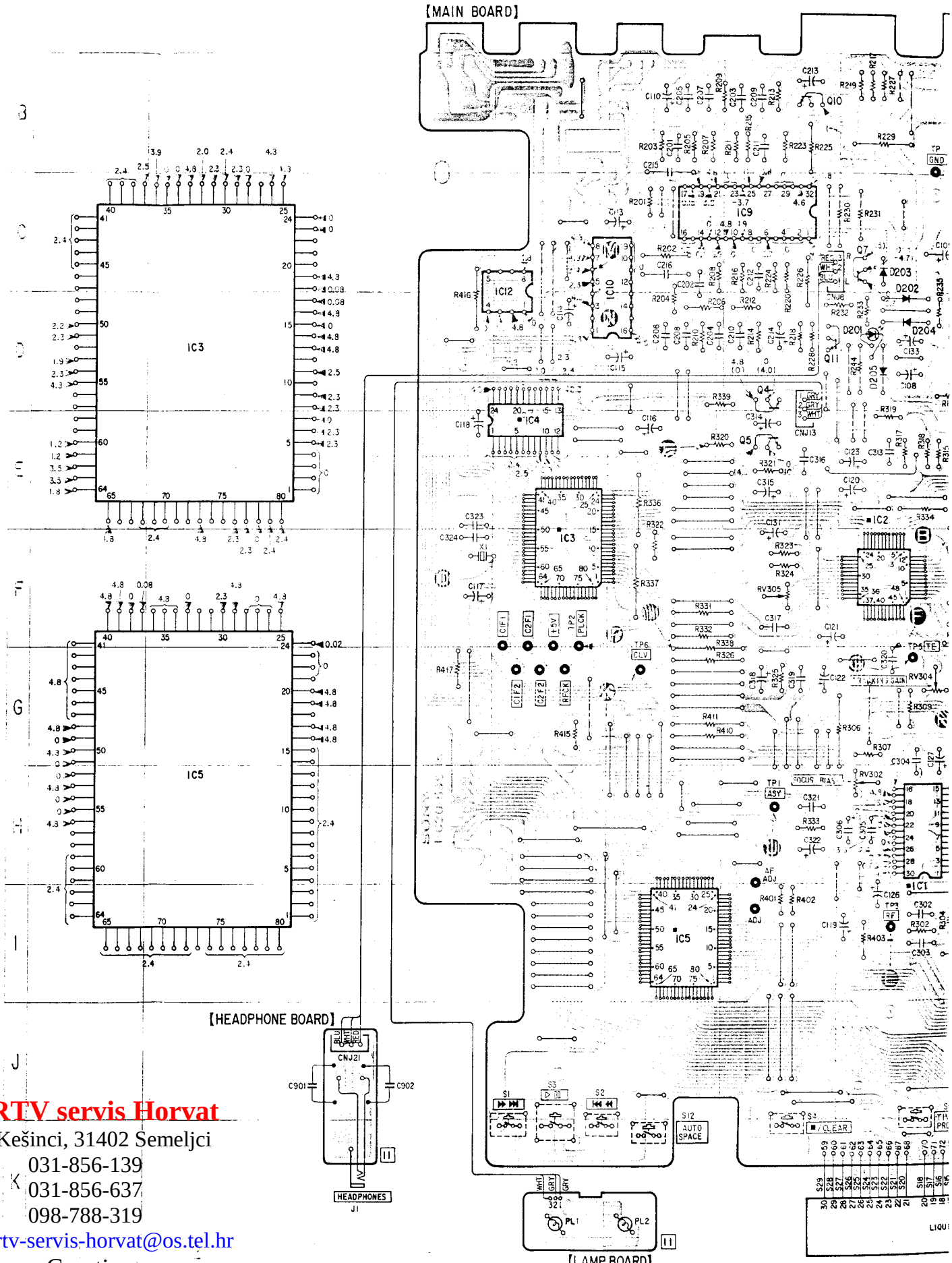
CIRCUIT BOARD LAYOUT

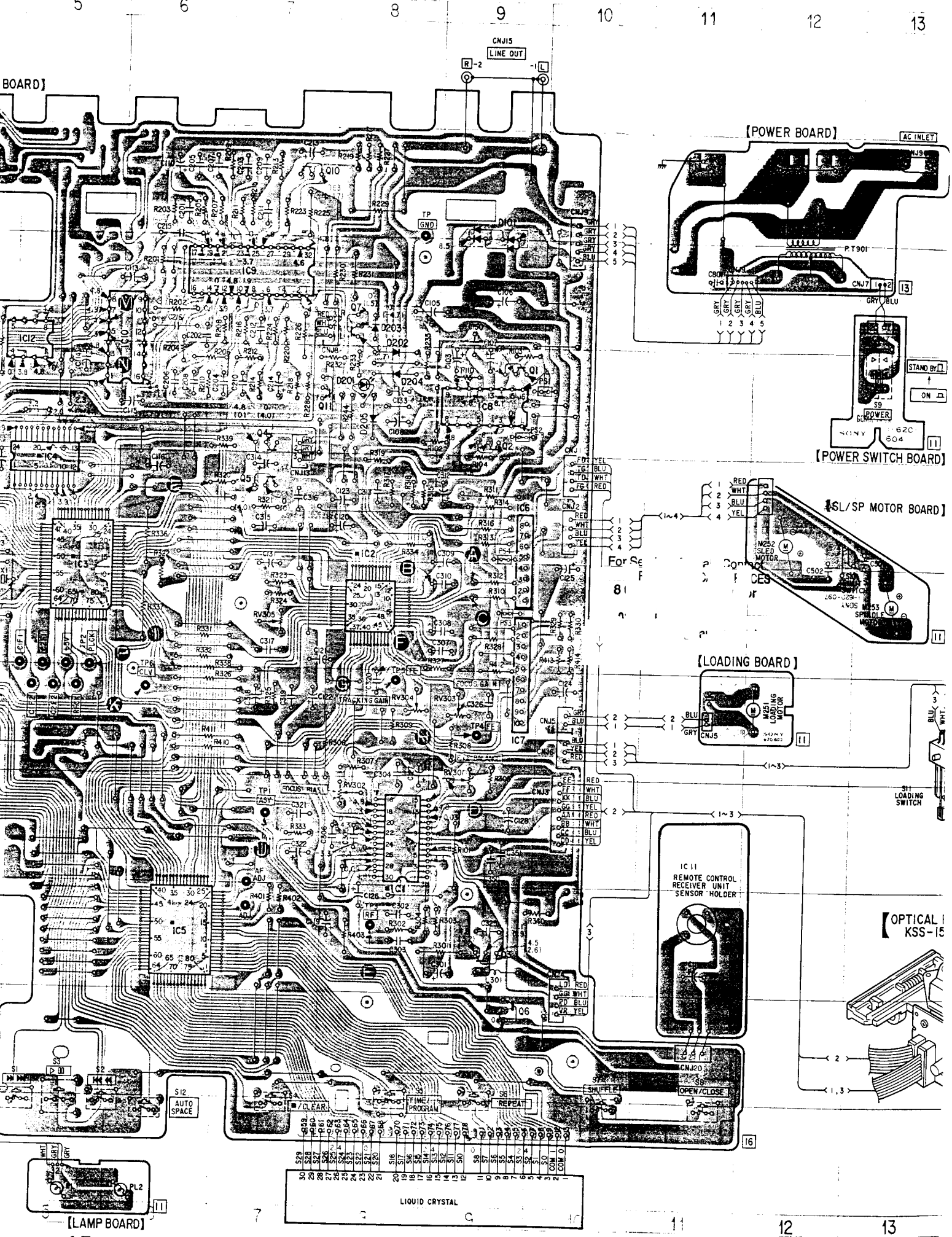


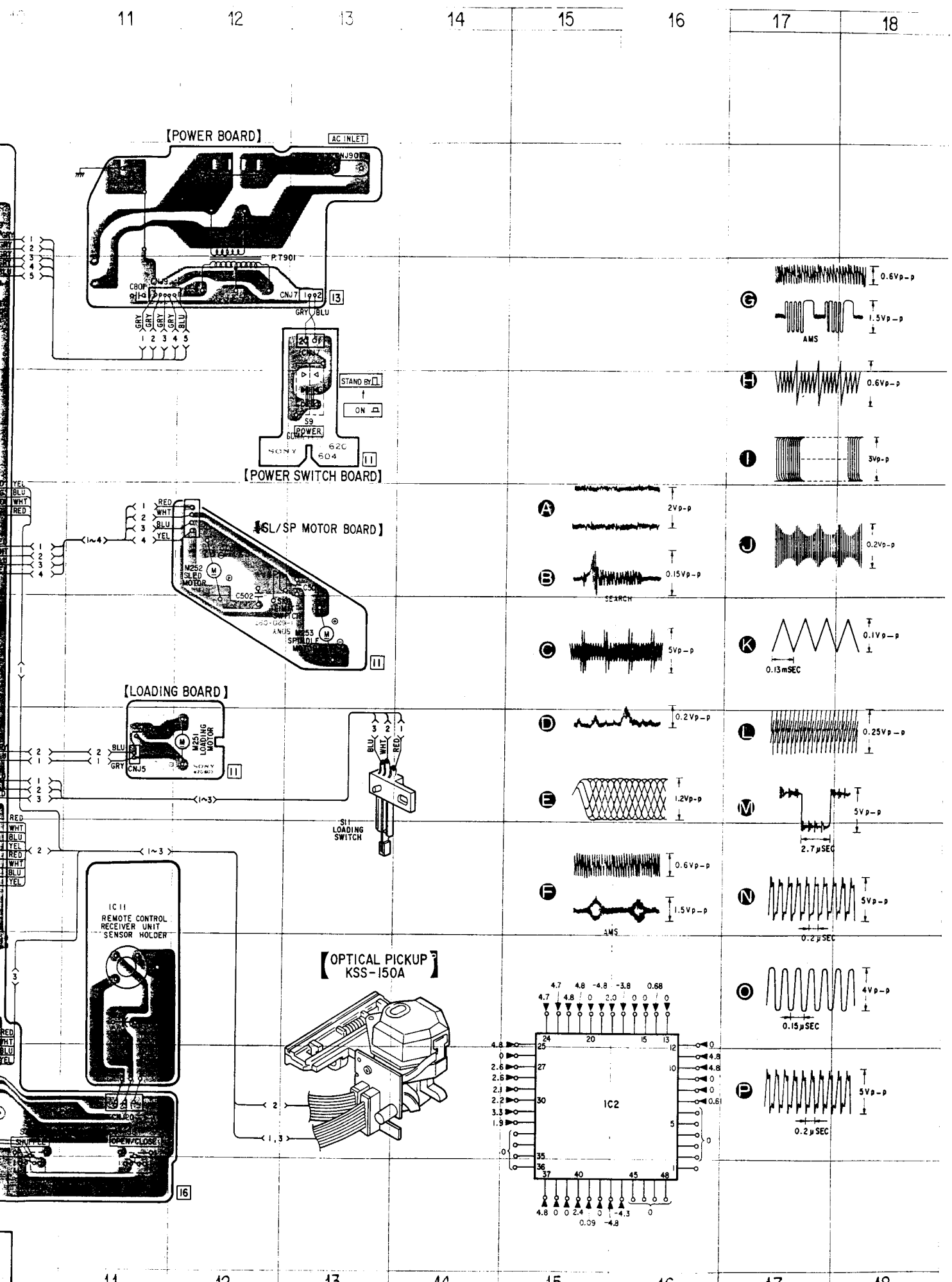
• ○— : parts extracted from the component side.

