ɔn—22-3, Shibuya 2-chome, Shibuya-ku, Tokyo, 150 Japan Tel: 03-3400-1121 Fax: 03-3400-8679 Telex: J22908, J22152
:—50 Kamitoda, Toda-shi, Saitama, 335 Japan Tel: 0484-43-1111 Telex: J2962628 CLAFAC-J

clarion Service Manual

Published by Service Administration Section

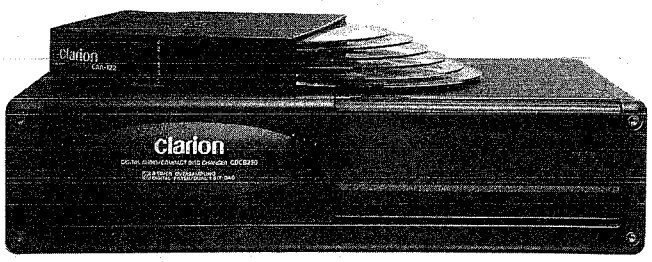


Photo is CDC9250

COMPACT disc DIGITAL AUDIO

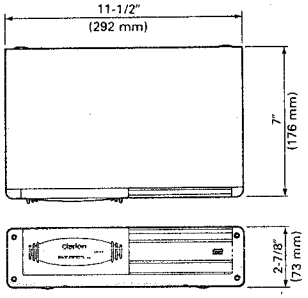
6 DISC COMPACT DISC CHANGER

Model **6201CD** (PE-2050A)
CDC9250 (PE-2050B)

■SPECIFICATIONS:

Sampling Frequency:	44.1kHz
Frequency Response:	5Hz to 20kHz
Dynamic Range:	95dB (1kHz)
Signal-to-Noise Ratio:	95dB
Wow and Flutter:	Unmeasurable
Power Supply:	14.4V (10.8V to 15.6V)
Power Consumption:	Less than 1A
Unit Weight:	2.8kg

External Dimensions



※Specifications and the design are subject to change without notice due to improvements.

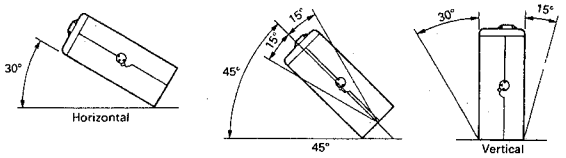
■COMPONENTS:

PE-2050A-A, PE-2050B-A

Mounting bracket A	300-9080-00	2
Mounting bracket B	300-9383-00	2
Extension lead	854-2085-00(13P)	1
Accessory box	CAA-122-101	1
{ Name plate	287-1585-00	1
{ Label	290-4832-00	1
{ CD magazine	962-0002-02	1
Parts bag	921-8812-01	1
{ Lead holder	335-0833-01	2
{ M6 wing nut	722-0545-00	4
{ D-sems-hex-bolt	734-5008-37(M5×8)	4
Parts bag	921-8813-01	1
{ Dumper key	330-9458-00	1
{ Machine screw	714-3005-47(M3×5)	2
Parts bag	921-8876-00	1
{ W-face	345-7030-00	2

■Installation of CD Changer Unit.

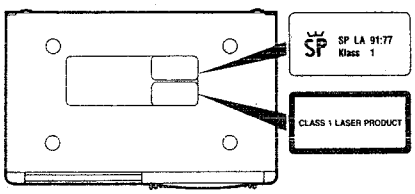
When installing, consider the safety and operability of the entire system when determining the position.
The angle of installation should be within the allowable limits for the various settings.



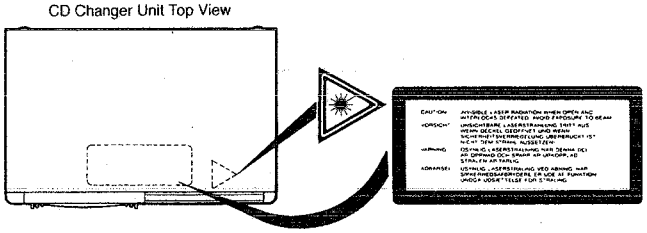
Note: NEVER turn the set upside down or change its direction during operation, as this may damage the CD mechanism and disc.

■CAUTIONS: CDC9250

CD Changer Unit Bottom View



CD Changer Unit Top View



CAUTIONS:

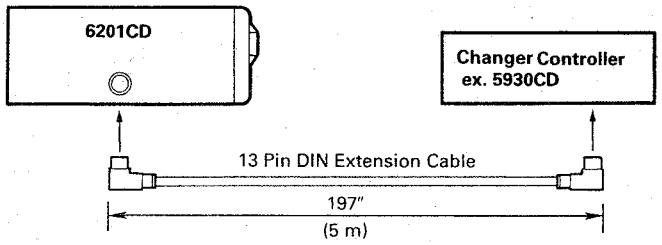
This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCT". To use this model properly, read this Owner's Manual carefully and keep this manual for your future reference. In case of any trouble with this player, please contact your nearest "AUTHORIZED service station". To prevent direct exposure to the laser beam, do not try to open the enclosure.

CAUTION

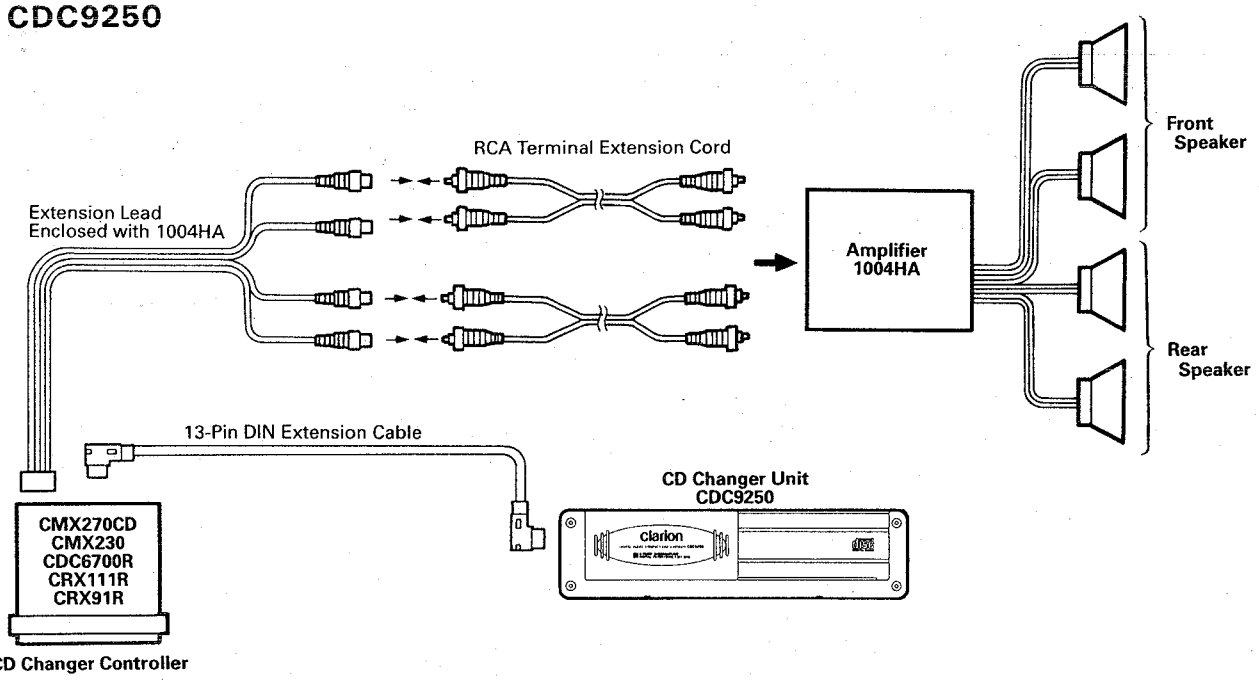
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED IN THE OWNER'S MANUAL MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■WIRE CONNECTION:

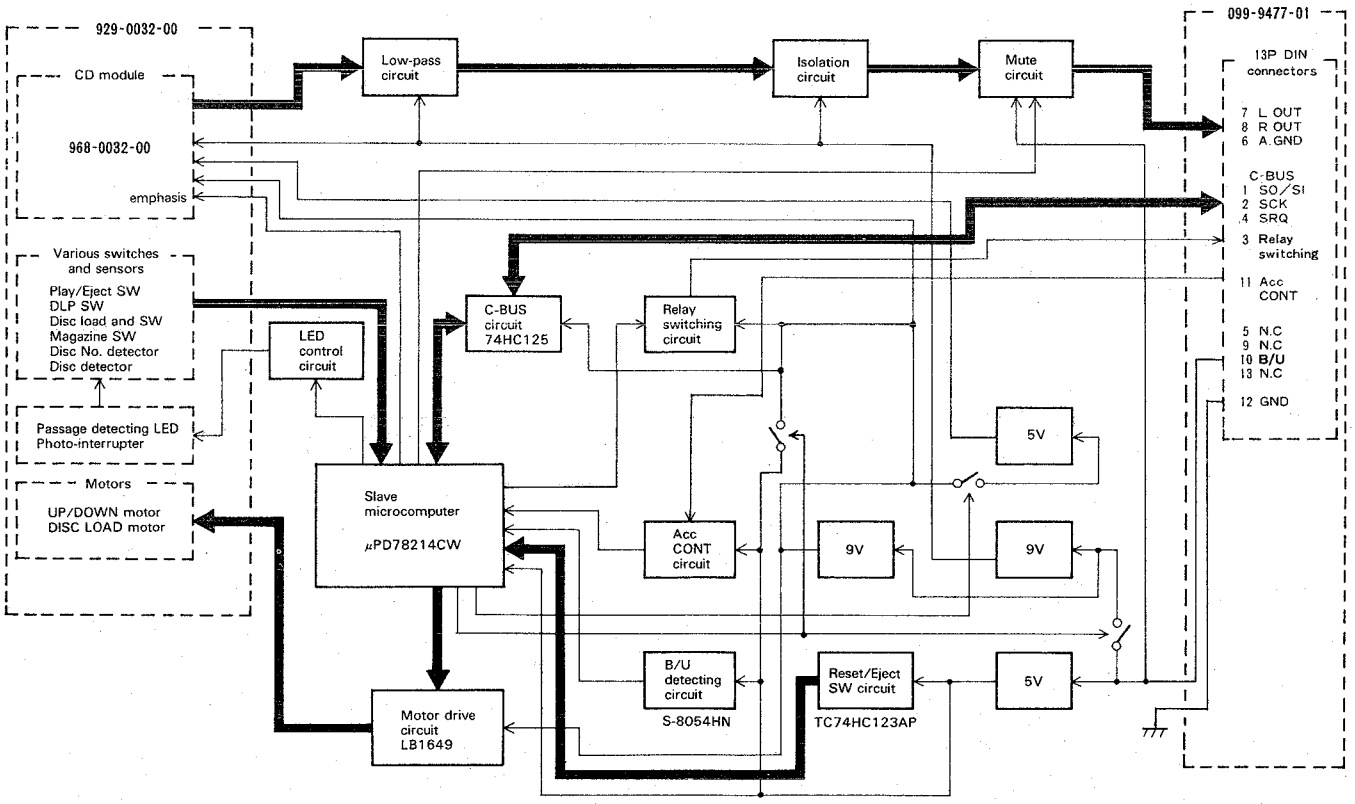
◉ 6201CD



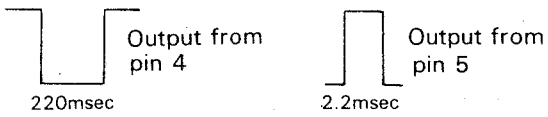
◉ CDC9250



■GENERAL BLOCK DIAGRAM:



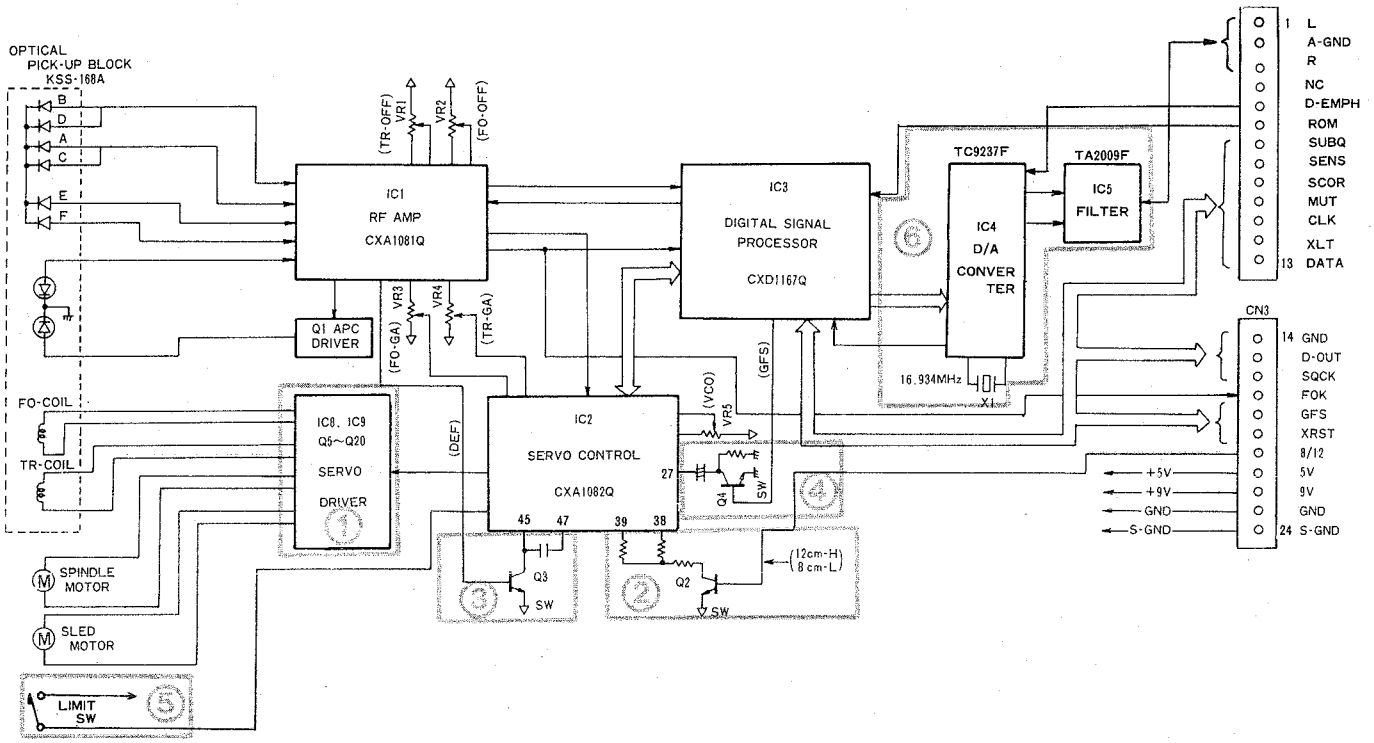
■CIRCUIT BLOCK DESCRIPTION:

Various switches and sensors	Play/Eject SW Detects the outline position in the vertical direction. Disc load plate SW (DISC LOAD PLATE SW) Detects the condition where the vertical movement is possible. Disc load end SW (DISC LOAD END SW) Detects that the disc is completely pulled out of the magazine. Magazine SW Detects whether the magazine is set or not. Disc No. detector Detects the position of disc Nos. 1 to 6 when moved up and down. Disc detector Detects the passage of the disc.
LED control circuit	The power to the disc detecting LED and photo-interrupter is controlled by a microcomputer. This circuit is turned OFF during play and ON during eject, disc change and disc check.
Motors	Vertical drive motor (U/D motor) Moves the disc up and down. Horizontal drive motor (DISC LOAD motor) Takes in and out the disc from the magazine.
Slave microcomputer	The μPD78214CW provides the C-BUS communication with the control unit to control the entire CD changer.
Motor drive circuit	The LB1649 drives the U/D and disc load motors. The applied voltages are 6V and 7V.
C-BUS circuit	It provides the bilateral communication by transistor switching to communicate with the control unit.
B/U detecting circuit	The S-8054HN monitors the power to the microcomputer. When the voltage goes below the detected voltage, the microcomputer enters the stop mode after the memory backup mode.
Reset/Eject SW	When the TC74HC123AP is used to connect B/U, a pulse of about 220 msec is output from pin 4. For backup eject, a pulse of about 2.2 msec is output from pin 5. 
Acc CONT circuit	This circuit transmits the Acc ON/OFF information from the control unit to the slave microcomputer.
Relay switching circuit	This circuit outputs 5V when the CD changer is selected.
Illumination circuit	This circuit controls the lighting of the illuminating lamp by the external illumination terminal and microcomputer.
Low-pass/Emphasis circuit	This circuit selects the low-pass filter or emphasis for CD audio signal.
Isolation circuit	This circuit disallows the noise from the chassis to the system externally connected.
Mute circuit	This circuit controls the CD audio signal ON/OFF.

■TROUBLE SHOOTING:

Symptom	Cause	Remedy
Loss of power	Bad connection.	Check connections.
Magazine cannot be inserted.	Magazine inserted wrongly.	Insert correctly.
	A magazine is already in the player.	Eject the magazine and insert the other.
	Distorted magazine.	Buy the Magazine Kit CAA-122-300 and use new magazine.
Indicators show ("[-:-0 00]" no discs) when discs are loaded.	Disc inserted upside-down.	Eject disc and reinsert with label facing upward.
	Moisture or dirt on disc.	Wipe disc free of moisture and dirt.

■BLOCK DIAGRAM OF DRIVE UNIT: 968-0032-00



①〈**Servo Driver Block**〉
The BTL circuit consisting the power TR and operating amplifier allows the BTL operation to drive the focus coil, tracking coil, spindle motor; and thread motor.

②〈**Spindle Servo Gain Switching Block**〉
This block consisting of Q2 switches the spindle servo system gain by 8-cm and 12-cm discs.

③〈**Antishock Control Block**〉
This block consisting of Q3 controls the antishock circuit at the time of detecting a defect signal.

④〈**Capture Range Control Block**〉
This block consisting of Q4 controls the PLL capture range.

⑤〈**Limit SW**〉
This switch detects that the pick-up entered the TOC area.

⑥〈**D/A Converter, Filter**〉
By removing the noise with the Filter IC (TA2009F) perfectly, D/A conversion system is composed the signal of differential output from DAC IC (TC9237F).

■PROCEDURE FOR REPAIR AND ADJUSTMENT:

1) Cautions

- This unit, as operates on single power supply, operates on the basis of various mid-point potential (such as, 2.5V and 4.7V mid points).
- When observing the operating state from the reference by an oscilloscope, connect CH1 GND to the mid point for measurement. The other probe GND should not be connected anywhere.
- When measuring the laser current, the misconnection of the measuring point may damage the laser (in the pick-up section).

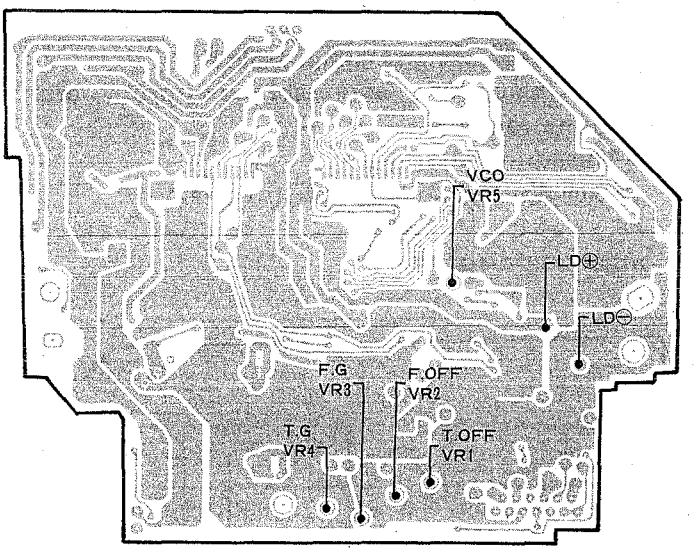
2) Test Disc

- SONY TYPE4 (YEDS18) 12cm
- ABEX MODEL TCD-783 8cm

3) Follow the precautions in handling the pick-up of special notes on page 2.

