

Service Manual

AUTOMOTIVE ELECTRONICS

COMPACT
disc
DIGITAL AUDIO



HONDA CQ-EH9160A

AM/FM MPX ELECTRONIC TUNING
RADIO with Stereo Cassette Tape
Player and 6-Disc CD Changer

PART No. : 39100-S6M-A100

ID CORD : 1TJ2

VEHICLE : ACURA RSX

DESTINATION : North America

PRODUCED AFTER : Apr., 2001

Specification*

General

Power Supply	DC 12V (11V - 16V), Test Voltage 13.2V Negative Ground
Current Consumption	Less than 1.0A (at VOL. MAX)
Output Voltage	More than 400mVrms
Output Impedance	1.5kΩ

AM Radio

Frequency Range	530 - 1,710kHz
Usable Sensitivity	24dB/μV (S/N 20dB)

FM Stereo Radio

Frequency Range	87.75 - 107.9MHz
Usable Sensitivity	6dB/μV (S/N 30dB)

Cassette Player

Reproduction System	4-Track, 2-Program Stereo
Tape Speed	4.76cm/sec.
Wow and Flutter	Less than 0.2% (WRMS)
Signal to Noise Ratio	More than 40dB

CD Player

Signal to Noise Ratio	More than 70dB (IHF-A)
Total Harmonic Distortion	Less than 0.4%
Channel Separation	More than 50dB (IHF-A)


Dimensions** (WxHxD) 180x102x165mm

Weight** 2.4kg

* Specifications and the design are subject to possible modification without notice due to improvements.

** Dimensions and Weight shown are approximate.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"Dolby" and the double-D symbol  are trade marks of Dolby Laboratories Licensing Corporation.

CONTENTS

	Page		Page
1 FEATUERS	2	13 REPLACEMENT PARTS LIST	16
2 LASER PRODUCTS	2	14 EXPLODED VIEW (Unit)	21
3 REAR VIEW	2	15 CD CHANGER PARTS LIST	22
4 FRONT VIEW AND FUNCTIONS	3	16 EXPLODED VIEW (CD Deck-1)	25
5 WIRING CONNECTIONS	4	17 EXPLODED VIEW (CD Deck-2)	26
6 BLOCK DIAGRAM (Main, Display, Tape Block)	5	18 EXPLODED VIEW (CD Deck-3)	27
7 BLOCK DIAGRAM (CD Servo Block)	6	19 TAPE PLAYER PARTS	28
8 TERMINALS DESCRIPTION	7	20 EXPLODED VIEW (Tape Deck)	30
9 ALIGNMENT INSTRUCTIONS	10	21 WIRING DIAGRAM	31
10 ALIGNMENT POINTS	10	22 SCHEMATIC DIAGRAM (1)	38
11 CD DISC CENTERING ALIGNMENT	11	23 SCHEMATIC DIAGRAM (2)	39
12 PACKAGE AND IC BLOCK DIAGRAM	12		

1 FEATUERS

- PLL (Phase Locked Loop) synthesized tuning.
- 18-station preset (12-FM, 6-AM).
- 6-Disc CD changer (in dash board).
- Dolby noise reduction.
- Electronic control of power and sound.
- Correspondence with BOSE Amp.
- Anti-Theft function.

2 LASER PRODUCTS

Do not take apart this unit or attempt to make any changes yourself.

This unit is very intricate that uses a laser pickup to retrieve information from the surface of compact discs. The laser is carefully shielded so that its rays remain inside the cabinet. Therefore, never try to disassemble the player or alter any of its parts since you may be exposed to laser rays and dangerous voltages.

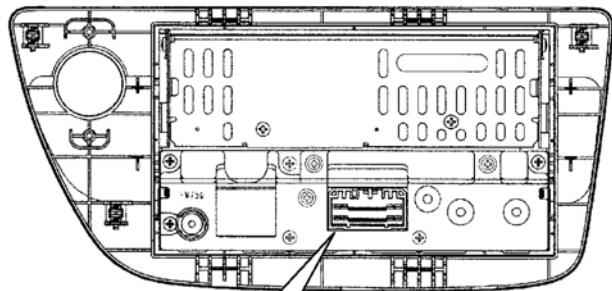
Laser products :

Wave length 780nm
 Laser power No hazardous radiation is emitted with safety protection.