onductor
ons

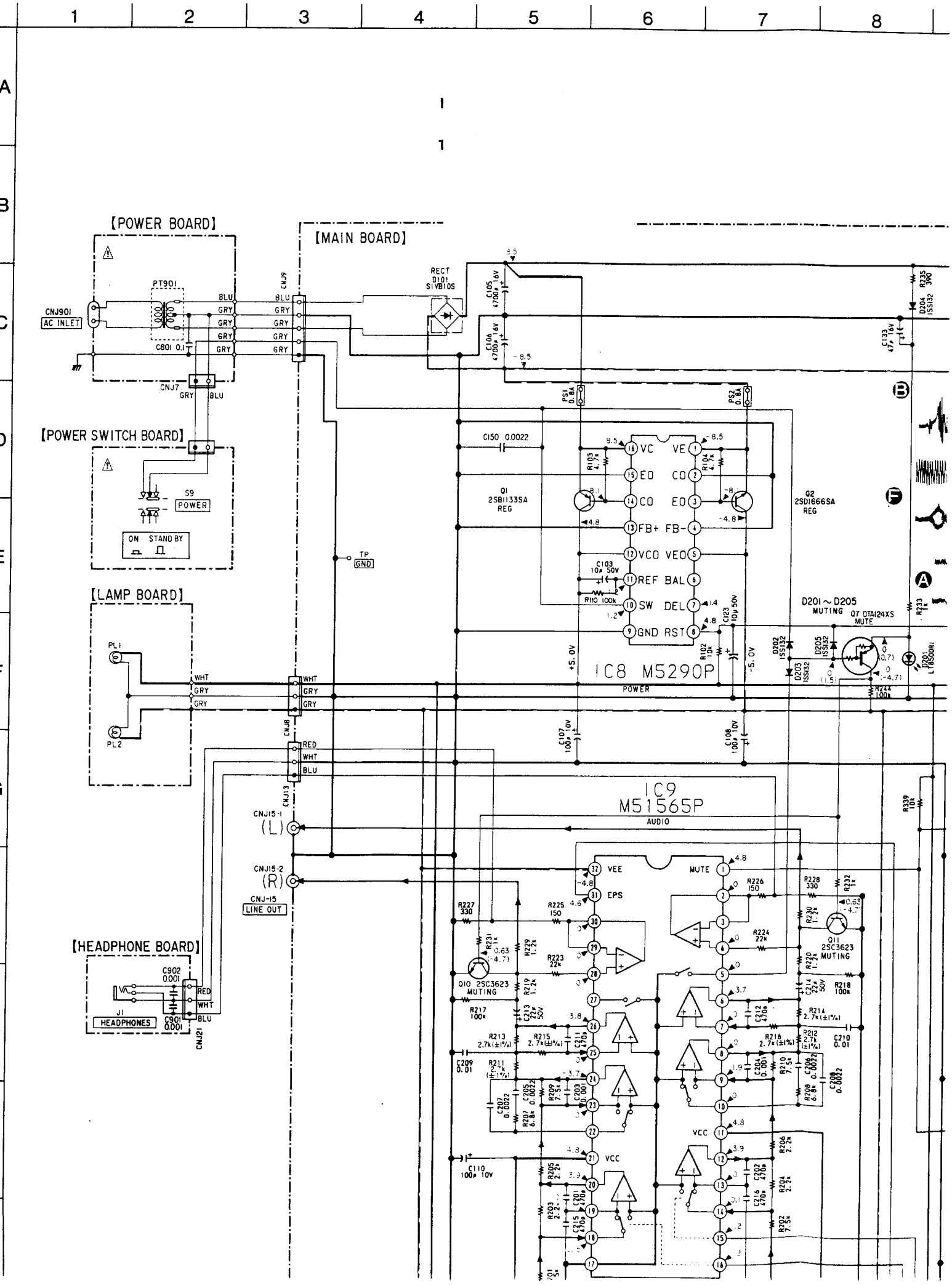
Location
B-9
D-8
C-8
D-8
D-8
C-8
H-8
E-8
E-5
D-5
I-6
E-9
G-9
D-9
C-7
C-5
H-11
C-5
C-9
D-9
I-9
D-7
E-7
J-9
C-8
B-5
B-5
B-7
D-7