4) Adjusting order

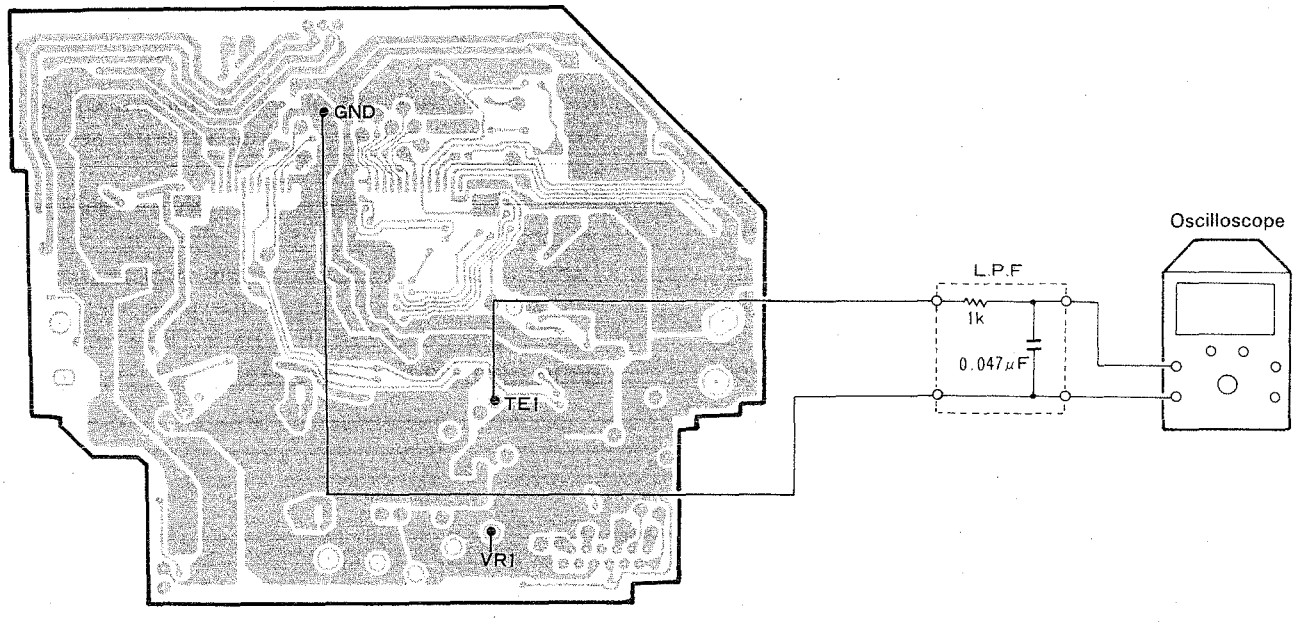
1. Tracking offset
2. Focus offset
3. Focus gain
4. Tracking gain



■Adjusting Tracking Offset

- **Purpose**
  To optimize the EF balance of the tracking servo.
- **When adjustment is incomplete**
  It takes a long time for search. The carriage runs away.
- **Measuring instrument**
  Oscilloscope
- **Measuring point**
  TP TE1
- **Test disc and setting state**
  SONY TYPE4, normal mode
- **Adjustment** : VR1

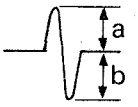
Connection diagram



Adjusting procesure

1. Make sure that the power is turned off and connect the measuring instrument as indicated in the above diagram.
2. Play back the first music of SONY TYPE4.
3. Perform the manual search and check the state of TR Jump (track jump) by an oscilloscope.

Adjust the tracking offset adjustmenting volume (VR1) so that the waveform may become symmetrical in both forward and reverse modes.

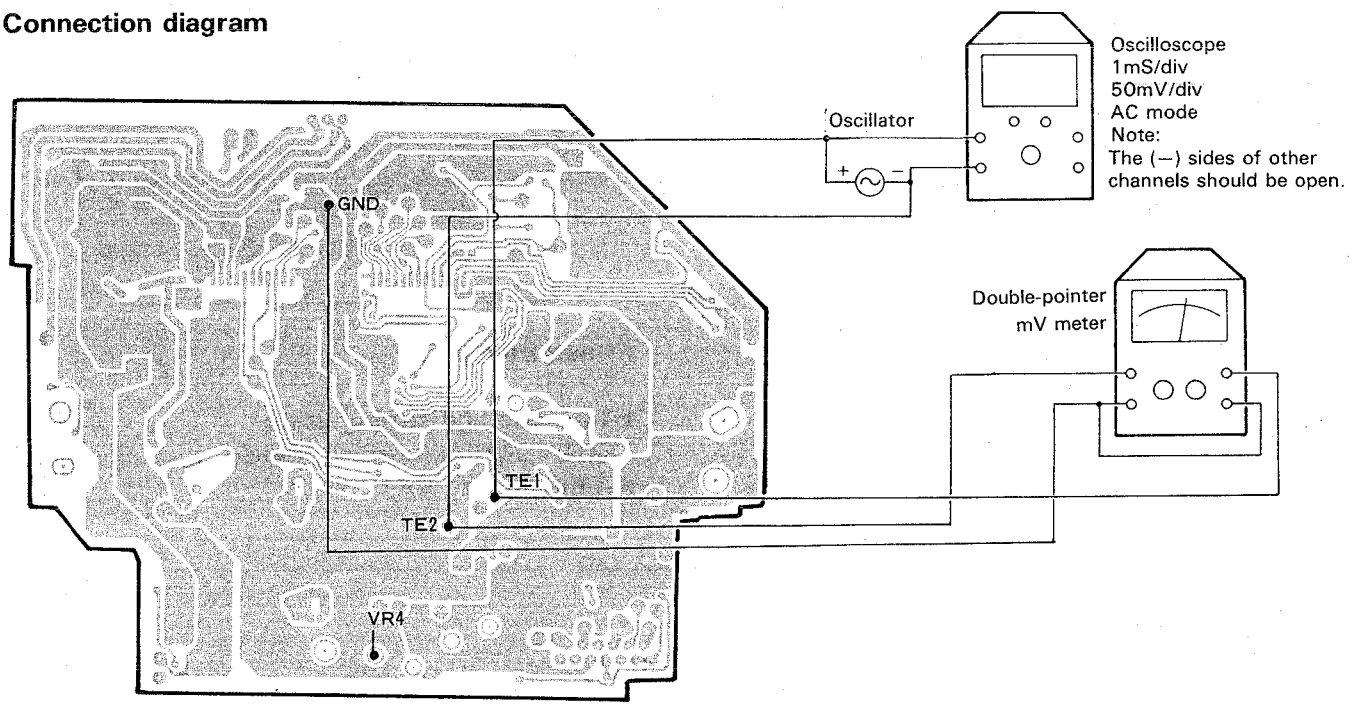


Adjust so as to be a ≒ b.

■Adjusting the Tracking Servo Loop Gain

- **Purpose**
  To adjust the tracking servo loop gain to be optimum value.
- **When adjustment is incomplete**
  The playability and vibration proof are deteriorated.
- **Measuring instrument**
  Oscillator, double-pointer mV meter
- **Measuring point**
  SERTR1, SERTR2, TP, TE1, TE2
- **Test disc and setting state**
  SONY TYPE4, normal mode
- **Adjustment** : VR4

Connection diagram



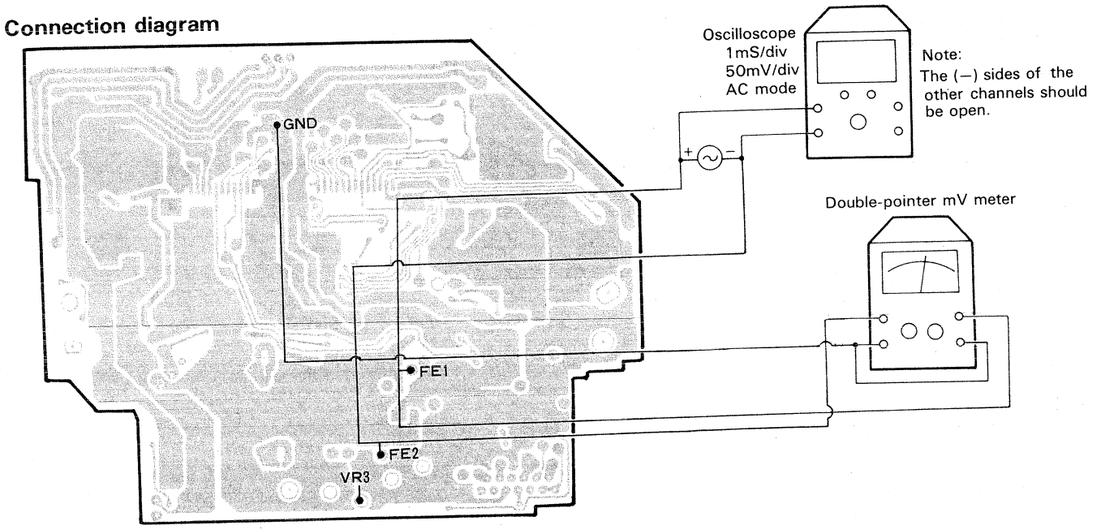
Adjusting procedure

1. Preset the oscillator. Set the output amplitude with no load to be 1Vp-p (at 1kHz).
   Note: The set value of the output level varies slightly depending on the oscillator. This set value is the one when the oscillator of about 500Ω output impedance is used. Adjustment should be made under the condition in which the servo can be activated stably even after the output of the oscillator was applied, causing no mistracking. Low output impedance provides low set output.
2. Make sure that the power is turned off and connect the measuring instruments as indicated in the above diagram.
3. Play back the first music of SONY TYPE4.
4. Adjust the tracking gain adjusting volume (VR4) so that the error of the double-pointer mV meter may be not more than 0±0.5dB (under the condition in which 1kHz output is generated from the oscillator).