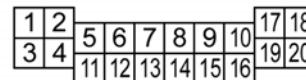
Caution

This product utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

3 REAR VIEW

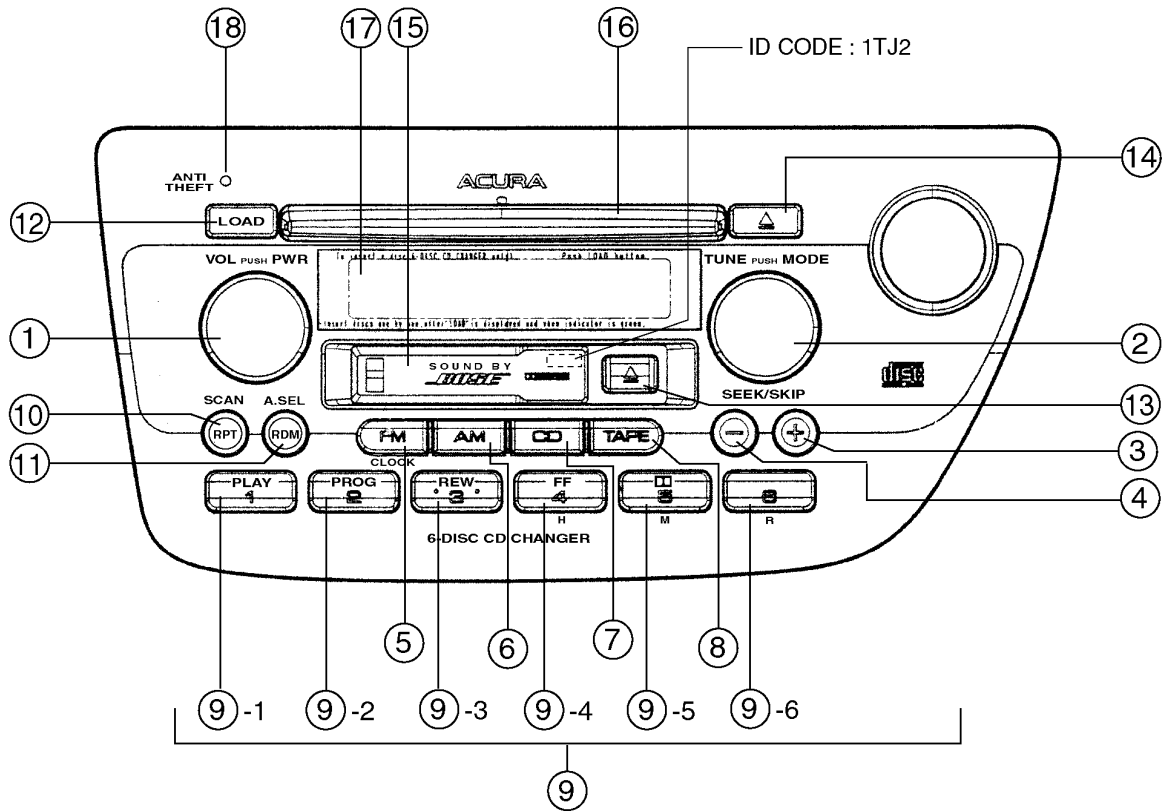


<CN701 20P CONNECTOR>



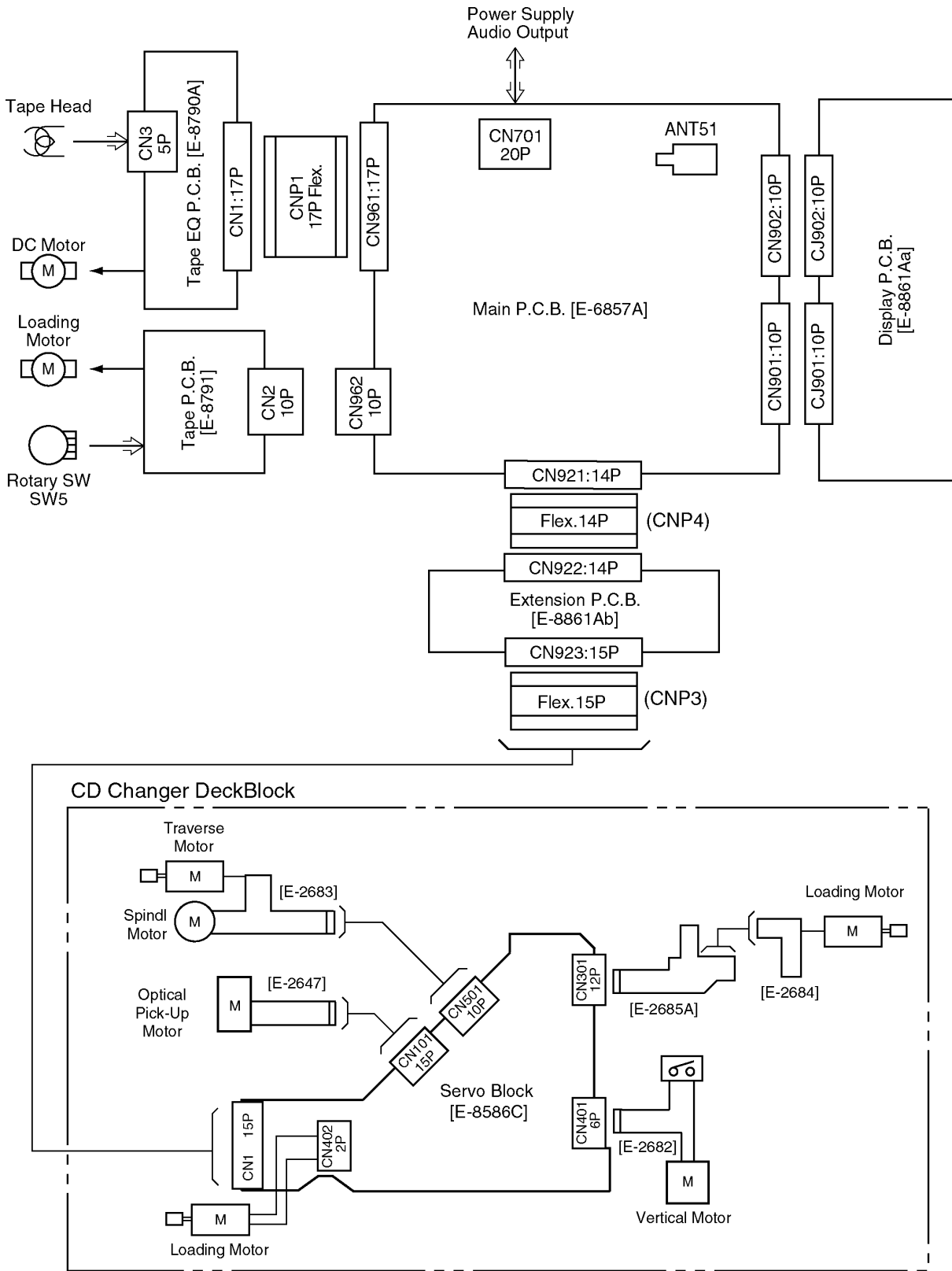
- | | |
|-------------------|-------------------|
| 1. SW+B | 11. No Connection |
| 2. ACC | 12. No Connection |
| 3. No Connection | 13. Rear Rch (-) |
| 4. No Connection | 14. Rear Lch (-) |
| 5. Remote | 15. Front Rch (-) |
| 6. SEC-IN | 16. Front Lch (-) |
| 7. Rear Rch (+) | 17. Illumi. |
| 8. Rear Lch (+) | 18. BATT. (+B) |
| 9. Front Rch (+) | 19. Illumi (-) |
| 10. Front Lch (+) | 20. Ground |