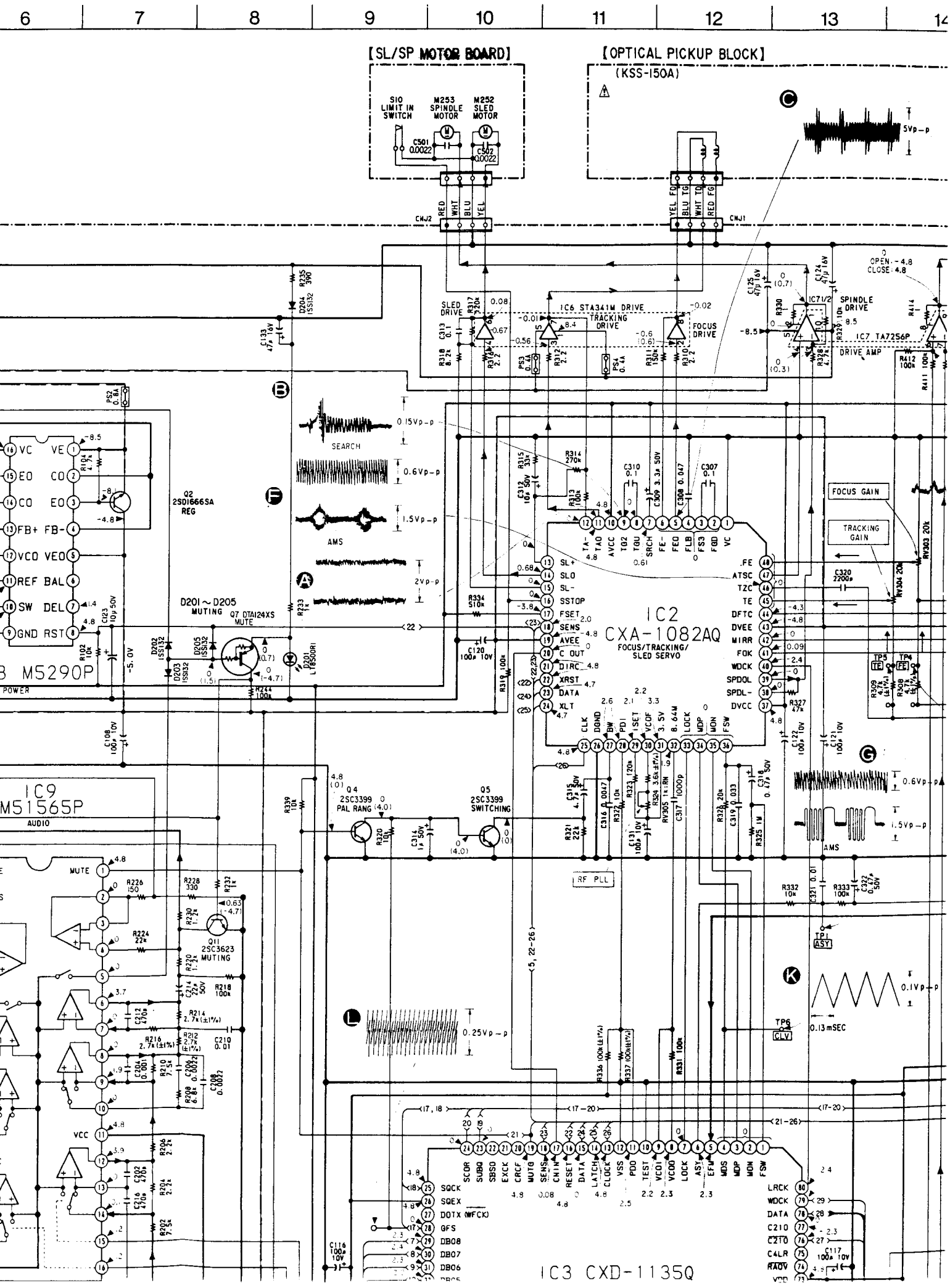


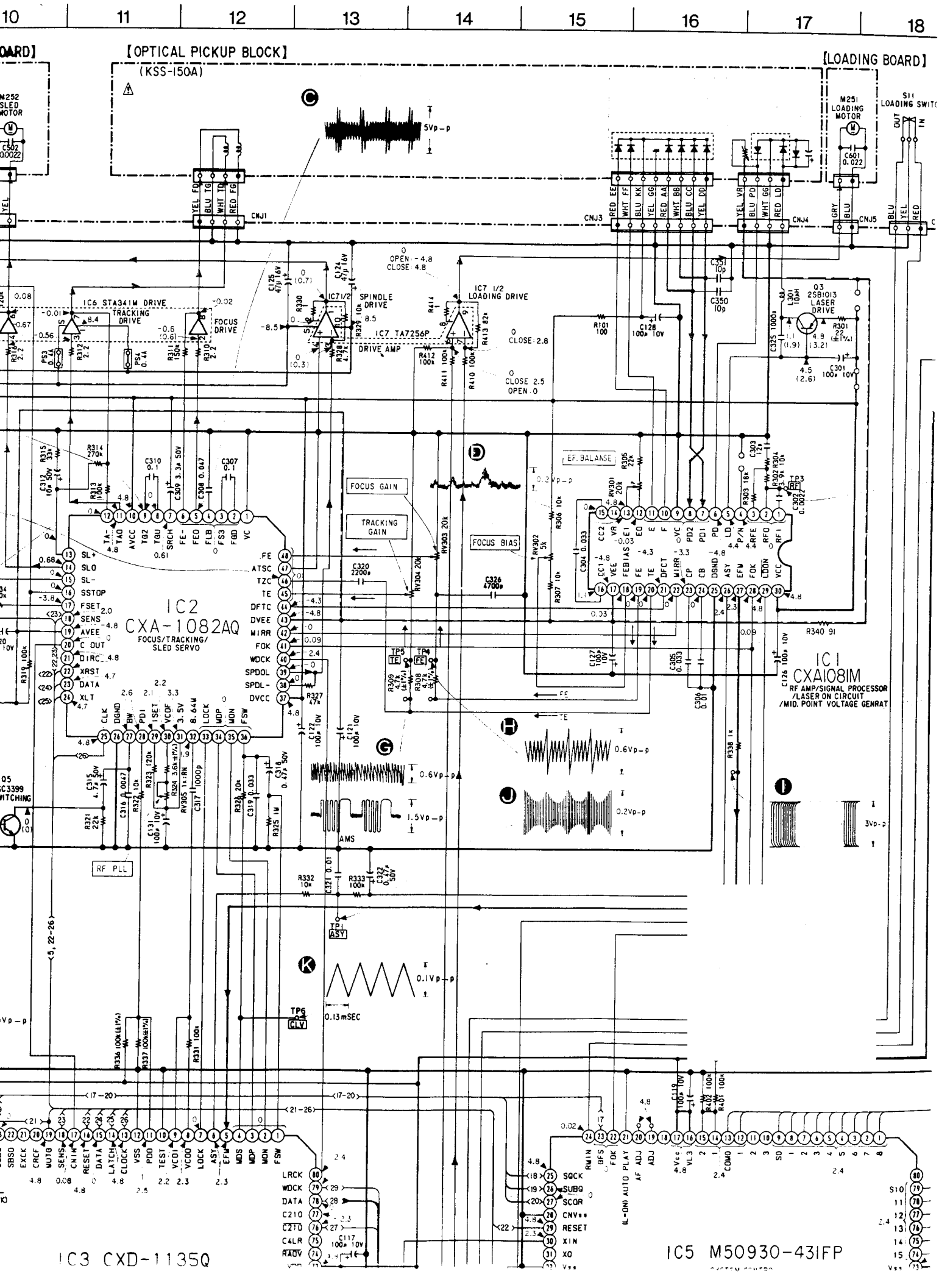

[POWER BOARD]
AC INLET
CNJ9
P.T901
CNJ7
[POWER SWITCH BOARD]
STAND BY
ON
POWER
S9
[SL/SP MOTOR BOARD]
M252 SLED MOTOR
M253 SPINDLE MOTOR
[LOADING BOARD]
M251 LOADING MOTOR
311 LOADING SWITCH
IC11 REMOTE CONTROL RECEIVER UNIT SENSOR HOLDER
[OPTICAL
KSS-15
CNJ15 LINE OUT
[LAMP BOARD]
PL2
LIQUID CRYSTAL
AUTO SPACE
CLEAR
TIME/ PROGRAM
REPEAT
SHUFFLE
OPEN/CLOSE
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC12
TRACKING GAIN
FOCUS GAIN
FOCUS BIAS
AF ADJ
RF ADJ

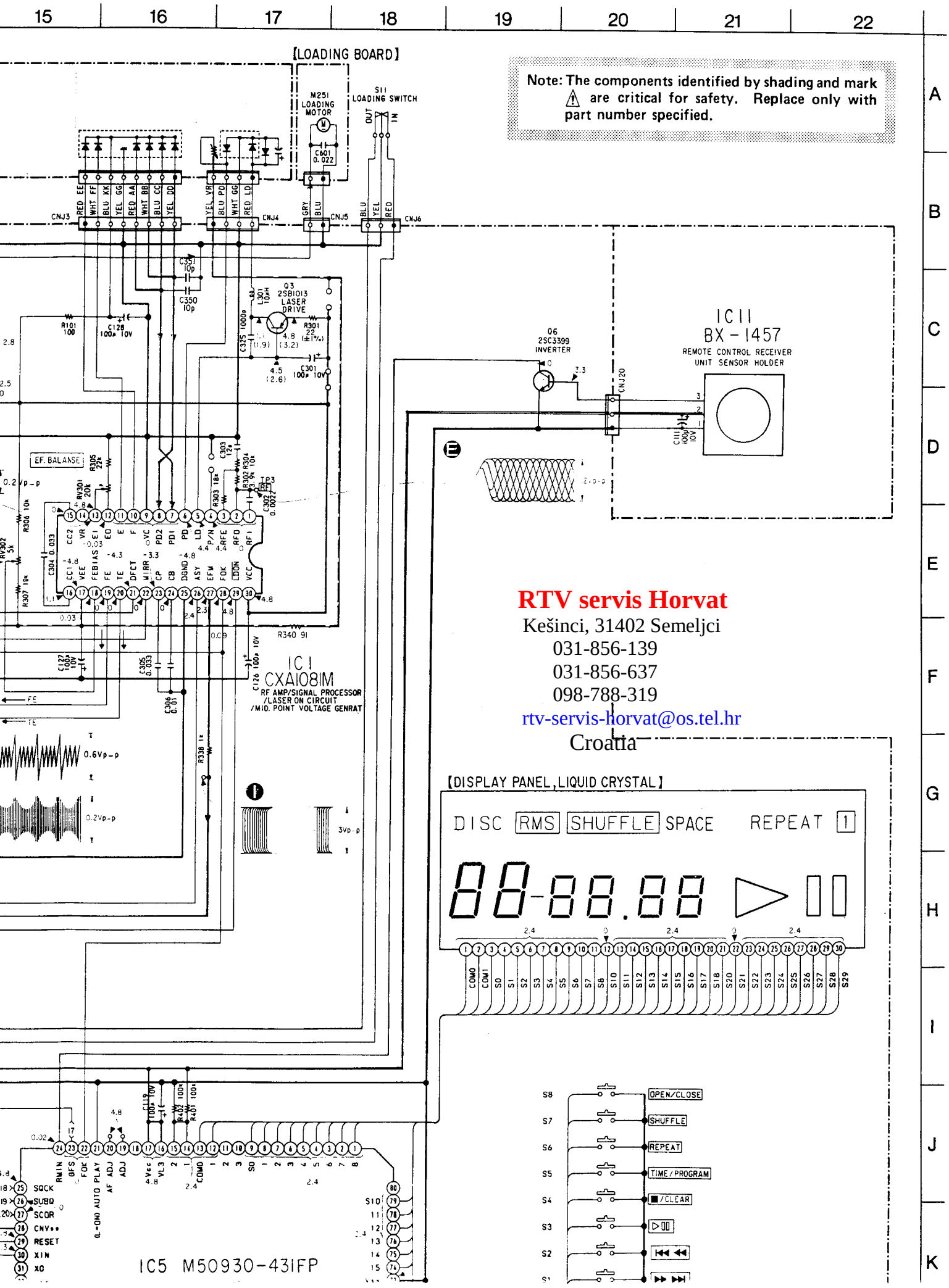

11
12
13
14
15
16
17
18
【POWER BOARD】
AC INLET
CNJ901
P.T901
CNJ7
13
STAND BY
ON
S9
POWER
SONY
620
604
11
【POWER SWITCH BOARD】
【SL/SP MOTOR BOARD】
M252
SLED
MOTOR
C502
M253
SPINDLE
MOTOR
11
【LOADING BOARD】
M251
LOADING
MOTOR
CNJ5
11
S11
LOADING
SWITCH
IC11
REMOTE CONTROL
RECEIVER UNIT
SENSOR HOLDER
SHUTTLE
OPEN/CLOSE
16
【OPTICAL PICKUP】
KSS-150A
IC2
A
2Vp-p
B
0.15Vp-p
SEARCH
C
5Vp-p
D
0.2Vp-p
E
1.2Vp-p
F
0.6Vp-p
1.5Vp-p
AMS
G
0.6Vp-p
1.5Vp-p
AMS
H
0.6Vp-p
I
3Vp-p
J
0.2Vp-p
K
0.1Vp-p
0.13mSEC
L
0.25Vp-p
M
5Vp-p
2.7μSEC
N
5Vp-p
0.2μSEC
O
4Vp-p
0.15μSEC
P
5Vp-p
0.2μSEC