■Adjusting the Focus Servo Loop Gain

- **Purpose**
  To adjust the focus servo loop gain to be optimum value.
- **When adjustment is incomplete**
  The playability and vibration proof are deteriorated. S detection is apt to fail.
- **Measuring instrument**
  Oscillator, double-pointer mV meter
- **Measuring point**
  TP FE1, FE2
- **Test disc and setting state**
  SONY TYPE4, normal mode
- **Adjustment** : VR3

Connection diagram



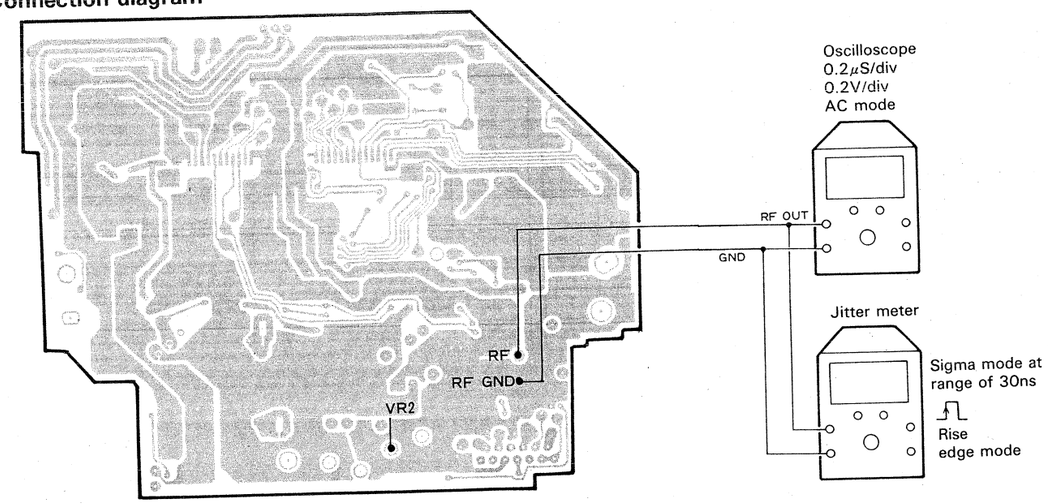
Adjusting procedure

1. Preset the oscillator. Set the output amplitude with no load to be 1Vp-p (at 1kHz).
   Note: The set value of the output level varies slightly depending on the oscillator. This set value is the one when the oscillator of about 500Ω output impedance is used. Adjustment should be made under the condition in which the servo can be activated stably even after the output of the oscillator was applied, causing no mistracking. Low output impedance provides low set output.
2. Make sure that the power is turned off and connect the measuring instruments as indicated in the above diagram.
3. Play back the first music of SONY TYPE4 in the normal mode.
4. Adjust the tracking gain adjusting volume (VR3) so that the error of the double-pointer mV meter may be not more than 0±0.5dB (under the condition in which 1kHz output is genereated from the oscillator).

■Adjusting the Focus Offset

- **Purpose**
  To adjust the focus servo bias to be optimum value.
- **When adjustment is incomplete**
  The focus is hard to be closed. Playability is deteriorated.
- **Measuring instrument**
  Oscilloscope
- **Measuring point**
  RF
- **Test disc and setting state**
  SONY TYPE4, normal mode
- **Adjustment :** VR2

Connection diagram



Adjusting procedure

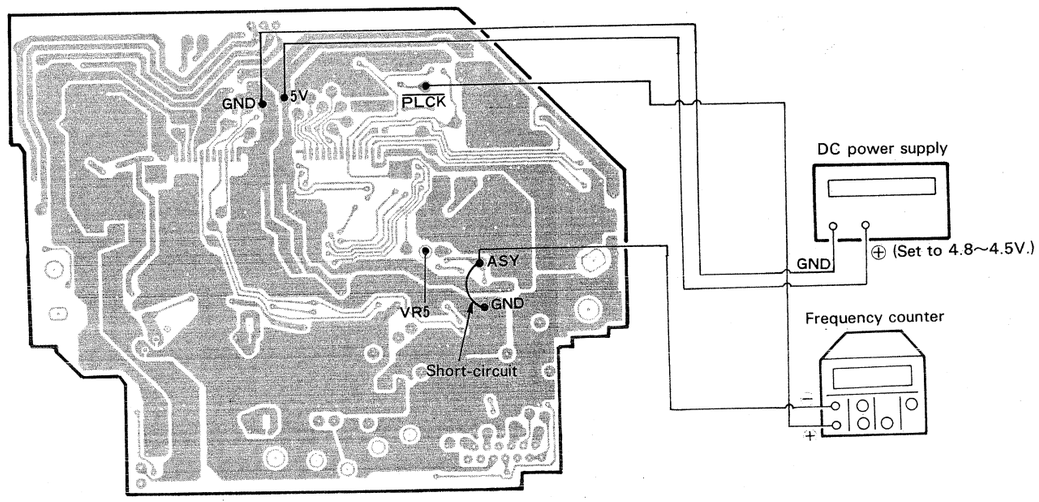
1. Play back the first music in the normal mode.
2. Connect the RF OUT to the jitter meter (Meguro) and adjust the focus offset adjusting volume (VR2) so that the jitter may be optimized.
   (When there is no jitter meter, observe the RF OUT based on GND by an oscilloscope and adjust VR2 so that RF may be maximized and the eye pattern may be omptimized.)

Note: Use the probe of 10 : 1 for connection to the jitter meter.

■Adjusting VCO Free-run Frequency

- **Purpose**
  To adjust the free-run frequency of reference clock for EFM decoder to be optimum value.
- **When adjustment is incomplete**
  Spindle lock is impossible. The sound is not emitted or breaks.
  The long access time is long. (22 music → 1 music or 1 music → 22 music by SONY TYPE4).
- **Measuring instrument**
  Frequency counter, various jigs for test mode
- **Measuring point**
  Pin 70 of $\overline{\text{PLCK}}$ CXD1167
- **Adjustment :** VR5

Connection diagram



1. Remove the mechanical module from the set.
2. Short-circuit ASY to GND.
3. Connect A-Vcc and 5V to the DC power supply.
4. Turn ON the power.
5. Read the numeric value from the frequency counter.
6. Adjust to be F=4.20MHz±10kHz.
7. Turn OFF the power.
8. Disconnect the connection.

■EXPLANATION OF IC's:

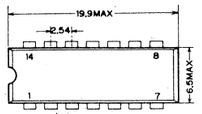
Refer to description in IC service manual Vol. 2			
NJM2058M	051-0556-01	Quad Op. Amp.	P41

Refer to description in IC service manual Vol. 3			
S-8054HN	051-0940-00	Voltage Detector	P43

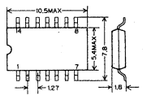
Refer to description in IC service manual Vol. 4			
CXA1081Q	051-1237-10	RF Amp. for CD Player	P38
CXA1082BQ	051-1238-00	Servo Signal Processor for CD	P40
CXD1167Q	051-1377-01	CD Digital Signal Processing	P43
LB1649	051-1408-00	Dual Clockwise/ Counter clockwise motor driver	P25
NJM4565D	051-1292-10	Dual Op. Amp.	P24
TA2009F	051-1497-00	Analog Filter for Σ-Δ Modulation Type DA Converter	P26
TC74HC123AP	051-1139-01	Dual Retriggerable Monostable Multivibrator	P35
TC9237F	051-1481-05	Σ-Δ Modulation Type DA Converter with Digital Filter	P28
μPD78214CW-714	051-1429-02	CD Autochanger Slave Microcomputer	P107

■ TC74HC125AP 051-1214-00
■ TC74HC125AF 051-1214-05
■ MC74HC125AN 051-1214-30
HD74HC125P 051-1214-60
QUAD BUS BUFFER

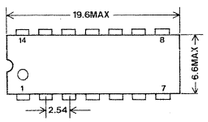
Outward Form



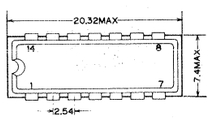
TC74HC125AP



TC74HC125AF

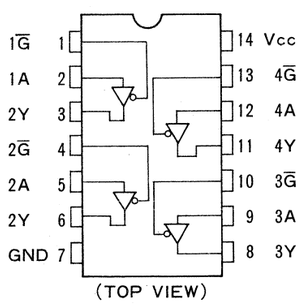


MC74HC125AN



HD74HC125P

Block Diagram



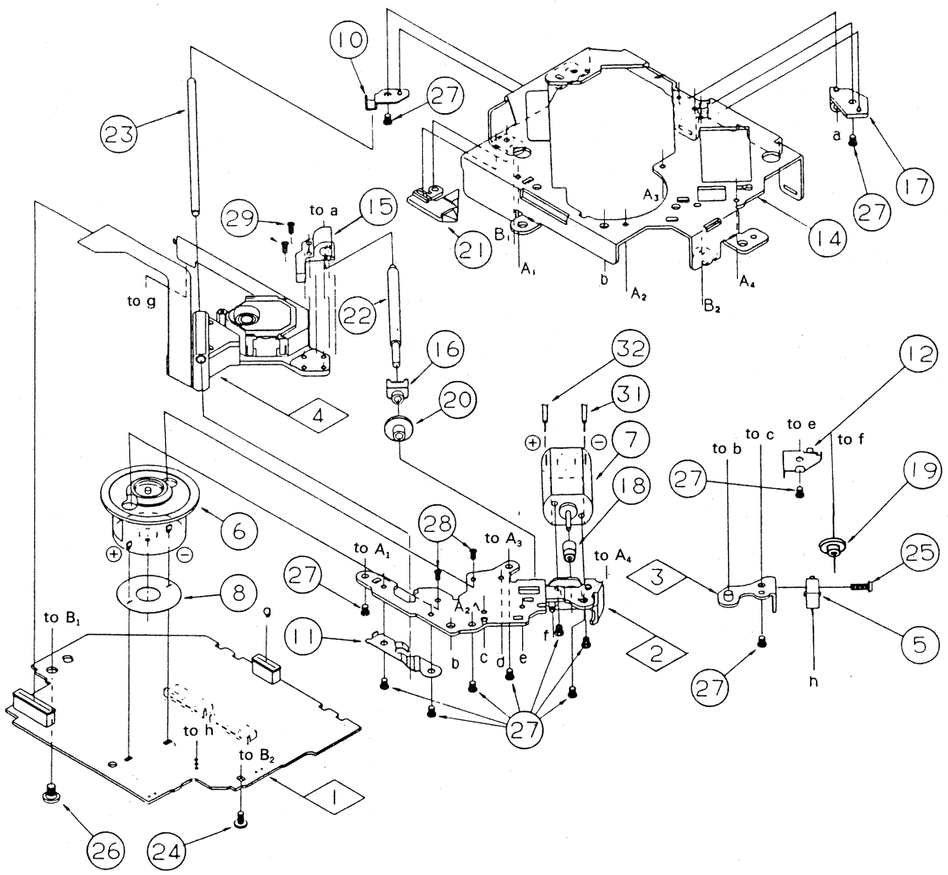
(TOP VIEW)