4 FRONT VIEW AND FUNCTIONS

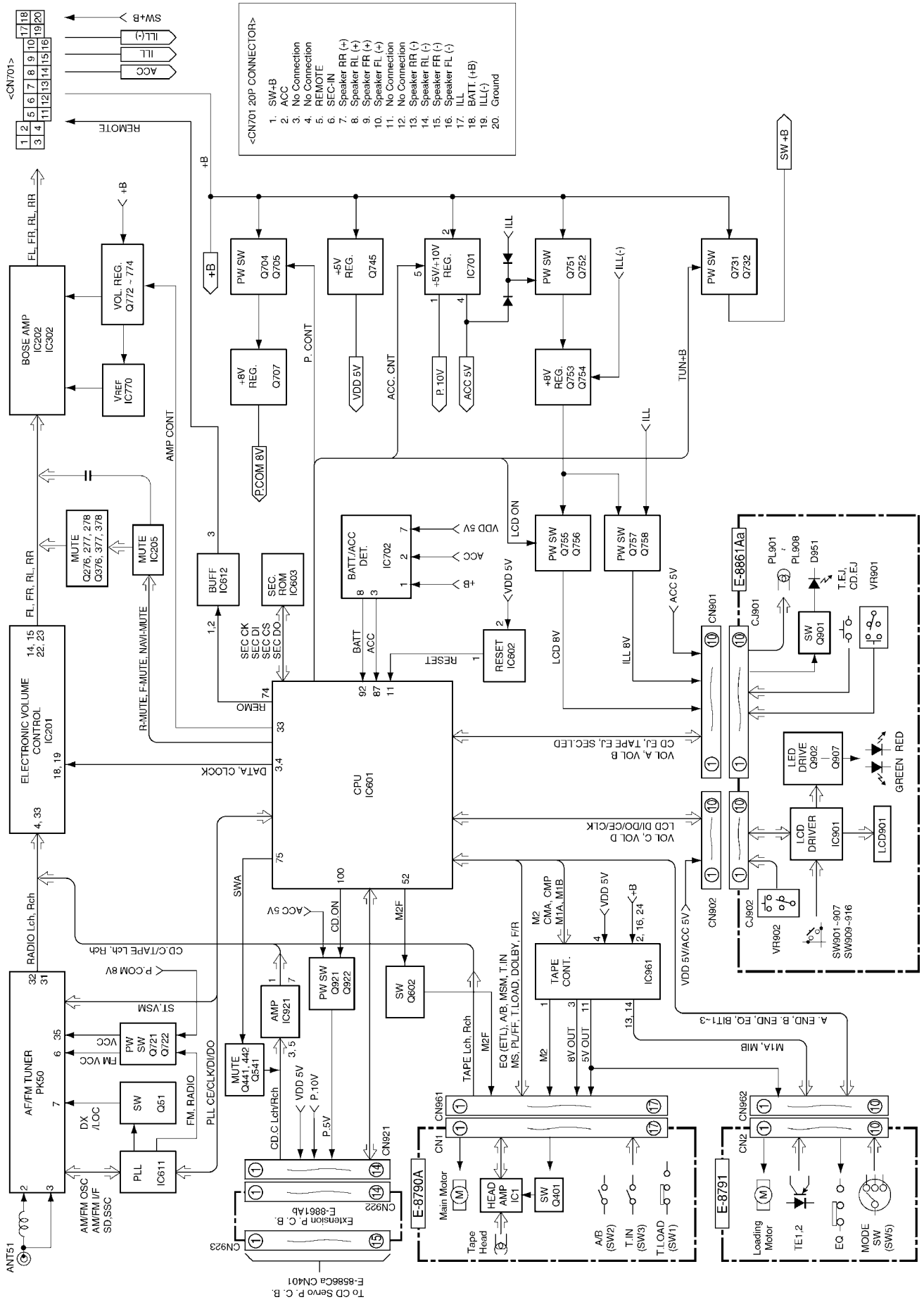


- | | | | | | |
|---|---------------|------------------------------------|-----|-------|-------------------------------|
| ① | PWR | : Power on/off. | ⑨-1 | PLAY | : Tape play mode. |
| | VOL | : Volume control. | ⑨-2 | PROG | : Tape program change. |
| ② | MODE | : Audio adjustment mode selection. | ⑨-3 | REW | : Tape rewind. |
| | TUNE | : Radio manual tuning. | ⑨-4 | FF | : Tape fast forward. |
| ③ | SEEK/SKIP (+) | : Radio seek/skip up tuning. | | H | : Time adjustment (hour). |
| | | : Tape APC (forward) operation. | ⑨-5 | NR | : Tape dolby NR on/off. |
| | | : CD disc fast forward. | | M | : Time adjustment (Minute). |
| ④ | SEEK/SKIP (-) | : Radio seek/skip down tuning. | ⑨-6 | R | : Minute/Sec. digit reset. |
| | | : Tape APC (Reverse) operation. | ⑩ | SCAN | : Radio scan up tuning. |
| | | : CD disc reverse. | | RPT | : Tape/CD repeat play. |
| ⑤ | FM | : FM radio mode selection. | ⑪ | A.SEL | : Radio stations auto-preset. |
| | CLOCK | : Clock adjustment mode. | | RDM | : CD random play. |
| ⑥ | AM | : AM radio mode selection. | ⑫ | LOAD | : CD disc loading. |
| ⑦ | CD | : CD mode selection. | ⑬ | ▲ | : Tape eject. |
| ⑧ | TAPE | : TAPE mode selection. | ⑭ | ▲ | : CD disc eject. |
| ⑨ | 1~6 | : Radio frequency preset/call. | ⑮ | | : Casette slot. |
| | | : CD changer disc selection. | ⑯ | | : CD slot. |
| | | | ⑰ | | : LCD display. |
| | | | ⑱ | | : Anti-theft indicator. |