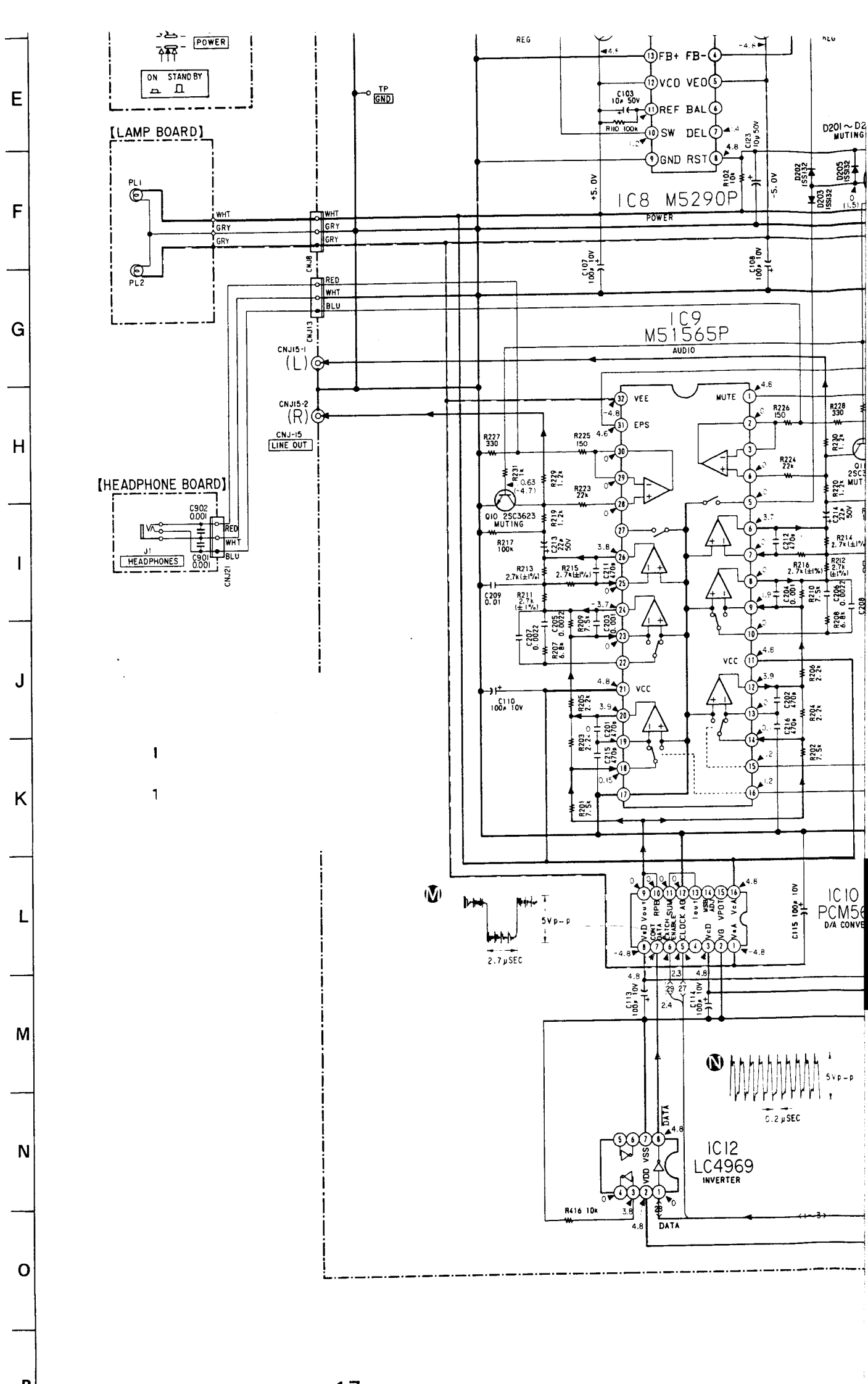
SECTION 5
SCHEMATIC DIAGRAM

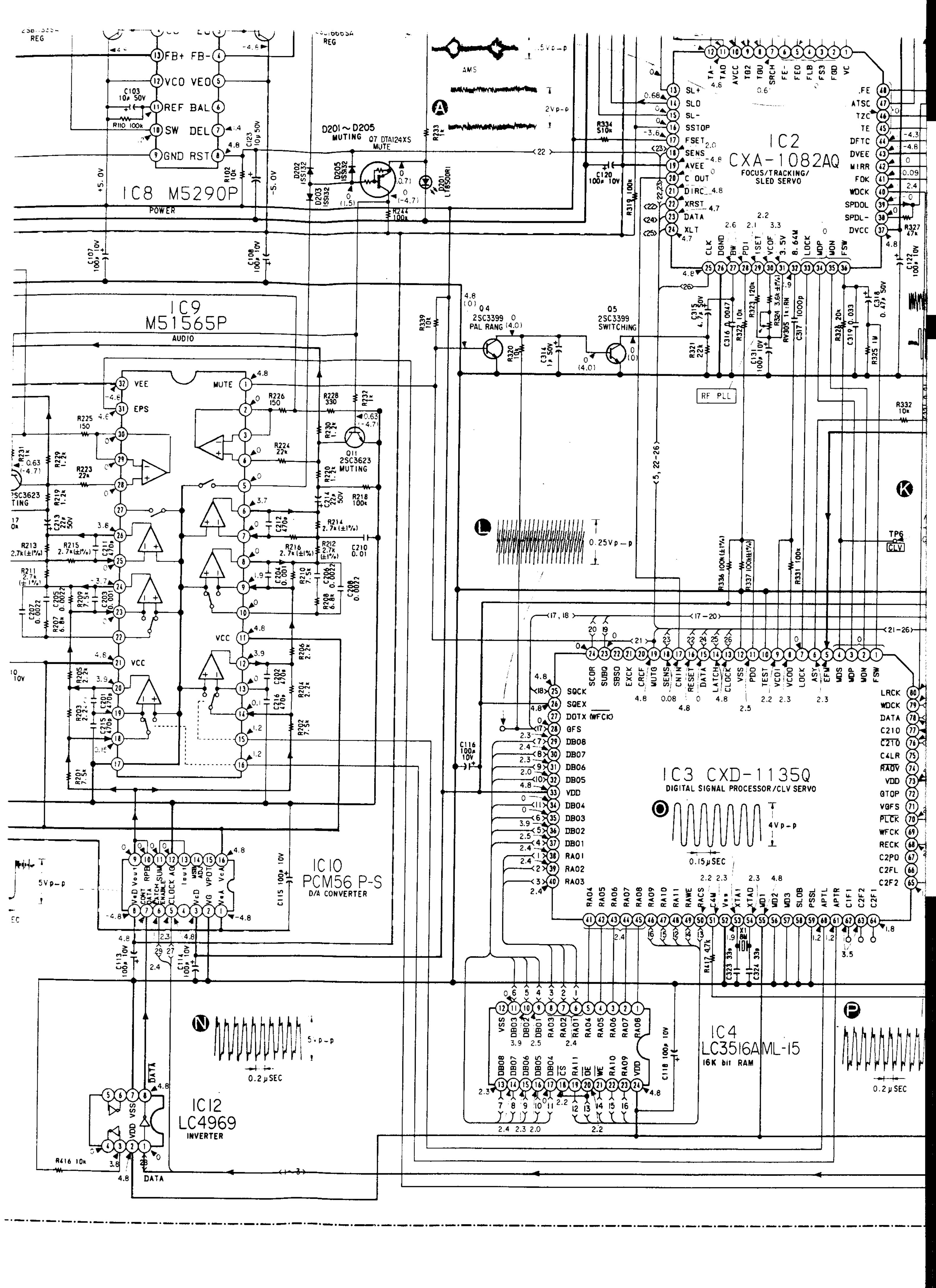


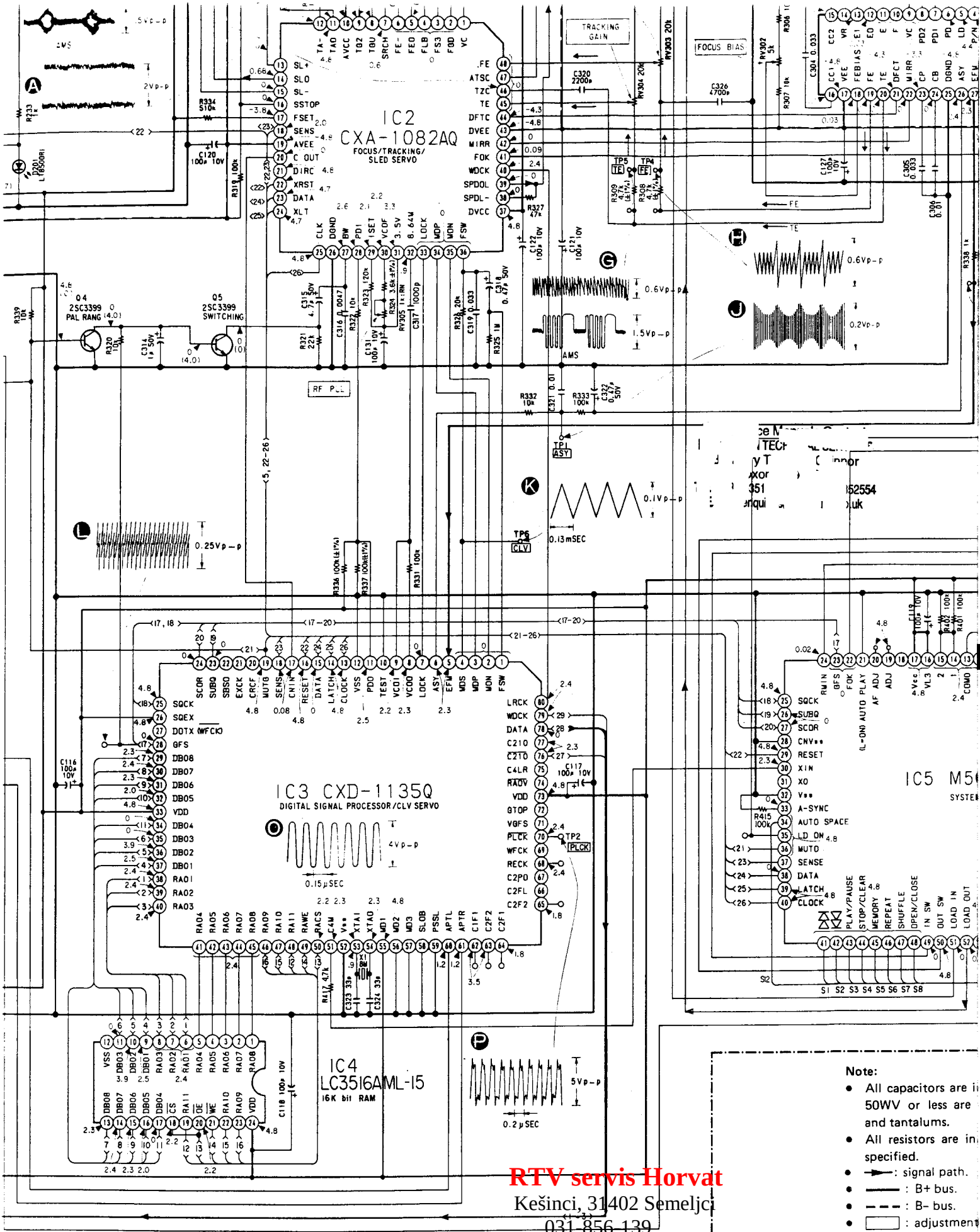

6
7
8
9
10
11
12
13
[SL/SP MOTOR BOARD]
[OPTICAL PICKUP BLOCK]
(KSS-150A)
S10 LIMIT IN SWITCH
M253 SPINDLE MOTOR
M252 SLED MOTOR
C501 0.0022
C502 0.0022
CNJ2
CNJ1
RED WHT BLU YEL
YEL FD BLU TG WHT TD RED FG
5Vp-p
SLED DRIVE
IC6 STA341M DRIVE
TRACKING DRIVE
FOCUS DRIVE
SPINDLE DRIVE
IC7 TA7256P
DRIVE AMP
OPEN: -4.8
CLOSE: 4.8
0.15Vp-p
SEARCH
0.6Vp-p
1.5Vp-p
AMS
2Vp-p
Q2 2SD1666SA REG
D201~D205 MUTING
Q7 DTA124XS MUTE
IC2 CXA-1082AQ
FOCUS/TRACKING/ SLED SERVO
FOCUS GAIN
TRACKING GAIN
IC9 M51565P
AUDIO
Q4 2SC3399 PAL RANG
Q5 2SC3399 SWITCHING
Q11 2SC3623 MUTING
RF PLL
0.6Vp-p
1.5Vp-p
AMS
0.1Vp-p
0.13mSEC
0.25Vp-p
IC3 CXD-1135Q
SQCK
SQEX
DOTX (WFCK)
GFS
DB08
DB07
DB06
LRCK
WDCK
DATA
C2PO
C4LR
RAOV


10
11
12
13
14
15
16
17
18
[OPTICAL PICKUP BLOCK]
(KSS-150A)
[LOADING BOARD]
M252 SLED MOTOR
M251 LOADING MOTOR
SW1 LOADING SWITCH
CNJ1
CNJ3
CNJ4
CNJ5
IC6 STA341M DRIVE
TRACKING DRIVE
FOCUS DRIVE
IC7 1/2 SPINDLE DRIVE
IC7 1/2 LOADING DRIVE
IC7 TA7256P
DRIVE AMP
Q3 2SB1013 LASER DRIVE
IC2
CXA-1082AQ
FOCUS/TRACKING/SLED SERVO
IC1
CXA1081M
RF AMP/SIGNAL PROCESSOR /LASER ON CIRCUIT /MID. POINT VOLTAGE GENRAT
FOCUS GAIN
TRACKING GAIN
FOCUS BIAS
EF BALANSE
RF PLL
AMS
IC3 CXD-1135Q
IC5 M50930-431FP


15
16
17
18
19
20
21
22
A
B
C
D
E
F
G
H
I
J
K
[LOADING BOARD]
M251 LOADING MOTOR
S11 LOADING SWITCH
OUT
IN
CNJ3
CNJ4
CNJ5
CNJ6
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.
Q3 2SB1013 LASER DRIVE
Q6 2SC3399 INVERTER
IC11 BX-1457
REMOTE CONTROL RECEIVER UNIT SENSOR HOLDER
CNJ20
EF. BALANSE
IC1 CXA1081M
RF AMP/SIGNAL PROCESSOR /LASER ON CIRCUIT /MID. POINT VOLTAGE GENRAT
IC5 M50930-431FP
[DISPLAY PANEL, LIQUID CRYSTAL]
DISC
RMS
SHUFFLE
SPACE
REPEAT
OPEN/CLOSE
SHUFFLE
REPEAT
TIME/PROGRAM
■/CLEAR
RTV servis Horvat
Kešinci, 31402 Semeljci
031-856-139
031-856-637
098-788-319
rtv-servis-horvat@os.tel.hr
Croatia