Truth Table

INPUTS		OUTPUTS
G̅	A	Y
H	X	Z
L	L	L
L	H	H

X : Don't Cate
Z : High Impedance

■DRIVE UNIT: 968-0032-00



REF.NO.	PART NO.	DESCRIPTION	Q'TY
1	099-9366-01	Float P.W.B	1
2	966-0182-01	DR-MO-bracket ass'y	1
3	966-0150-02	SW-plate ass'y	1
4	969-0001-00	Pick up U-ass'y	1
5	013-3808-11	Switch	1
6	020-1505-00	DC-motor	1
7	020-1507-00	DC-motor	1
8	347-3270-00	Motor sheet	1
10	620-0202-00	Hold plate	1
11	620-0328-00	Slide-S-plate	1
12	620-0204-03	SP-plate A	1
14	620-0388-00	Drive plate	1
15	621-0123-00	Screw holder	1
16	621-0168-01	L-S-holder A	1
17	621-0169-01	L-S-holder B	1

REF.NO.	PART NO.	DESCRIPTION	Q'TY
18	621-0170-01	DR-gear A	1
19	621-0171-01	DR-gear B	1
20	621-0172-01	DR-gear C	1
21	621-0173-00	FPC-guide	1
22	624-0011-99	Lead screw	1
23	624-0003-00	Slide shaft	1
24	714-2004-81	Machine screw (M2x4)	1
25	716-0791-00	Screw	1
26	716-1445-01	P.W.B screw	1
27	716-1468-00	Screw	12
28	739-1725-17	Precision screw	2
29	739-1730-17	Precision screw	2
31	800-4904-60	Vinyl-coat-wire	1
32	802-4904-60	Vinyl-coat-wire	1

REF.NO.	PART NO.	DESCRIPTION	Q'TY
1	966-0237-00	Chassis ass'y	1
2	966-0155-01	L-plate ass'y	1
3	966-0156-02	H-G-plate ass'y	1
4	966-0157-00	Idler arm ass'y	1
5	966-0158-00	H-gear D-ass'y	1
6	966-0159-01	R-arm A-ass'y	1
7	966-0160-01	R-arm B-ass'y	1
8	966-0161-01	D-SW-arm ass'y	1
9	966-0162-01	U-plate B-ass'y	1
10	966-0163-00	SP-plate ass'y	1
11	966-0164-01	Side-PL-F-ass'y	1
12	966-0165-00	Side-PL-R-ass'y	1
13	966-0166-01	Slide-PL-F-ass'y	1
14	966-0167-01	Slide-PL-R-ass'y	1
15	966-0168-02	Slide link ass'y	1
16	966-0169-01	SW-plate ass'y	1
17	966-0170-02	MG-plate ass'y	1
18	966-0171-01	MG-lock-PL-ass'y	1
19	966-0172-03	Top plate ass'y	1
20	968-0032-00	Drive unit	1
21	099-9477-01	Main P.W.B	1
22	013-3808-11	Switch	1
23	013-3808-12	Switch	1
24	013-3863-00	Switch	2
25	020-0394-00	DC-motor	1
26	020-1504-00	DC-motor	1
27	051-1406-00	IC	1
28	060-0252-00	Photo-TR	1
29	088-0017-01	Battery	1
30	099-9467-01	P.W.B	1
31	099-9467-02	P.W.B	1
32	099-9467-03	P.W.B	1
33	099-9467-04	P.W.B	1
34	099-9467-05	P.W.B	1
35	099-9157-01	P.W.B	1
36	345-6975-00	Rubber part	4
37	347-3261-00	Felt	1
38	620-0208-01	H-motor plate	1
39	620-0209-02	Thrust plate A	1
40	620-0210-01	Upper plate A	1
41	620-0211-00	Clamp arm	1
42	620-0212-00	Clamp holder	1
43	620-0213-00	D-load plate	1
44	620-0214-01	MG-eject plate	1
45	620-0215-01	MG-eject lever	1
46	620-0216-01	Thrust plate B	1
47	620-0240-00	Clamp link	1
48	621-0130-02	Disc guide A	1
49	621-0131-01	Disc guide B	1
50	621-0132-01	H-worm	1
51	621-0133-01	H-gear A	1
52	621-0134-00	H-gear B	1
53	621-0135-00	H-gear C	1
54	621-0136-00	Idler gear	1
55	621-0137-00	H-gear E	1
56	621-0138-01	H-gear F	1
57	621-0139-01	Hegear G	1

REF.NO.	PART NO.	DESCRIPTION	Q'TY
58	621-0140-00	Roller guide A	2
59	621-0141-00	Roller guide B	2
60	621-0143-00	Disc load lever	1
61	621-0144-00	Disc clamp	1
62	621-0145-02	Slide gear	1
63	621-0146-02	V-worm	1
64	621-0147-01	V-gear A	1
65	621-0148-00	V-gear B	1
66	621-0149-01	MG-stopper	1
67	621-0150-01	Dumper holder	4
68	622-0760-00	Clamp arm shaft	1
69	622-0761-00	Roller A	2
70	622-0762-00	Roller B	8
71	622-0763-00	Roller C	1
72	622-0764-01	Eject-PL-roller	1
73	622-0765-00	SL-link roller	2
74	629-0029-01	Disc roller A	1
75	629-0030-01	Disc roller B	1
76	629-0031-00	Gear dumper	1
77	629-0032-01	Dumper	4
78	714-2003-11	Machine screw (M2x3)	2
79	714-2003-81	Machine screw (M2x3)	2
80	714-2603-81	Machine screw (M2.6x3)	16
81	714-2604-81	Machine screw (M2.6x4)	10
82	714-2606-81	Machine screw (M2.6x6)	1
83	716-0484-02	Screw (M2x2.3)	23
84	716-0761-01	Screw	6
85	716-0791-00	Screw (M2x5.7)	4
86	716-1503-00	Screw	4
87	738-2025-17	Precision screw	8
88	743-1500-10	E-ring	18
89	743-2000-10	E-ring	6
90	744-0031-10	E-ring (ϕ1.5xϕ5 t0.4)	2
91	745-0737-00	Washer (ϕ1.5xϕ5 t0.04)	1
92	746-0761-00	Washer (ϕ1.6xϕ3.2 t0.25)	12
93	746-0762-00	Washer (ϕ1.6xϕ3.2 t0.5)	2
94	746-0829-00	Washer (ϕ2.1xϕ5.5 t0.25)	4
95	750-2895-00	R-arm spring A	1
96	750-2896-00	R-arm spring B	1
97	750-2897-00	C-arm spring	1
98	750-2898-00	D-SW-arm spring	1
99	750-2945-00	Clamp spring	1
100	750-2900-00	EJ-plate spring	1
101	750-2901-01	MG-lock spring	2
102	750-2923-00	SW-plate spring	1
103	801-4912-60	Vinyl-coat-wire	1
104	802-4911-60	Vinyl-coat-wire	1
105	816-2132-00	Lead	2
106	816-2133-00	Lead	2
107	854-2439-00	Extension lead	1
108	854-2440-00	Extension lead	1
109	854-2441-00	Extension lead	1
110	854-2442-00	Extension lead	1
111	335-0833-01	Lead holder	1
112	001-0563-00	Diode	1
113	345-4205-00	Spacer	1

■PARTS LIST:

◎Electrical section

◎MAIN P.W.B

REF.NO.	PART NO.	DESCRIPTION	Q'TY
D501~509 601	001-0330-00	Diode 1SS119	10
	(001-0352-00)	Diode (1SS176)	
D401	001-0377-28	Diode MA4051L	1
	(001-0400-28)	Diode (HZS5.1EB1)	
D802	001-0377-34	Diode MA4062L	1
	(001-0400-34)	Diode (HZS6.2JB1)	
D510	001-0377-36	Diode MA4062H	1
	(001-0400-36)	Diode (HZS6.2JB3)	
D801	001-0377-39	Diode MA4068H	1
	(001-0400-39)	Diode (HZS6.8JB3)	
D300	001-0377-45	Diode MA4082H	1
	(001-0400-45)	Diode (HZS8.2JB3)	
D402	001-0377-47	Diode MA4091M	1
	(001-0400-47)	Diode (HZS9.1JB2)	
D603,605,607	001-0425-24	Diode HZS9.1J	3
	(001-0423-24)	Diode (MA4091)	
D701	001-0454-00	Diode MA700	1
IC502	051-0940-00	IC S-8054HN	1
IC501	051-1139-01	IC TC74HC123AP	1
IC601	051-1214-30	IC MC74HC125AN	1
	(051-1214-00)	IC (TC74HC125AP)	
IC100,101	051-1292-40	IC RC4565D	2
	(051-1292-10)	IC (NJM4565D)	
IC801	051-1408-00	IC LB1649	1
IC701	051-1429-02	IC μPD78214CW-714	1
X701	060-0241-09	Cera-resonator 4MHz	1
Q501,502	100-1048-00	Transistor 2SA1048-O,Y,GR	2
Q402,405	101-1240-00	Transistor 2SB1240-PQR	2
Q100,201	102-2458-00	Transistor 2SC2458-O,Y,GR,BL	2
Q102,202	103-1450-00	Transistor 2SD1450-R,S,T	2
Q401,404	103-1683-00	Transistor 2SD1683-RSTU	2