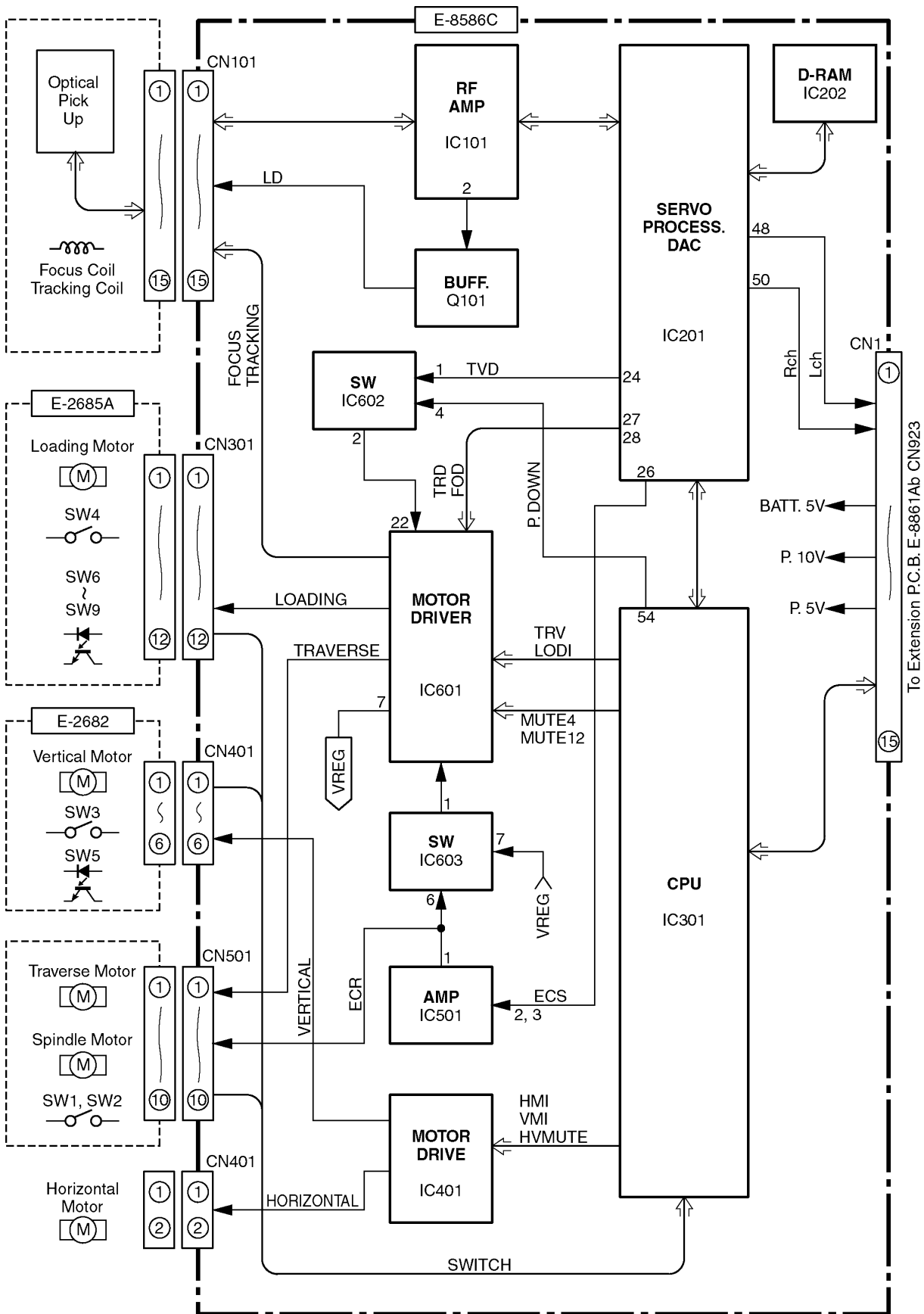
5 WIRING CONNECTIONS



6 BLOCK DIAGRAM (Main, Display, Tape Block)



7 BLOCK DIAGRAM (CD Servo Block)



9 ALIGNMENT INSTRUCTIONS

9.1. Alignment Conditions

- Power Supply Voltage : DC13.2V
- Output Impedance : 4Ω
- Output Power : 0.5W
- Balance, Fader Control : center
- Bass, Treble Control : Center
- Dolby NR: OFF

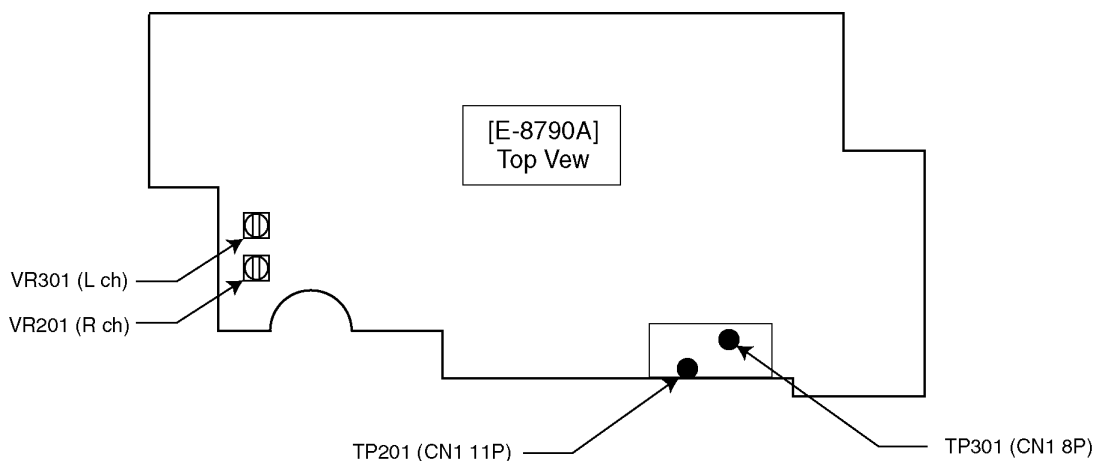
Note :

Do not align the FM/AM package block. When the package block is necessary, it will be supplied already aligned at the factory.