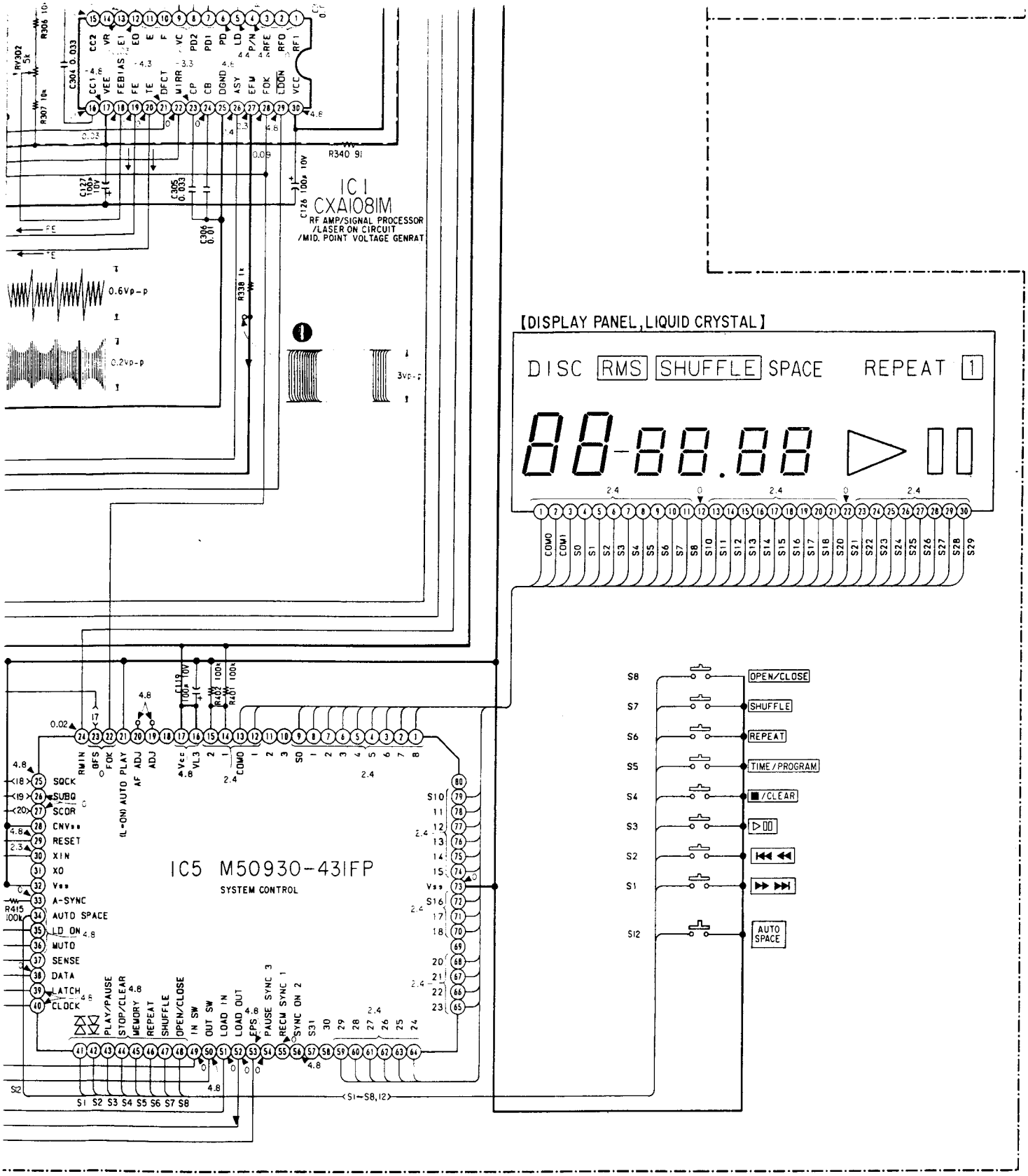

POWER
ON STAND BY
TP GND
【LAMP BOARD】
PL1
PL2
WHT
GRY
GRY
CNJ8
RED
WHT
BLU
CNJ13
CNJ15-1 (L)
CNJ15-2 (R)
CNJ-15 LINE OUT
【HEADPHONE BOARD】
C902 0.001
C901 0.001
J1 HEADPHONES
CNJ21
IC8 M5290P
POWER
FB+ FB-
VCO VEO
REF BAL
SW DEL
GND RST
+5.0V
-5.0V
IC9 M51565P
AUDIO
VEE
EPS
MUTE
VCC
Q10 2SC3623 MUTING
5Vp-p
2.7μSEC
IC10 PCM56
D/A CONVE
IC12 LC4969
INVERTER
DATA
VSS
VDD
5Vp-p
0.2μSEC


IC8 M5290P
POWER
C103 10μ 50V
R110 100k
C123 10μ 50V
R102 10k
+5.0V
-5.0V
C107 100μ 10V
C108 100μ 10V
D201～D205 MUTING
Q7 DTA124XS MUTE
D202 1SS132
D203 1SS132
D205 1SS132
D201 LT6500R1
R233 1k
R244 100k
AMS
1.5Vp-p
2Vp-p
IC2
CXA-1082AQ
FOCUS/TRACKING/SLED SERVO
R334 510k
C120 100μ 10V
R319 100k
SL+
SLO
SL-
SSTOP
FSET
SENS
AVEE
C OUT
DIRC
XRST
DATA
XLT
CLK
DGND
BW
PDI
ISET
VCOF
8.64M
LOCK
MDP
MON
FSW
FE
ATSC
TZC
TE
DFTC
DVEE
MIRR
FOK
WDCK
SPDOL
SPDL-
DVCC
R327 47k
C122 100μ 10V
IC9
M51565P
AUDIO
VEE
EPS
MUTE
VCC
R226 150
R228 330
R232 1k
R225 150
R224 22k
R223 22k
R229 1.2k
R219 1.2k
R230 1.2k
R220 1.2k
Q11 2SC3623 MUTING
C214 22μ 50V
R218 100k
C213 22μ 50V
C212 470p
R214 2.7k(±1%)
R213 2.7k(±1%)
R215 2.7k(±1%)
R216 2.7k(±1%)
R212 2.7k (±1%)
C210 0.01
C211 470p
R211 2.7k (±1%)
C204 0.001
R210 7.5k
C206 0.0022
C205 0.0022
C207 0.0022
R209 7.5k
C203 0.001
R208 6.8k
C208 0.0022
R207 6.8k
R206 2.2k
R205 2.2k
C202 470p
R204 2.2k
R203 2.2k
C201 470p
C216 470p
C215 470p
R202 7.5k
R201 7.5k
Q4 2SC3399 PAL RANG
Q5 2SC3399 SWITCHING
R339 10k
R320 10k
C314 1μ 50V
R321 22k
C315 22μ 50V
C316 0.0047
R322 10k
R323 120k
C131 100μ 10V
R324 3.6k ±1%
RV305 1k:RH
C317 1000p
R328 20k
C319 0.033
R325 1M
C318 0.47μ 50V
RF PLL
R332 10k
TP6 CLV
0.25Vp-p
R336 100k(±1%)
R337 100k(±1%)
R331 100k
IC3 CXD-1135Q
DIGITAL SIGNAL PROCESSOR/CLV SERVO
SCOR
SUBQ
SBSO
EXCK
CRCF
MUTG
SENS
CNIN
RESET
DATA
LATCH
CLOCK
VSS
PDO
TEST
VCOI
VCOO
LOCK
ASY
EFM
MDS
MDP
MON
FSW
SQCK
SQEX
DOTX (WFCK)
GFS
DB08
DB07
DB06
DB05
VDD
DB04
DB03
DB02
DB01
RA01
RA02
RA03
LRCK
WDCK
DATA
C210
C4LR
RAOV
GTOP
VGFS
PLCK
WFCK
RECK
C2PO
C2FL
C2F2
RA04
RA05
RA06
RA07
RA08
RA09
RA10
RA11
RAWE
RACS
C4M
XTAO
XTAI
MD1
MD2
SLOB
PSSL
APTL
APTR
C1F1
C2F1
C116 100μ 10V
4Vp-p
0.15μSEC
R417 4.7k
C323 33p
C324 33p
8M
IC10
PCM56 P-S
D/A CONVERTER
VeD
Vout
CONT DATA
RPB
LATCH ENABLE
SUM
CLOCK
AG
Iout
MSB ADJ
VPOT
VG
VcA
VeA
C115 100μ 10V
C113 100μ 10V
C114 100μ 10V
5Vp-p
IC4
LC3516AML-15
16K bit RAM
VSS
CS
OE
WE
C118 100μ 10V
5Vp-p
0.2μSEC
IC12
LC4969
INVERTER
VDD
VSS
DATA
R416 10k
0.2μSEC



Note:

- All capacitors are i
  50WV or less are
  and tantalums.
- All resistors are in
  specified.
- ⟶: signal path.
- ——: B+ bus.
- - - -: B- bus.
- ▭: adjustment
- Voltages are dc wi
  noted.
- Readings are taken
  with a VOM (50 kΩ
- Voltage variations
  tion tolerances.
- Note: • A ... Circl
  mounting a
- Waveforms are take



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ➝: signal path.
- ——: B+ bus.
- – – –: B– bus.
- ▭: adjustment for repair.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (50 kΩ/V).
- Voltage variations may be noted due to normal production tolerances.
- Note: • A ... Circled T.P. No's coincide with those in mounting and schematic diagrams.
- Waveforms are taken to ground by using oscilloscope.