REF.NO.	PART NO.	DESCRIPTION	Q'TY
Q301,507	103-1858-00	Transistor 2SD1858-P,Q,R	2
Q303,503,505 601,701	125-0012-02	Transistor DTA124EL	5
Q302,403,406 504,506,702	125-2016-01	Transistor DTC114EL	6
R406	111-4711-81	Film resistor 1/2W470Ω	1
R305	117-1011-10	Chip resistor 1/10W100Ω S	1
R504,514,604	117-1031-10	Chip resistor 1/10W10kΩ S	3
R501	117-1041-10	Chip resistor 1/10W100kΩ S	1
R603 701~705	117-2211-10	Chip resistor 1/10W220Ω S	6
R502	117-3341-10	Chip resistor 1/10W330kΩ S	1
R707	117-5611-10	Chip resistor 1/10W560Ω S	1
R505	117-8231-10	Chip resistor 1/10W82kΩ S	1
C105,205	160-1012-05	Ceramic capacitor 100pF B HD	2
C501,502	171-2233-06	Ceramic capacitor 0.022μF SC	2
C504	172-1041-10	Polyester capacitor 0.1μF SS	1
C104,204	173-2721-10	Polyester capacitor 2700pF S	2
C107,207	173-3321-10	Polyester capacitor 3300pF S	2
C103,203	173-4721-10	Polyester capacitor 4700pF S	2
C701~706	178-1022-05	Ceramic chip capacitor 1000pF HD,S	6
C601,707,708 801,803	178-1042-05	Ceramic chip capacitor 0.1μF HD,S	5
C402	042-0417-00	Alumi-electrolytic capacitor 10V220μF	1
C301,302	042-0445-01	Alumi-electrolytic capacitor 6.3V100μF	2
C303	042-0445-02	Alumi-electrolytic capacitor 10V100μF	1
C101,106,201 206	042-0451-00	Alumi-electrolytic capacitor 50V10μF	4
C508	042-0452-00	Alumi-electrolytic capacitor 6.3V330μF	1
C403	182-1073-22	Electrolytic capacitor 10V100μF SS	1
C404	182-1073-32	Electrolytic capacitor 16V100μF SS	1
C102,202,304	183-1063-32	Electrolytic capacitor 16V10μF USS	3
C503	183-2253-62	Electrolytic capacitor 50V2.2μF USS	1
C505	183-4763-12	Electrolytic capacitor 6.3V47μF USS	1
C802	183-6863-22	Electrolytic capacitor 10V68μF USS	1

NOTE : OM (Oxidized Metal) SS (Super Small)
S (Small) TC (Temperature-Compensating)
HD (Higher Dielectric) LL (Low Leak)
SC (Semi-Conductor) USS (Ultra Super Small)

◎MECHANISM FLOAT P.W.B

REF.NO.	PART NO.	DESCRIPTION	Q'TY
D1,2	001-0367-01	Diode 1SS226	2
L1	010-2155-03	Coil 10H	1
VR5	012-4997-03	Variable resistor 2.2kΩ	1
VR1~4	012-4997-07	Variable resistor 22kΩ	4
R 49,53~56 59~61 63~66 68~71	032-0092-03	Film chip resistor 15kΩ 1%	16
R 50,52,57,58 62,67	032-0092-04	Film chip resistor 30kΩ 1%	6
R24,26	032-0092-05	Film chip resistor 100kΩ 1%	2
C21,30,33	042-0397-00	Tantalum chip capacitor 16V1μF	3
C19,22	042-0397-03	Tantalum chip capacitor 25V0.47μF	2
C1,44	042-0397-05	Tantalum chip capacitor 6.3V3.3μF	2
C37	042-0398-01	Tantalum chip capacitor 10V4.7μF	1
C64	042-0403-01	Tantalum chip capacitor 16V10μF	1
C3,5,25,47	042-0416-01	Tantalum chip capacitor 6.3V10μF	4
C27,60	042-0449-00	Tantalum chip capacitor 4V22μF	2
IC8,9	051-0556-93	IC NJM2058M	2
IC1	051-1237-10	IC CXA1081Q	1
IC2	051-1238-00	IC CXA1082BQ	1
IC3	051-1377-01	IC CXD1167Q	1
IC4	051-1481-05	IC TC9237F	1
IC5	051-1497-00	IC TA2009F	1
X1	061-1087-58	Crystal 16MHz	1
Q 1,6,8,10,12 14,16,18,20	101-1188-50	Transistor 2SB1188Q,R	9
Q2,3	102-2712-00	Transistor 2SC2712O,Y,GL	2
	(103-0601-00)	Transistor (2SD601A-Q,R,S)	
Q 5,7,9,11,13 15,17,19	103-1766-50	Transistor 2SD1766Q,R	8
Q4	125-2004-02	Transistor RN1402	1
	(125-2005-01)	Transistor (UN2111)	
R3	117-1001-10	Chip resistor 1/10W10Ω S	1
R1	117-1011-10	Chip resistor 1/10W100Ω S	1
R 2,6,15,20,48 74,76,77	117-1021-10	Chip resistor 1/10W1kΩ S	8
R 4,9,10,12,13 16,25,34,37	117-1031-10	Chip resistor 1/10W10kΩ S	9

REF.NO.	PART NO.	DESCRIPTION	Q'TY
R 17,23,33,39 40,41,42,51	117-1041-10	Chip resistor 1/10W100kΩ S	8
R21,35	117-1051-10	Chip resistor 1/10W1MΩ S	2
R7	117-1231-10	Chip resistor 1/10W12kΩ S	1
R29,30	117-1531-10	Chip resistor 1/10W15kΩ S	2
R22	117-2231-10	Chip resistor 1/10W22kΩ S	1
R45	117-2241-10	Chip resistor 1/10W220kΩ S	1
R32,36,43	117-2741-10	Chip resistor 1/10W270kΩ S	3
R31	117-3321-10	Chip resistor 1/10W3.3kΩ S	1
R5,38	117-3331-10	Chip resistor 1/10W33kΩ S	2
R75	117-4711-10	Chip resistor 1/10W470Ω S	1
R28,47	117-4721-10	Chip resistor 1/10W4.7kΩ S	2
R27,46,72,73	117-4731-10	Chip resistor 1/10W47kΩ S	4
R44	117-4741-10	Chip resistor 1/10W470kΩ S	1
R11,14	117-5601-10	Chip resistor 1/10W56Ω S	2
R8	117-8221-10	Chip resistor 1/10W8.2kΩ S	1
C2,24	163-1073-10	Aluminum chip capacitor 6.3V100μF	2
C58	163-4763-30	Aluminum chip capacitor 16V47μF	1
C61	176-1201-00	Ceramic chip capacitor 12pF TC,S	1
C6	176-1801-00	Ceramic chip capacitor 18pF TC,S	1
C65	176-2096-00	Ceramic chip capacitor 2pF TC,S	1
C15,16	176-2201-00	Ceramic chip capacitor 22pF TC,S	2
C40,49~56	176-4702-00	Ceramic chip capacitor 47pF TC,S	9
C17,20,34,63	178-1022-05	Ceramic chip capacitor 1000pF HD,S	4
C 4,7,8,21,24 26,43,46,48 57	178-1032-05	Ceramic chip capacitor 0.01μF HD,S	10
C 11~14,23 35,36,38,41 45,59,62	178-1042-05	Ceramic chip capacitor 0.1μF HD,S	12
C31	178-2222-05	Ceramic chip capacitor 2200pF HD,S	1
C9,10,18,39	178-3332-05	Ceramic chip capacitor 0.033μF HD,S	4
C28	178-4722-05	Ceramic chip capacitor 4700pF HD,S	1
C32	178-4732-05	Ceramic chip capacitor 0.047μF HD,S	1

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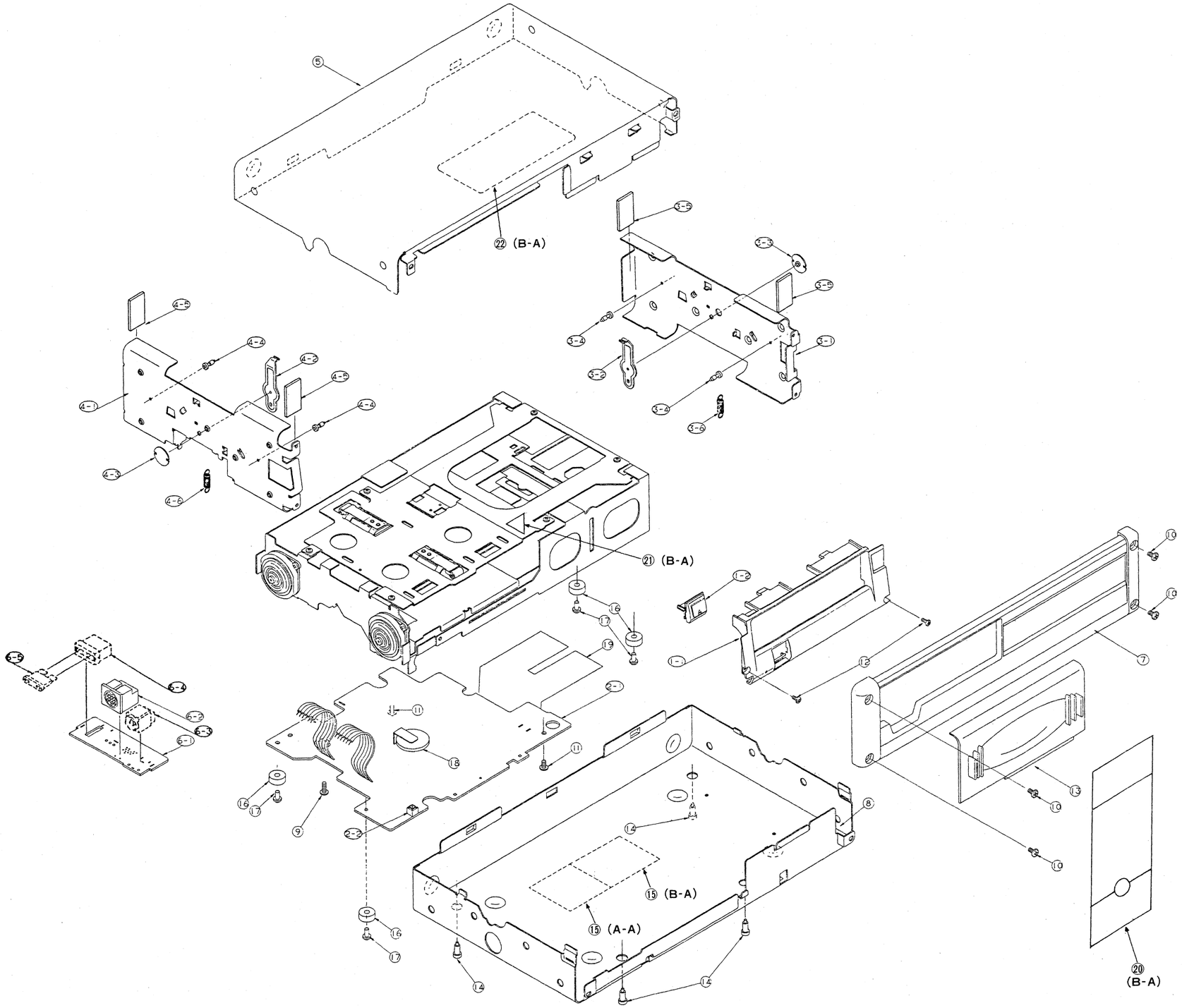
■EXPLODED VIEW • PARTS LIST:

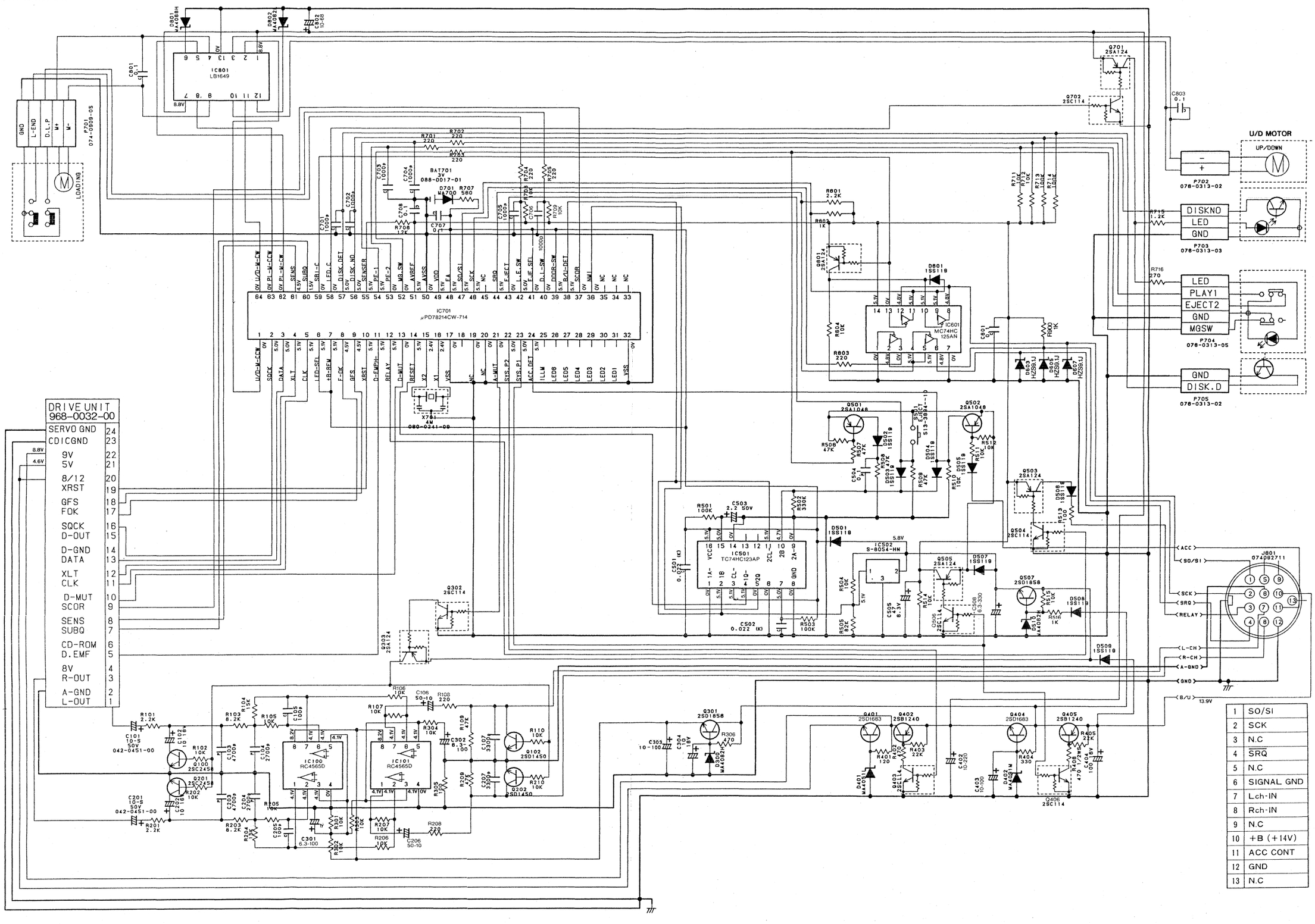
◎Main section



REF.NO.	PART NO.	DESCRIPTION	Q'TY
1-1	370-5329-00	Inner escutcheon	1
1-2	382-2324-02	Eject button	1
2-1	099-9477-01	P.W.B	1
2-2	013-3694-10	Switch	1
3-1	330-9797-00	Dumper support RH	1
3-2	330-9459-03	Dumper link arm	1
3-3	399-4153-01	Dumper link shaft	1
3-4	399-4157-00	Dumper pin	2
3-5	345-7185-00	Bottom rubber	2
3-6	750-2902-01	Spring	1
4-1	330-9798-00	Dumper support LH	1
4-2	330-9459-03	Dumper link arm	1
4-3	399-4153-01	Dumper link shaft	1
4-4	399-4157-00	Dumper pin	2
4-5	345-7185-00	Bottom rubber	2
4-6	750-2902-01	Spring	1
5	303-0409-00	Upper case	1
6-1	099-9477-01	P.W.B	1
6-2	074-0927-11	Outlet socket	1
6-3	075-0305-00	Jack	1
6-4	077-0087-00	Fuse recept	1
6-5	060-0057-02	Auto fuse (3A)	1
7	370-5328-00	Escutcheon	1
8	304-0421-00	Lower case	1
9	714-2606-81	Machine screw (M2.6x6)	1
10	716-0878-01	Screw (A-A)	4
	716-0317-01	Screw (B-A)	
11	716-0761-01	Machine screw	2
12	714-2004-89	Machine screw (M2x4)	2
13	320-0473-02	Sliding door (A-A)	1
	320-0473-05	Sliding door (B-A)	
14	716-1464-00	Lock screw	4
15	286-7716-00	Set plate (A-A)	1
	286-7733-00	Set plate (B-A)	
16	345-6975-00	Rubber part	4
17	716-1503-00	Screw	4
18	088-0017-01	Battery	1
19	099-9417-00	P.W.B	1
20	285-1524-00	Guide label (B-A)	1
21	285-1327-00	Guide label (B-A)	1
22	285-1340-00	Guide label (B-A)	1

■CIRCUIT DIAGRAM:

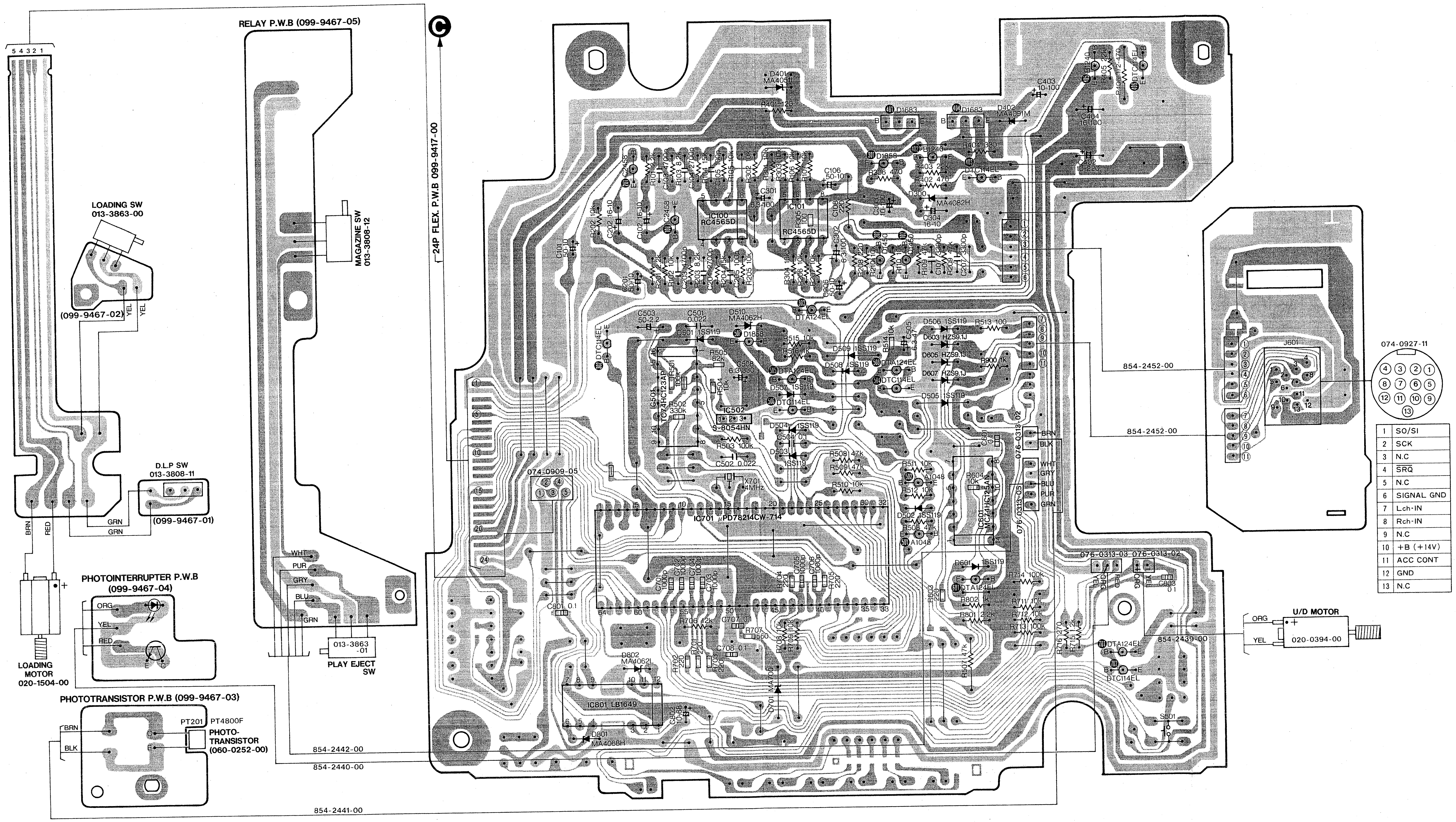
◎Main section



1	SO/SI
2	SCK
3	N.C
4	$\overline{SRQ}$
5	N.C
6	SIGNAL GND
7	Lch-IN
8	Rch-IN
9	N.C
10	+B (+14V)
11	ACC CONT
12	GND
13	N.C

■PRINTED WIRING BOARD:

◎Main section

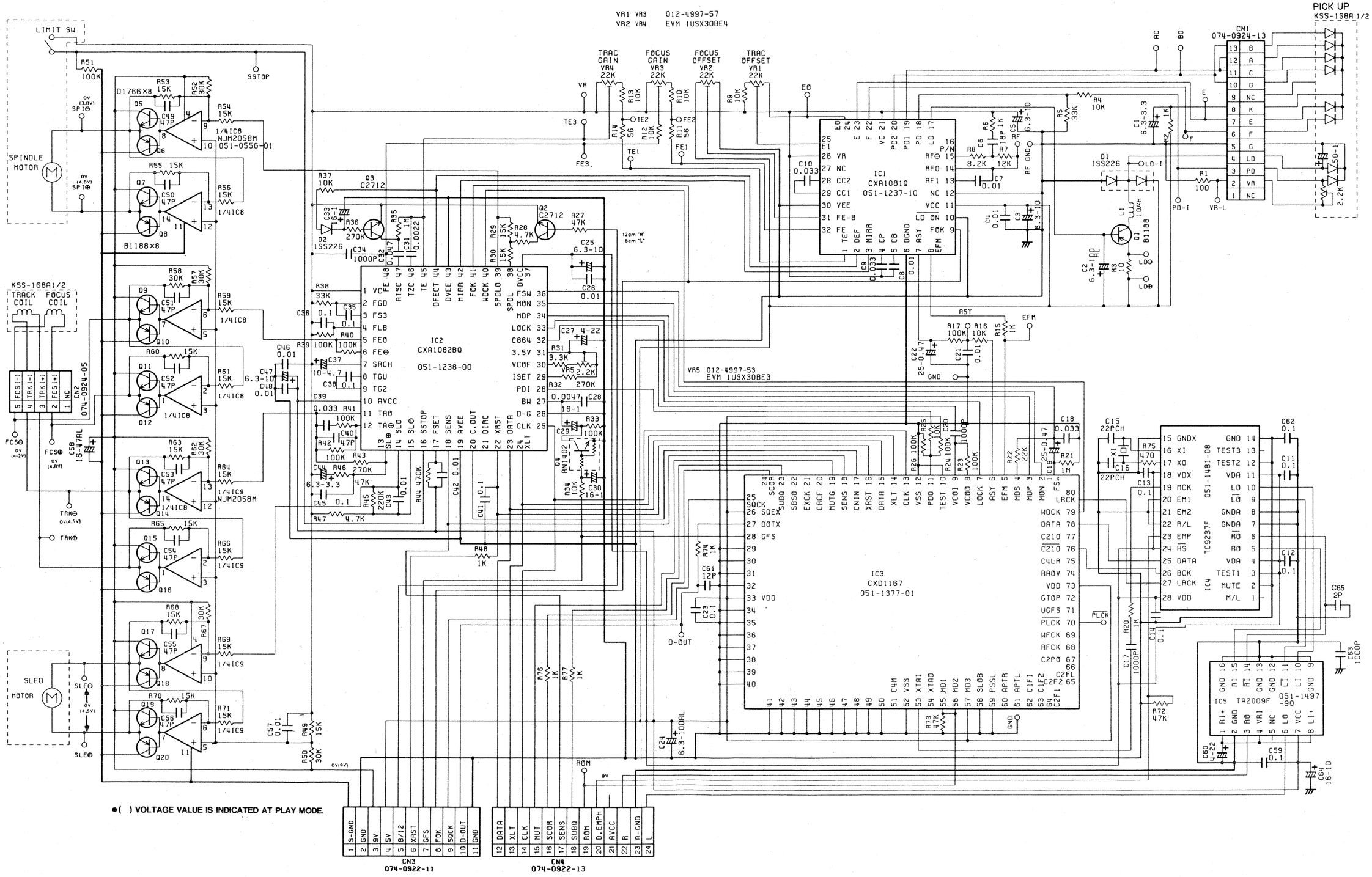


1	SO/SI
2	SCK
3	N.C
4	$\overline{SRQ}$
5	N.C
6	SIGNAL GND
7	Lch-IN
8	Rch-IN
9	N.C
10	+B (+14V)
11	ACC CONT
12	GND
13	N.C

6201CD・CDC9250

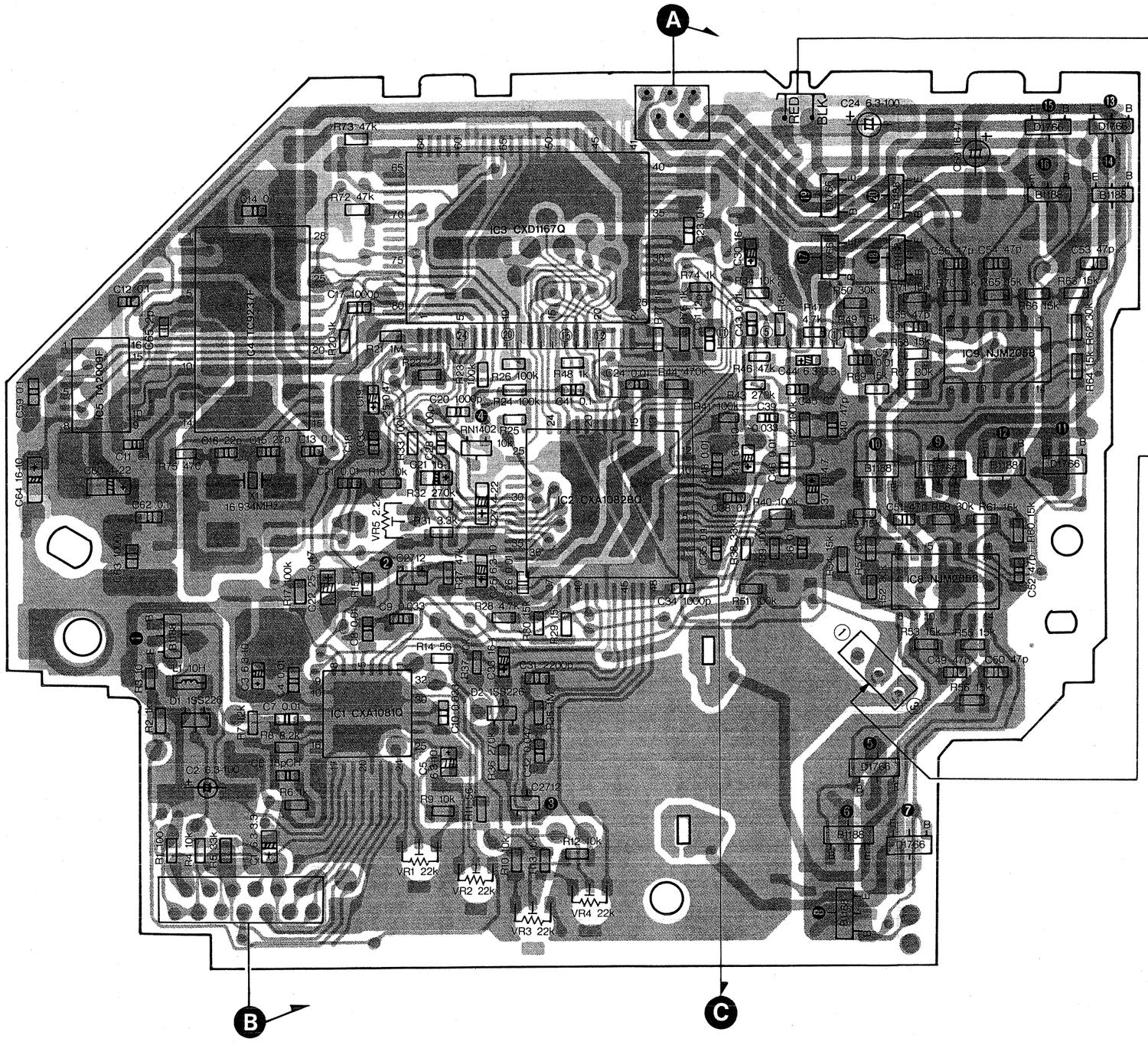
■CIRCUIT DIAGRAM:

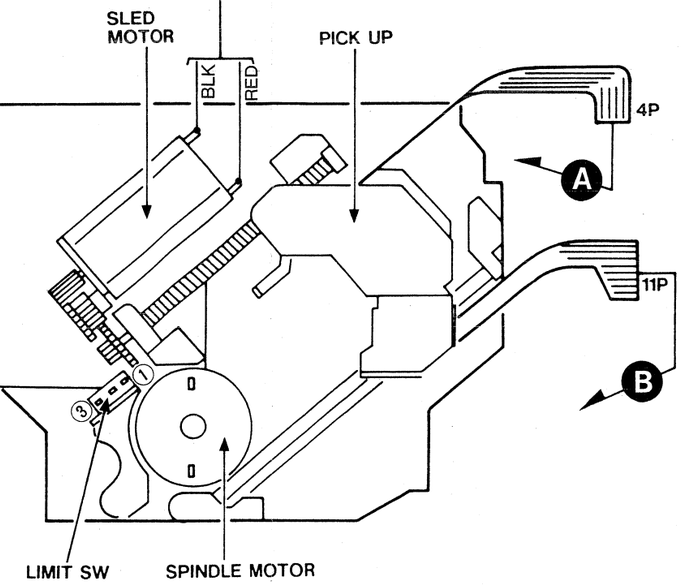
◎CD changer module mechanism section



■PRINTED WIRING BOARD:

◎CD changer module mechanism section





■EXPLODED VIEW • PARTS LIST:

◎CD changer module mechanism section