9.2. Dolby NR Alignment

Step	Alignment Item	Test Tape	VTVM Connection	Adjust	Remarks
(1)	DOLBY NR Rch	RFKZ0038	TP201	VR201	Adjust for 388mV ±1.0dB
(2)	DOLBY NR Lch	RFKZ0038	TP301	VR301	Adjust for 388mV ±1.0dB

10 ALIGNMENT POINTS



11 CD DISC CENTERING ALIGNMENT

- This adjustment is for assuring that compact discs will be placed in the center of the turntable.

<Adjustment Condition / Jig>

- Power Supply Voltage : 13.2V
- Test Disc : TCD-784M

<Adjustment Procedures>

1. Attach the adjusting screw to the upper chassis (See Figure 1.).
2. Insert the test CD (TCD-784M) into the disc No.1 position and play it.
3. After checking whether the disc is centered on the turntable, turn the adjusting screw unit it is in the center.

<Check Items>

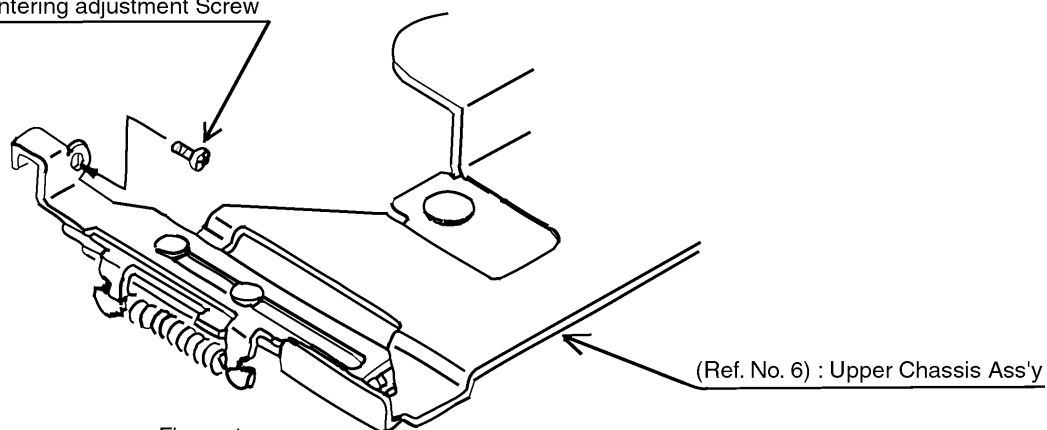
- Check that the disc is correctly centered.
- Check that the disc is securely clamped.
- Check that no abnormal noise is produced when clamping the disc.

[Directions of Turning the Adjusting Screw]

- CD stops before its proper position : Turn the screw counterclockwise.
- CD overruns : Turn the screw clockwise.

4. After the adjustment, lock the screw.

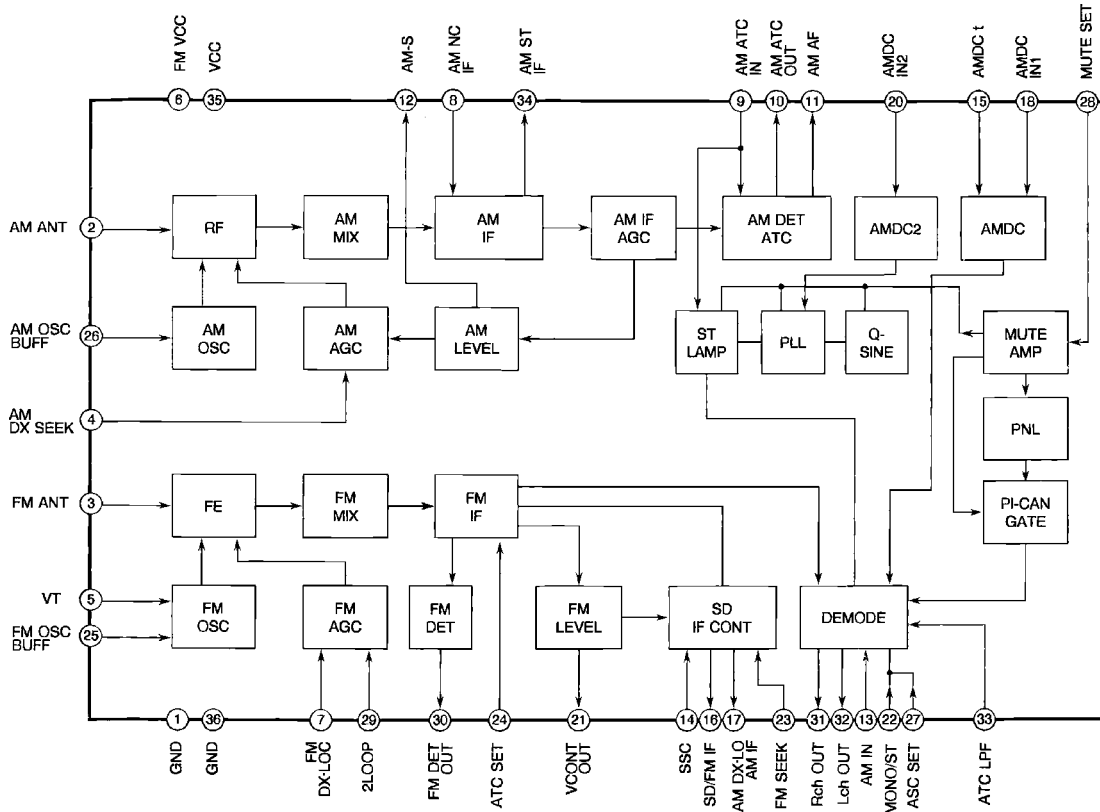
(Ref. No.156) : Centering adjustment Screw