- Switches

Ref. No.	Switch	Position
S1	⏭	OFF
S2	⏮	OFF
S3	PLAY/PAUSE	OFF
S4	STOP/CLEAR	OFF
S5	MEMORY/TIME	OFF
S6	REPEAT	OFF
S7	SHUFFLE	OFF
S8	OPEN/CLOSE	OFF
S9	POWER	OFF
S10	LIMIT	OFF
S11	LOADING	OFF
S12	AUTO SPACE	OFF

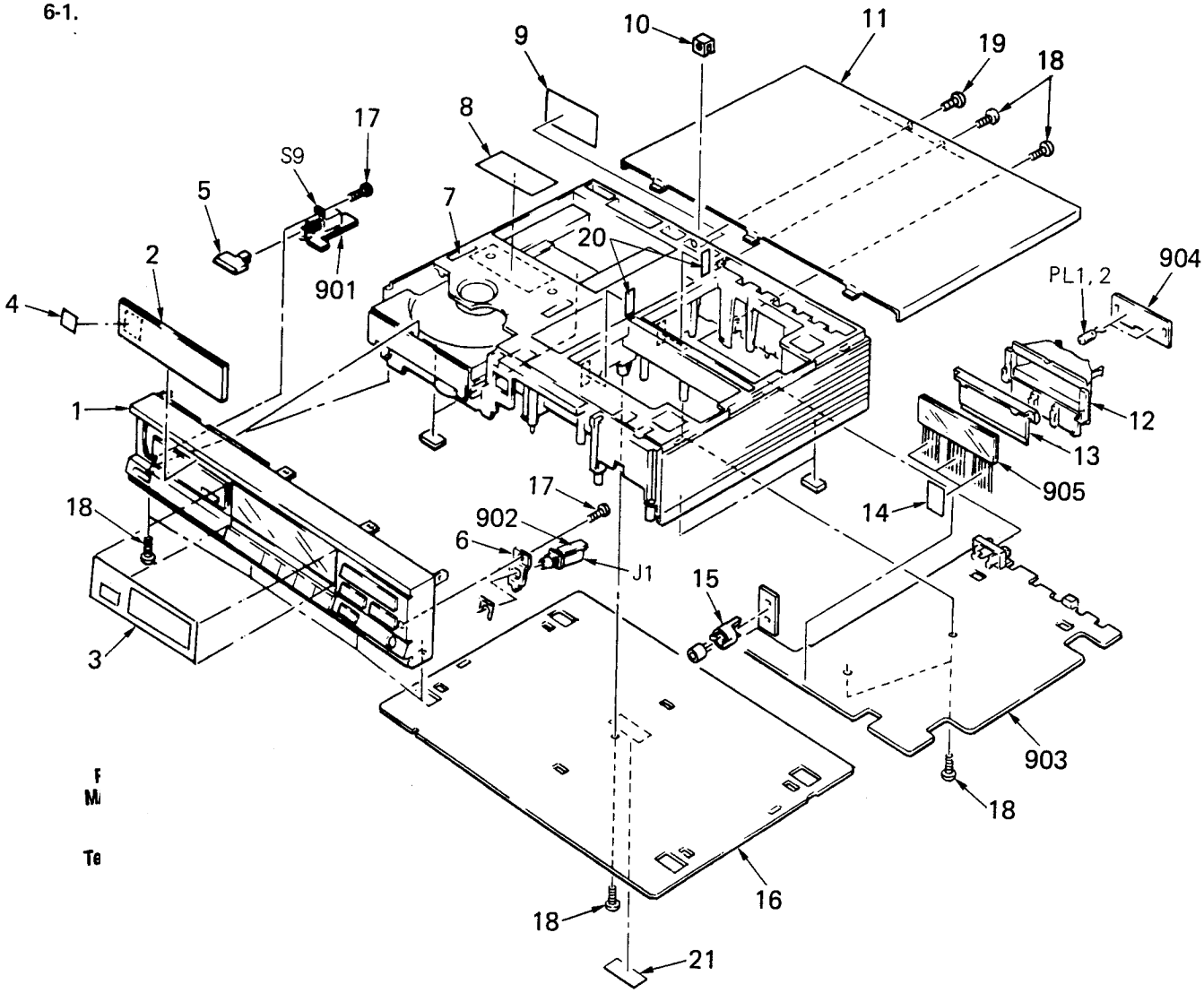
SECTION 6
EXPLODED VIEWS AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Color Indication of Appearance Parts
  Example: (RED) ..... KNOB, BALANCE (WHITE)
  ↑ Cabinet's Color ↑ Parts' Color

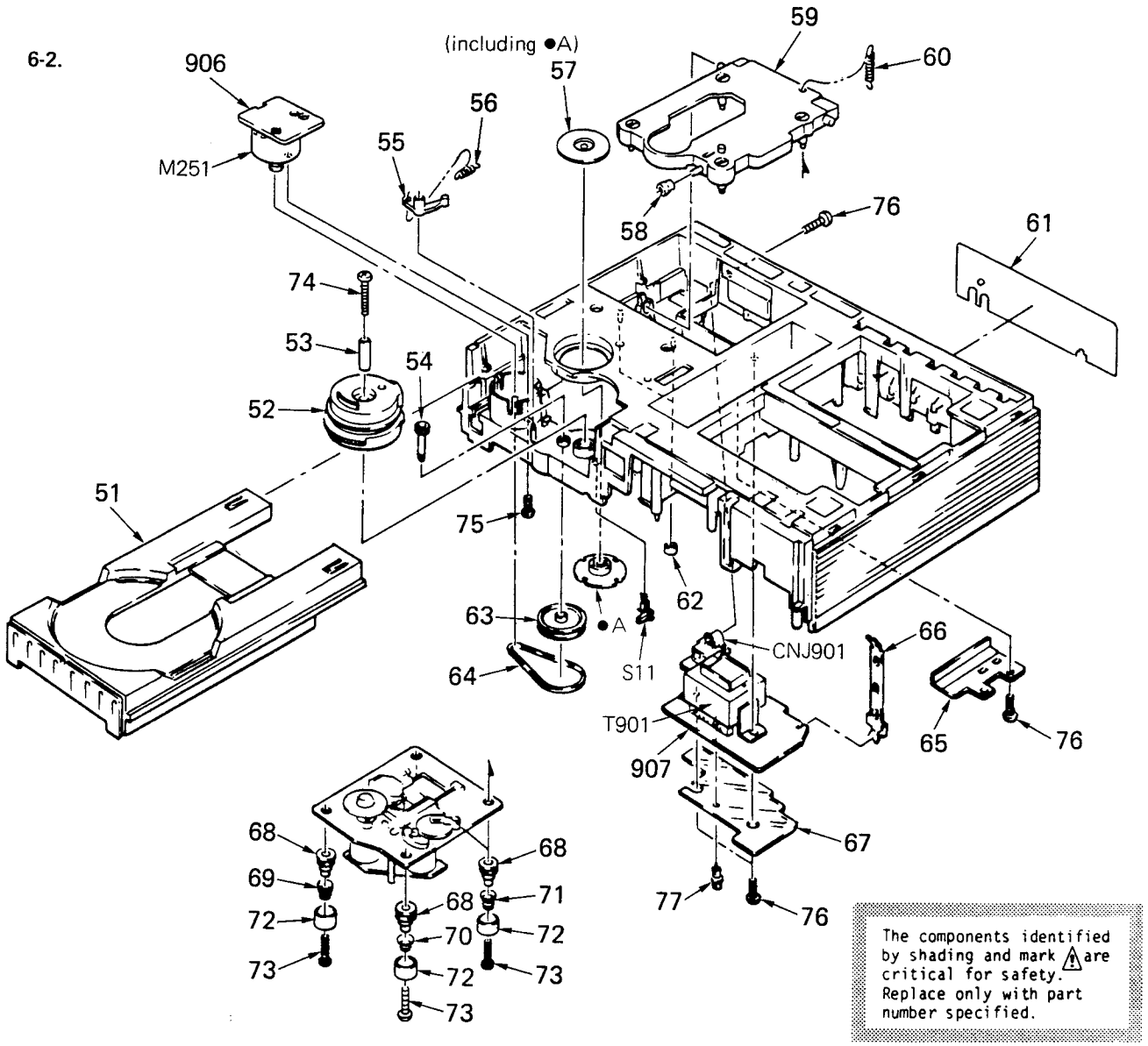
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

6-1.



No.	Part No.	Description	Remarks
1	X-4917-514-1	PANEL ASSY, CONTROL	
2	4-917-531-11	PANEL, LOADING	
3	4-917-530-01	PLATE (A), INDICATION	
4	3-703-713-41	STICKER, SONY SYMBOL (10)	
5	4-917-525-01	KNOB, POWER	
6	*4-917-513-01	BRACKET, HEADPHONE	
7	X-4917-506-1	FRAME ASSY	
8	*4-885-843-02	LABEL, CAUTION, LASER	
9	*4-885-838-00	LABEL, CLASS 1	
10	*4-918-670-01	SUPPORT, GROUND	
11	4-917-536-03	CASE	
12	*4-917-529-01	HOUSE, LAMP	
13	*4-917-528-01	ILLUMINATOR	
14	3-831-441-XX	CUSHION (25X15X0.3)	
15	*4-917-593-01	HOLDER, SENSOR	
16	*4-917-535-01	PLATE, BOTTOM	
17	7-685-133-19	SCREW +P 2.6X6 TYPE1	
18	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
19	3-703-685-21	SCREW (+BV 3X8)	
20	3-831-441-XX	(AEP)...CUSHION (B), CABINET	
21	3-703-079-21	(UK)....LABEL, CAUTION (BACK)	
901	*1-620-604-11	PC BOARD, POWER SW	
902	*1-620-605-11	PC BOARD, HEADPHONE	
903	*A-4651-109-A	MOUNTED PCB, MAIN	
904	*1-620-606-11	PC BOARD, LAMP	
905	1-807-686-11	DISPLAY PANEL, LIQUID CRYSTAL	
J1	1-563-485-21	JACK, LARGE TYPE (HEADPHONES)	

6-2.

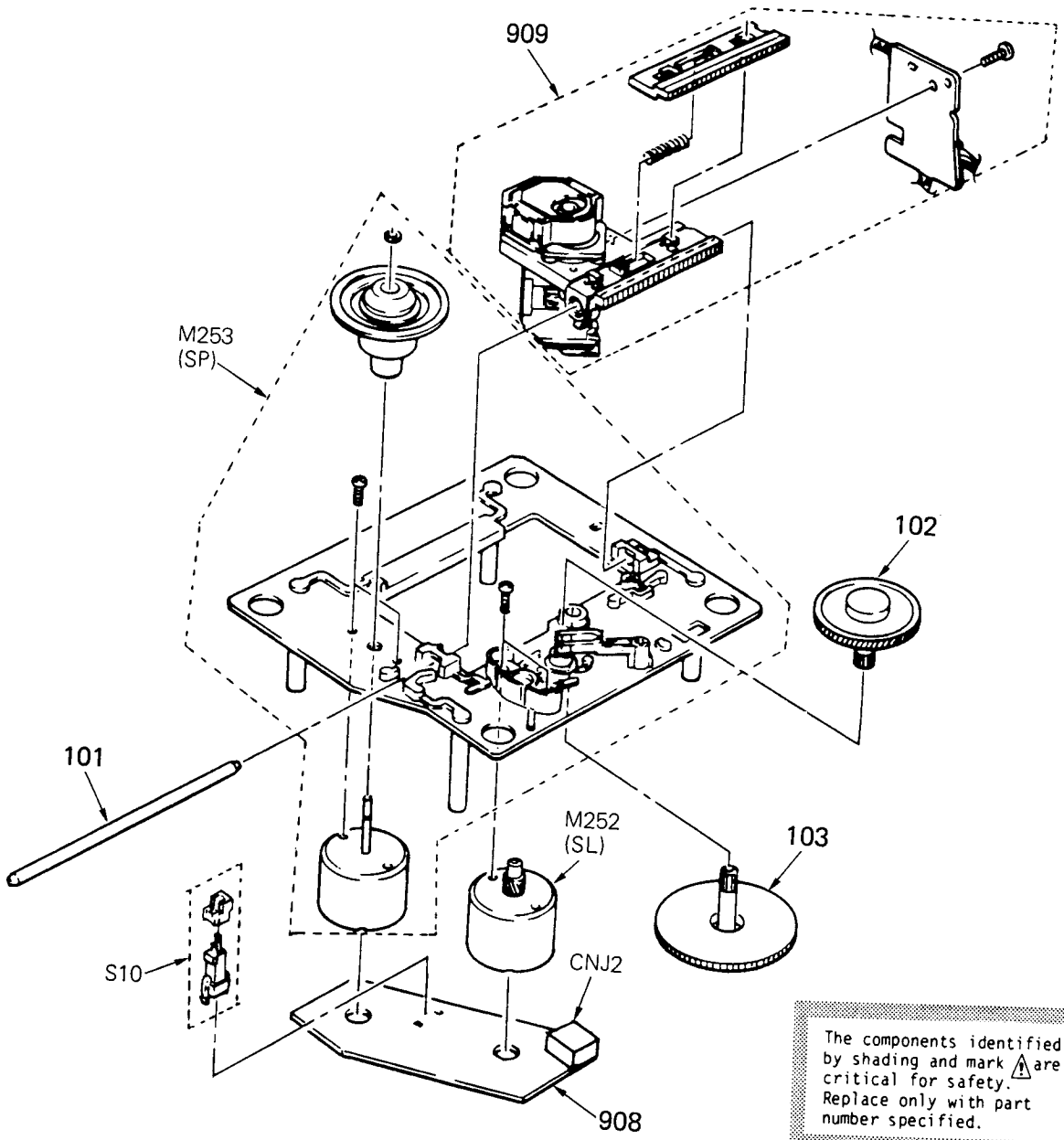


The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remarks
51	4-917-539-01	TABLE, DISK	
52	4-917-534-01	GEAR (A), LOADING	
53	*4-917-523-01	COLLAR, CAM	
54	4-917-516-01	GEAR (B), LOADING	
55	4-917-519-02	LEVER, SET	
56	4-917-514-01	SPRING, TENSION	
57	A-4665-024-A	MAGNET ASSY	
58	4-917-515-01	ROLLER	
59	4-917-537-01	BASE, FLOATING	
60	4-917-526-01	SPRING, TENSION	
61	4-917-502-01	(UK)....PLATE (B), INDICATION, TERMINAL	
	4-917-503-01	(AEP)...PLATE (B), INDICATION, TERMINAL	
62	*3-576-990-01	CUSHION	
63	4-917-521-01	PULLEY, LOADING	
64	4-917-522-01	BELT	
65	*4-917-517-01	GUIDE, LEAD	
66	*4-917-511-01	PLATE, GROUND	

No.	Part No.	Description	Remarks
67	4-917-510-01	SHEET, INSULATING	
68	4-917-562-01	INSULATOR	
69	4-918-669-01	SPRING (W)	
70	4-917-541-01	SPRING (B)	
71	4-917-507-01	SPRING (H)	
72	4-917-508-01	HOLDER, SP	
73	7-685-535-19	SCREW +BTP 2.6X10 TYPE2 N-S	
74	7-685-552-19	SCREW +BTP 3X25 TYPE2 N-S	
75	7-621-759-30	+PSW, 2.6X5	
76	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
77	3-531-576-11	RIVET	
906	*1-620-603-11	PC BOARD, LOADING MOTOR	
907	*1-620-600-11	PC BOARD, POWER	
⚠CNJ901	1-526-931-11	INLET, AC	
M251	A-4608-330-A	MOTOR ASSY (LOADING)	
S11	1-570-203-11	SWITCH, LEAF (LOADING)	
T901	⚠1-448-686-11	(UK)....TRANSFORMER, POWER	
T901	⚠1-448-690-11	(AEP)...TRANSFORMER, POWER	

6-3.



The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remarks
101	4-917-565-01	SHAFT, SLED	
102	4-917-567-01	GEAR (M)	
103	4-917-564-01	GEAR (P), FLATNESS	
908	*1-620-097-11	PC BOARD, SL/SP MOTOR	
909	⚠8-848-046-11	PICKUP, OPTICS KSS-150A	
M252	X-4917-504-1	MOTOR ASSY (SLED)	
M253	X-4917-523-1	BASE (OUTSURT) ASSY (SPINDLE)	
S10	1-570-822-11	SWITCH, LEAF (LIMIT IN)	

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
901	*1-620-604-11	PC BOARD, POWER SW			
902	*1-620-605-11	PC BOARD, HEADPHONE			
903	*A-4651-109-A	MOUNTED PCB, MAIN			
904	*1-620-606-11	PC BOARD, LAMP			
905	1-807-686-11	DISPLAY PANEL, LIQUID CRYSTAL			
906	*1-620-603-11	PC BOARD, LOADING MOTOR			
907	*1-620-600-11	PC BOARD, POWER			
908	*1-620-097-11	PC BOARD, SL/SP MOTOR			
909	⚠8-848-046-11	PICKUP, OPTICS KSS-150A			
C103	1-123-875-11	ELECT	10MF	20%	50V
C105	1-124-898-11	ELECT	4700MF	20%	16V
C106	1-124-898-11	ELECT	4700MF	20%	16V
C107	1-124-443-00	ELECT	100MF	20%	10V
C108	1-124-443-00	ELECT	100MF	20%	10V
C110	1-124-443-00	ELECT	100MF	20%	10V
C111	1-124-443-00	ELECT	100MF	20%	10V
C113	1-124-443-00	ELECT	100MF	20%	10V
C114	1-124-443-00	ELECT	100MF	20%	10V
C115	1-124-443-00	ELECT	100MF	20%	10V
C116	1-124-443-00	ELECT	100MF	20%	10V
C117	1-124-443-00	ELECT	100MF	20%	10V
C118	1-124-443-00	ELECT	100MF	20%	10V
C119	1-124-443-00	ELECT	100MF	20%	10V
C120	1-124-443-00	ELECT	100MF	20%	10V
C121	1-124-443-00	ELECT	100MF	20%	10V
C122	1-124-443-00	ELECT	100MF	20%	10V
C123	1-123-875-11	ELECT	10MF	20%	50V
C124	1-124-236-00	ELECT	47MF	20%	16V
C125	1-124-236-00	ELECT	47MF	20%	16V
C126	1-124-443-00	ELECT	100MF	20%	10V
C127	1-124-443-00	ELECT	100MF	20%	10V
C128	1-124-443-00	ELECT	100MF	20%	10V
C131	1-124-443-00	ELECT	100MF	20%	10V
C133	1-124-236-00	ELECT	47MF	20%	16V
C150	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C201	1-130-467-00	MYLAR	470PF	5%	50V
C202	1-130-467-00	MYLAR	470PF	5%	50V
C203	1-130-471-00	MYLAR	0.001MF	5%	50V
C204	1-130-471-00	MYLAR	0.001MF	5%	50V
C205	1-130-475-00	MYLAR	0.0022MF	5%	50V
C206	1-130-475-00	MYLAR	0.0022MF	5%	50V
C207	1-130-475-00	MYLAR	0.0022MF	5%	50V
C208	1-130-475-00	MYLAR	0.0022MF	5%	50V
C209	1-136-153-00	FILM	0.01MF	5%	50V
C210	1-136-153-00	FILM	0.01MF	5%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C211	1-130-467-00	MYLAR	470PF	5%	50V
C212	1-130-467-00	MYLAR	470PF	5%	50V
C213	1-123-357-00	ELECT	22MF	20%	50V
C214	1-123-357-00	ELECT	22MF	20%	50V
C215	1-162-290-31	CERAMIC	470PF	10%	50V
C216	1-162-290-31	CERAMIC	470PF	10%	50V
C301	1-124-443-00	ELECT	100MF	20%	10V
C302	1-130-475-00	MYLAR	0.0022MF	5%	50V
C303	1-162-201-31	CERAMIC	12PF	5%	50V
C304	1-136-159-00	FILM	0.033MF	5%	50V
C305	1-136-159-00	FILM	0.033MF	5%	50V
C306	1-136-153-00	FILM	0.01MF	5%	50V
C307	1-136-165-00	FILM	0.1MF	5%	50V
C308	1-136-161-00	FILM	0.047MF	5%	50V
C309	1-123-382-00	ELECT	3.3MF	20%	50V
C310	1-136-165-00	FILM	0.1MF	5%	50V
C312	1-123-875-11	ELECT	10MF	20%	50V
C313	1-136-165-00	FILM	0.1MF	5%	50V
C314	1-124-499-11	ELECT	1MF	20%	50V
C315	1-124-927-11	ELECT	4.7MF	20%	50V
C316	1-130-479-00	MYLAR	0.0047MF	5%	50V
C317	1-162-294-31	CERAMIC	0.001MF	10%	50V
C318	1-124-902-00	ELECT	0.47MF	20%	50V
C319	1-136-159-00	FILM	0.033MF	5%	50V
C320	1-130-475-00	MYLAR	0.0022MF	5%	50V
C321	1-136-153-00	FILM	0.01MF	5%	50V
C322	1-124-902-00	ELECT	0.47MF	20%	50V
C323	1-162-211-31	CERAMIC	33PF	5%	50V
C324	1-162-211-31	CERAMIC	33PF	5%	50V
C325	1-162-294-31	CERAMIC	0.001MF	10%	50V
C326	1-161-047-00	CERAMIC	0.0047MF	20%	25V
C350	1-162-199-31	CERAMIC	10PF	5%	50V
C351	1-162-199-31	CERAMIC	10PF	5%	50V
C501	1-106-351-00	FILM	0.0022MF	5%	50V
C502	1-106-351-00	FILM	0.0022MF	5%	50V
C601	1-136-157-00	FILM	0.022MF	5%	50V
C801	⚠1-136-165-00	FILM	0.1MF	5%	50V
C901	1-162-294-31	CERAMIC	0.001MF	10%	50V
C902	1-162-294-31	CERAMIC	0.001MF	10%	50V
CNJ1	*1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CNJ2	*1-564-720-41	PIN, CONNECTOR (SMALL TYPE) 4P			
CNJ3	*1-564-724-11	PIN, CONNECTOR (SMALL TYPE) 8P			
CNJ4	*1-564-720-31	PIN, CONNECTOR (SMALL TYPE) 4P			
CNJ5	*1-564-495-11	PIN, CONNECTOR 2P			
CNJ6	*1-564-496-11	PIN, CONNECTOR 3P			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
CNJ7	*1-566-214-11	PIN, CONNECTOR (PC BOARD) 2P
CNJ8	*1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
CNJ9	*1-564-498-11	PIN, CONNECTOR 5P
CNJ13	*1-564-337-00	PIN, CONNECTOR 3P
CNJ15	*1-562-999-21	JACK, PIN 2P (LINE OUT)
CNJ20	*1-566-165-11	CONNECTOR, BOARD TO BOARD 3P
CNJ21	*1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
⚠CNJ901	1-526-931-11	INLET, AC
D101	8-719-511-40	DIODE S1VB40
D201	8-719-941-37	DIODE LT8500R1
D202	8-719-940-76	DIODE 1SS132
D203	8-719-940-76	DIODE 1SS132
D204	8-719-940-76	DIODE 1SS132
D205	8-719-940-76	DIODE 1SS132
IC1	8-752-030-93	IC CXA1081M
IC2	8-752-031-61	IC CXA1082AQ
IC3	8-752-322-05	IC CXD1135Q
IC4	8-759-802-74	IC LC3516AML-15
IC5	8-759-604-62	IC M50930-431FP
IC6	8-759-303-90	IC STA341M
IC7	8-759-202-01	IC TA7256P
IC8	8-759-604-03	IC M5290P
IC9	8-759-604-00	IC M51565P
IC10	8-759-937-95	IC PCM56P-S
IC11	8-749-900-69	IC BX-1457
IC12	8-759-803-41	IC LC4969
J1	1-563-485-21	JACK, LARGE TYPE (HEADPHONES)
L301	1-408-563-00	MICRO INDUCTOR 10UH
M251	A-4608-330-A	MOTOR ASSY (LOADING)
M252	X-4917-504-1	MOTOR ASSY (SLED)
M253	X-4917-505-1	BASE (OUTSURT) ASSY (SPINDLE)
PL1	1-518-606-11	LAMP, PILOT
PL2	1-518-606-11	LAMP, PILOT
PS1	1-532-685-00	LINK, IC 0.8A
PS2	1-532-685-00	LINK, IC 0.8A
PS3	1-532-605-00	LINK, IC 0.8A
PS4	1-532-605-00	LINK, IC 0.8A
Q1	8-729-807-03	TRANSISTOR 2SB1133SA
Q2	8-729-807-07	TRANSISTOR 2SD1666SA
Q3	8-729-801-83	TRANSISTOR 2SB1013
Q4	8-729-806-38	TRANSISTOR 2SC3399
Q5	8-729-806-38	TRANSISTOR 2SC3399
Q6	8-729-806-38	TRANSISTOR 2SC3399