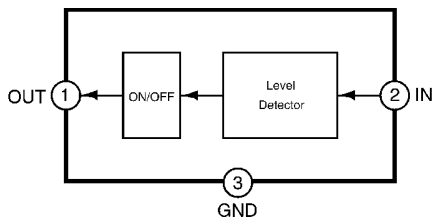
<Figure 1>

12 PACKAGE AND IC BLOCK DIAGRAM

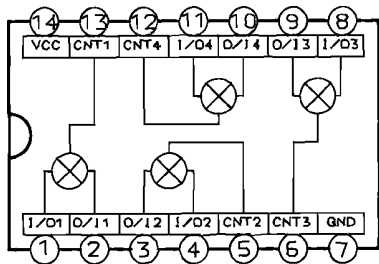
12.1. Main Block



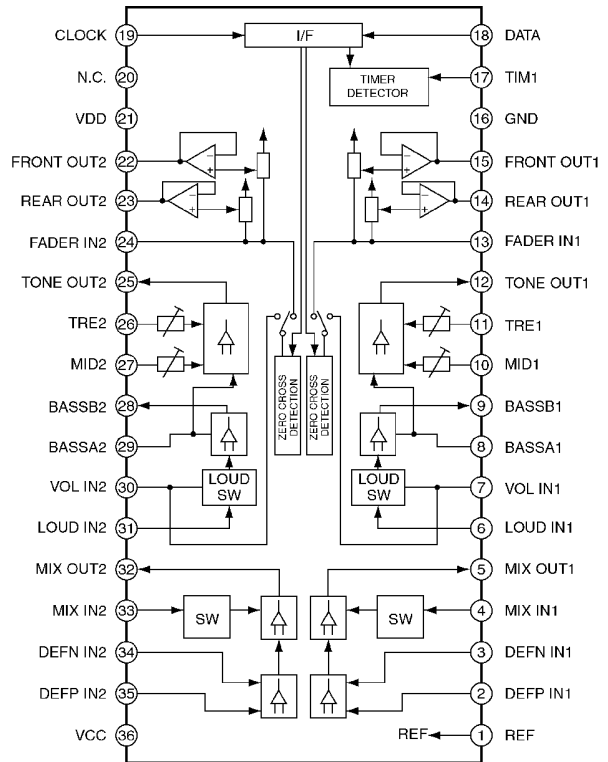
PK50 : YEP0PTA514B0