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
Q7	8-729-900-67	TRANSISTOR DTA124XS			
Q10	8-729-107-77	TRANSISTOR 2SC3623-L			
Q11	8-729-107-77	TRANSISTOR 2SC3623-L			
R101	1-249-405-11	CARBON	100	5%	1/4W
R102	1-249-429-11	CARBON	10K	5%	1/4W
R103	1-249-425-11	CARBON	4.7K	5%	1/4W
R104	1-249-425-11	CARBON	4.7K	5%	1/4W
R110	1-249-441-11	CARBON	100K	5%	1/4W
R201	1-215-442-00	CARBON	7.5K	5%	1/4W
R202	1-215-442-00	CARBON	7.5K	5%	1/4W
R203	1-249-421-11	CARBON	2.2K	5%	1/4W
R204	1-249-421-11	CARBON	2.2K	5%	1/4W
R205	1-249-421-11	CARBON	2.2K	5%	1/4W
R206	1-249-421-11	CARBON	2.2K	5%	1/4W
R207	1-249-427-11	CARBON	6.8K	5%	1/4W
R208	1-249-427-11	CARBON	6.8K	5%	1/4W
R209	1-215-442-00	CARBON	7.5K	5%	1/4W
R210	1-215-442-00	CARBON	7.5K	5%	1/4W
R211	1-215-431-00	METAL	2.7K	1%	1/6W
R212	1-215-431-00	METAL	2.7K	1%	1/6W
R213	1-215-431-00	METAL	2.7K	1%	1/6W
R214	1-215-431-00	METAL	2.7K	1%	1/6W
R215	1-215-431-00	METAL	2.7K	1%	1/6W
R216	1-215-431-00	METAL	2.7K	1%	1/6W
R217	1-249-441-11	CARBON	100K	5%	1/4W
R218	1-249-441-11	CARBON	100K	5%	1/4W
R219	1-249-418-11	CARBON	1.2K	5%	1/4W
R220	1-249-418-11	CARBON	1.2K	5%	1/4W
R223	1-249-433-11	CARBON	22K	5%	1/4W
R224	1-249-433-11	CARBON	22K	5%	1/4W
R225	1-247-702-11	CARBON	150	5%	1/4W
R226	1-247-702-11	CARBON	150	5%	1/4W
R227	1-249-411-11	CARBON	330	5%	1/4W
R228	1-249-411-11	CARBON	330	5%	1/4W
R229	1-249-418-11	CARBON	1.2K	5%	1/4W
R230	1-249-418-11	CARBON	1.2K	5%	1/4W
R231	1-249-417-11	CARBON	1K	5%	1/4W
R232	1-249-417-11	CARBON	1K	5%	1/4W
R233	1-249-417-11	CARBON	1K	5%	1/4W
R235	1-249-412-11	CARBON	390	5%	1/4W
R244	1-249-441-11	CARBON	100K	5%	1/4W
R301	1-214-092-00	METAL	22	1%	1/4W
R302	1-249-424-11	CARBON	3.9K	5%	1/4W
R303	1-249-432-11	CARBON	18K	5%	1/4W
R304	1-249-429-11	CARBON	10K	5%	1/4W

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R305	1-249-433-11	CARBON	22K	5%	1/4W
R306	1-249-429-11	CARBON	10K	5%	1/4W
R307	1-249-429-11	CARBON	10K	5%	1/4W
R308	1-215-437-00	METAL	4.7K	1%	1/6W
R309	1-215-437-00	METAL	4.7K	1%	1/6W
R310	1-249-385-11	CARBON	2.2	5%	1/4W
R311	1-247-883-00	CARBON	150K	5%	1/4W
R312	1-249-385-11	CARBON	2.2	5%	1/4W
R313	1-249-441-11	CARBON	100K	5%	1/4W
R314	1-215-479-00	CARBON	270K	5%	1/4W
R315	1-249-435-11	CARBON	33K	5%	1/4W
R316	1-249-385-11	CARBON	2.2	5%	1/4W
R317	1-247-881-00	CARBON	120K	5%	1/4W
R318	1-249-428-11	CARBON	8.2K	5%	1/4W
R319	1-249-441-11	CARBON	100K	5%	1/4W
R320	1-249-429-11	CARBON	10K	5%	1/4W
R321	1-249-433-11	CARBON	22K	5%	1/4W
R322	1-249-429-11	CARBON	10K	5%	1/4W
R323	1-247-881-00	CARBON	120K	5%	1/4W
R324	1-215-434-00	METAL	3.6K	1%	1/6W
R325	1-215-493-00	CARBON	1M	5%	1/4W
R326	1-215-452-00	CARBON	20K	5%	1/4W
R327	1-249-437-11	CARBON	47K	5%	1/4W
R328	1-249-425-11	CARBON	4.7K	5%	1/4W
R329	1-249-429-11	CARBON	10K	5%	1/4W
R330	1-249-381-11	CARBON	1	5%	1/4W
R331	1-249-441-11	CARBON	100K	5%	1/4W
R332	1-249-429-11	CARBON	10K	5%	1/4W
R333	1-249-441-11	CARBON	100K	5%	1/4W
R334	1-215-486-00	CARBON	510K	5%	1/4W
R336	1-215-469-00	METAL	100K	1%	1/6W
R337	1-215-469-00	METAL	100K	1%	1/6W
R338	1-249-417-11	CARBON	1K	5%	1/4W
R339	1-249-429-11	CARBON	10K	5%	1/4W
R340	1-215-396-00	CARBON	91	5%	1/4W
R401	1-249-441-11	CARBON	100K	5%	1/4W
R402	1-249-441-11	CARBON	100K	5%	1/4W
R403	1-249-429-11	CARBON	10K	5%	1/4W
R410	1-249-441-11	CARBON	100K	5%	1/4W
R411	1-249-441-11	CARBON	100K	5%	1/4W
R412	1-249-441-11	CARBON	100K	5%	1/4W
R413	1-249-440-11	CARBON	82K	5%	1/4W
R414	1-249-381-11	CARBON	1	5%	1/4W
R415	1-249-441-11	CARBON	100K	5%	1/4W
R416	1-249-429-11	CARBON	10K	5%	1/4W
R417	1-249-425-11	CARBON	4.7K	5%	1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
RV301	1-237-194-21	RES, ADJ, CARBON 20K
RV302	1-237-192-21	RES, ADJ, CARBON 5K
RV303	1-237-194-21	RES, ADJ, CARBON 20K
RV304	1-237-194-21	RES, ADJ, CARBON 20K
RV305	1-228-990-00	RES, ADJ, METAL GLAZE 1K
S1	1-554-088-00	SWITCH, KEY BOARD (FORWARD SEARCH/AMS)
S2	1-554-088-00	SWITCH, KEY BOARD (REVERSE SEARCH/AMS)
S3	1-570-577-11	SWITCH, PUSH (PLAY/PAUSE)
S4	1-554-088-00	SWITCH, KEY BOARD (STOP/CLEAR)
S5	1-554-088-00	SWITCH, KEY BOARD (MEMORY/TIME)
S6	1-554-088-00	SWITCH, KEY BOARD (REPEAT)
S7	1-554-088-00	SWITCH, KEY BOARD (SHUFFLE)
S8	1-554-088-00	SWITCH, KEY BOARD (OPEN/CLOSE)
S9	⚠1-552-928-00	SWITCH (POWER)
S10	1-570-822-11	SWITCH, LEAF (LIMIT IN)
S11	1-570-203-11	SWITCH, LEAF (LOADING)
S12	1-554-088-00	SWITCH, KEY BOARD (AUTO SPACE)
T901	⚠1-448-686-11	(UK)....TRANSFORMER, POWER
T901	⚠1-448-690-11	(AEP)...TRANSFORMER, POWER
X1	1-567-301-21	OSCILLATOR, CRYSTAL (8MHz)

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-463-784-11	REMOTE COMMANDER (RM-D50)
⚠1-558-032-11	(UK)....CORD, POWER
⚠1-558-835-11	(AEP)...CORD, POWER
1-558-543-11	CORD, CONNECTION
3-312-970-00	SHEET, PROTECTION
3-701-630-00	BAG, POLYETHYLENE
3-765-659-11	MANUAL, INSTRUCTION
3-765-659-41	(AEP)...MANUAL, INSTRUCTION
*3-795-629-11	(AEP)...INSTRUCTION
4-917-578-01	CUSHION
4-917-589-31	INDIVIDUAL CARTON
7-632-650-75	SHEET, PROTECTION (500MM)

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

TROUBLESHOOTING

The following checks will assist in the correction of most problems which you may encounter with your unit. Should any problem persist after you have made these checks, consult your nearest Sony service facility. Before going through the check list below, first refer back to the connection and operating procedures.

Symptom	Cause	Countermeasures
Play does not begin.	The disc is incorrectly inserted.	Insert the disc correctly.
	The disc is extremely dirty.	Clean the disc.
	The disc is inserted upside down.	Insert the disc with the label surface up.
	The ▶II button has been pressed.	Press the ▶II button again to release pause.
	Moisture condensation.	Leave the player turned on for about an hour.
No audio from one or both channels	Incorrect connections	Connect properly.

Sony Corporation
Audio Group

9-952-501-11

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