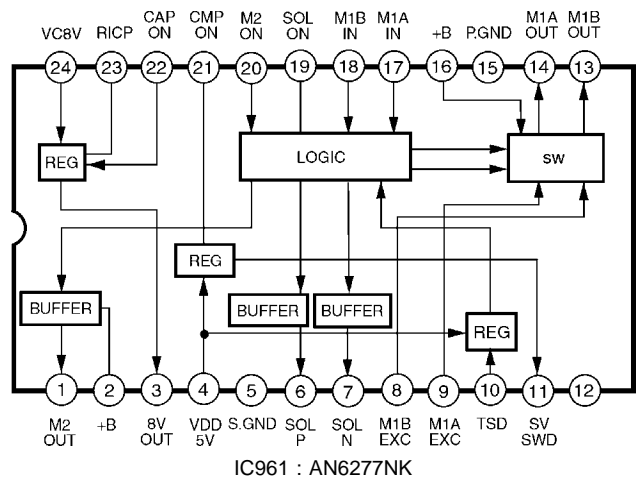
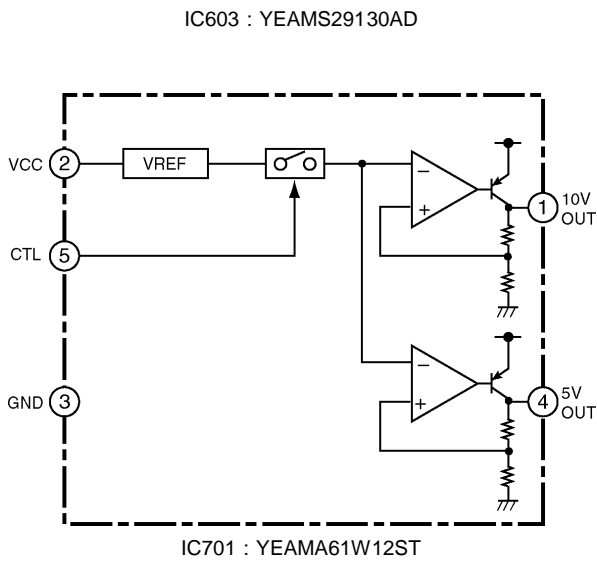
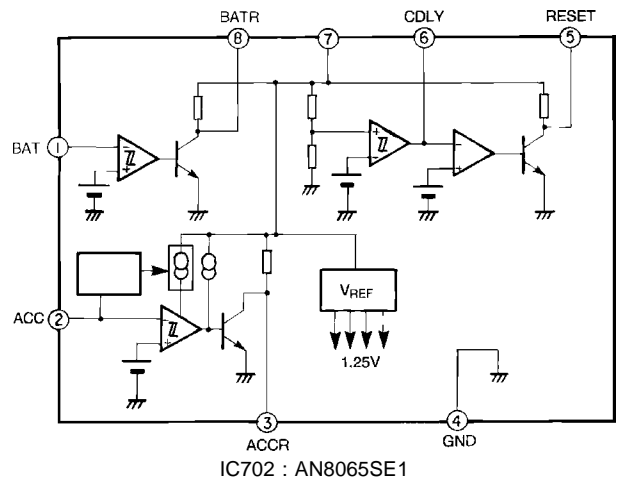
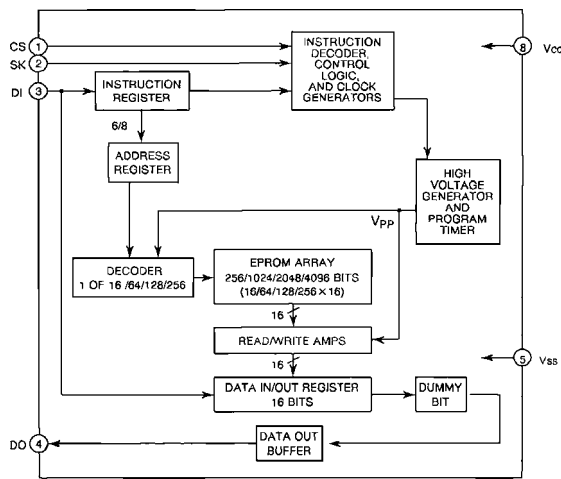
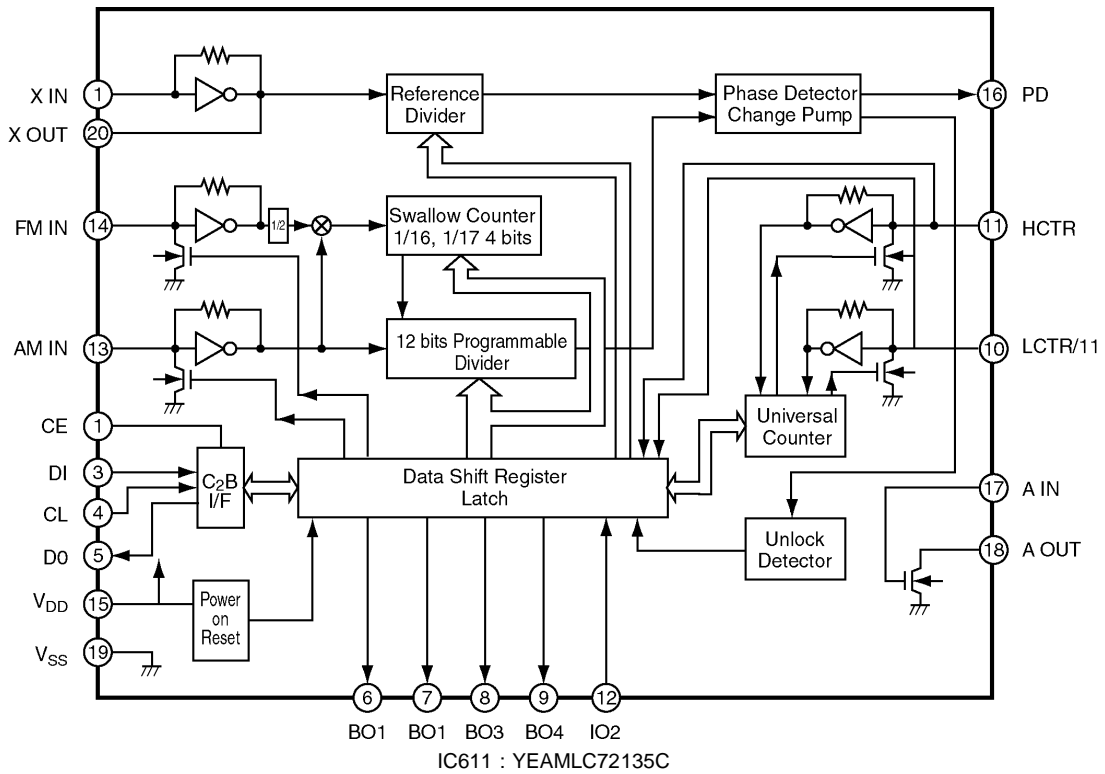
IC602 : MN1382KTX



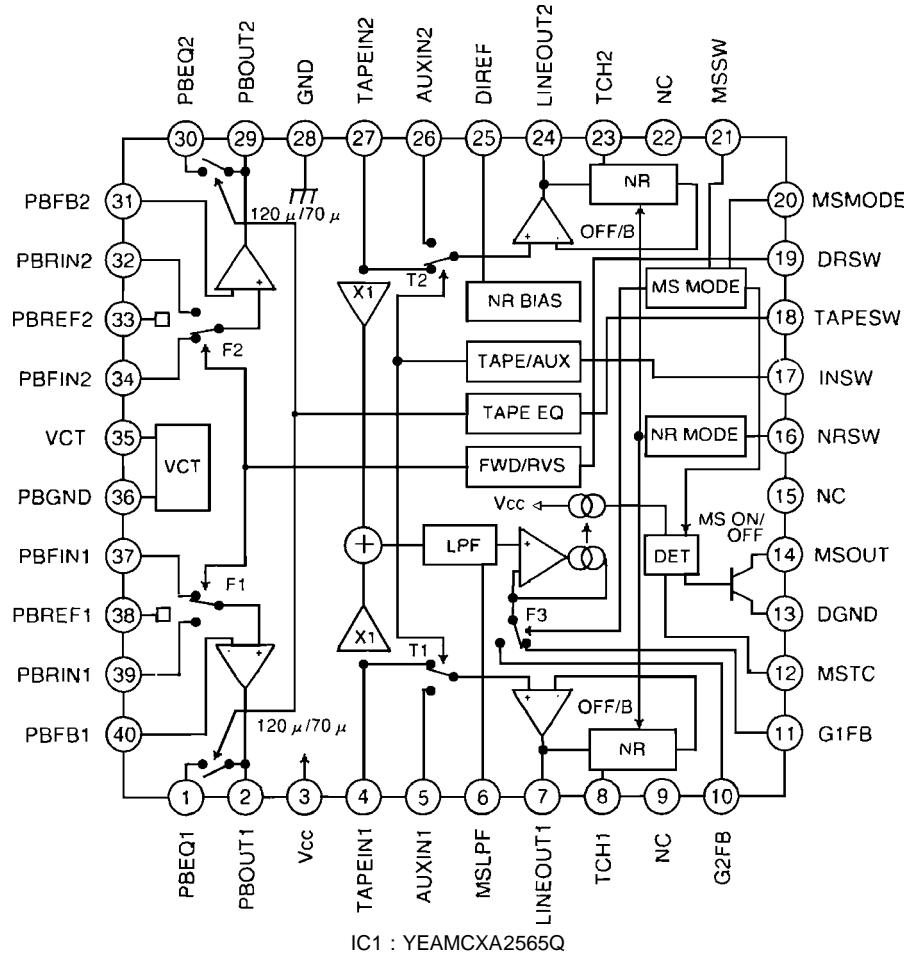
IC205 : C0JBAS000030



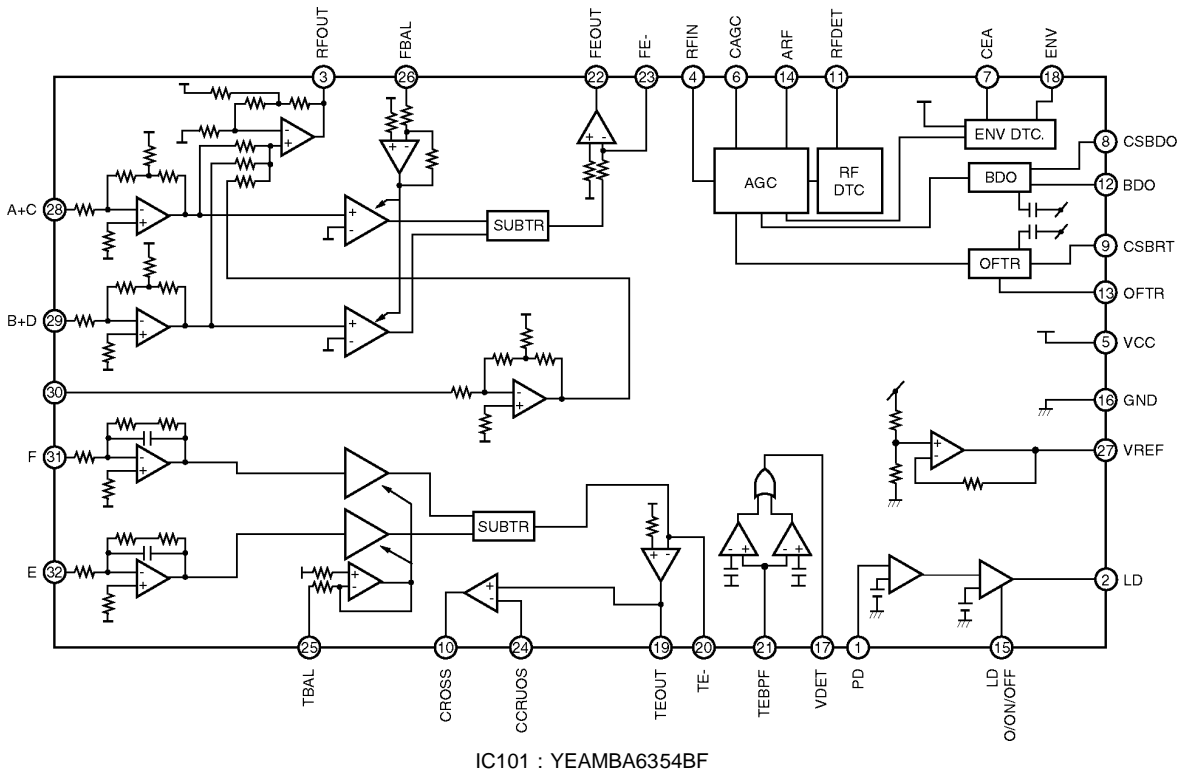
IC201 : C1BB0000284

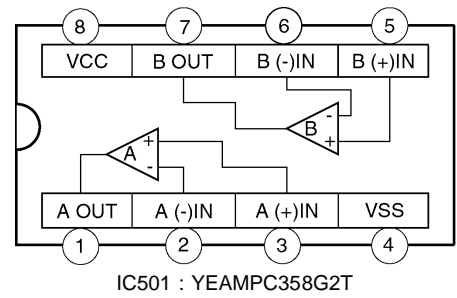
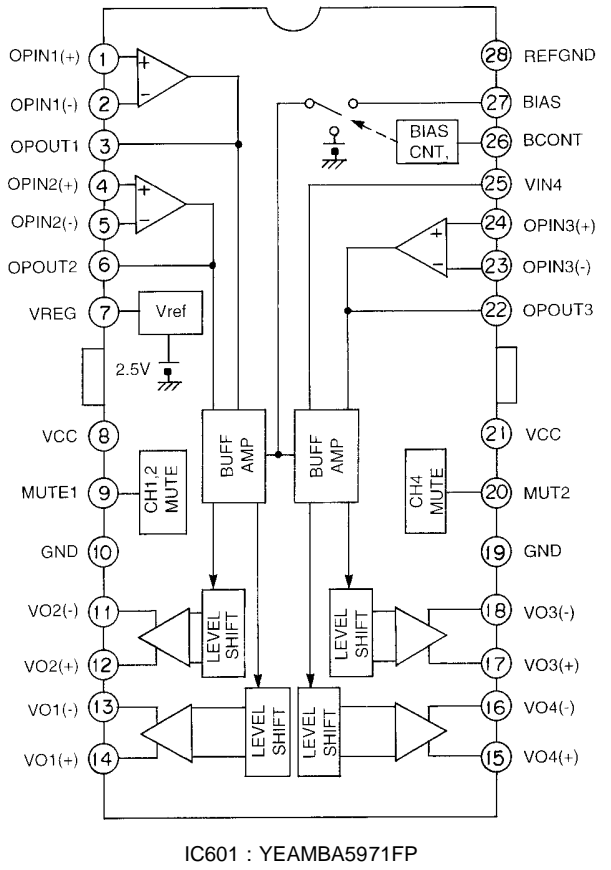
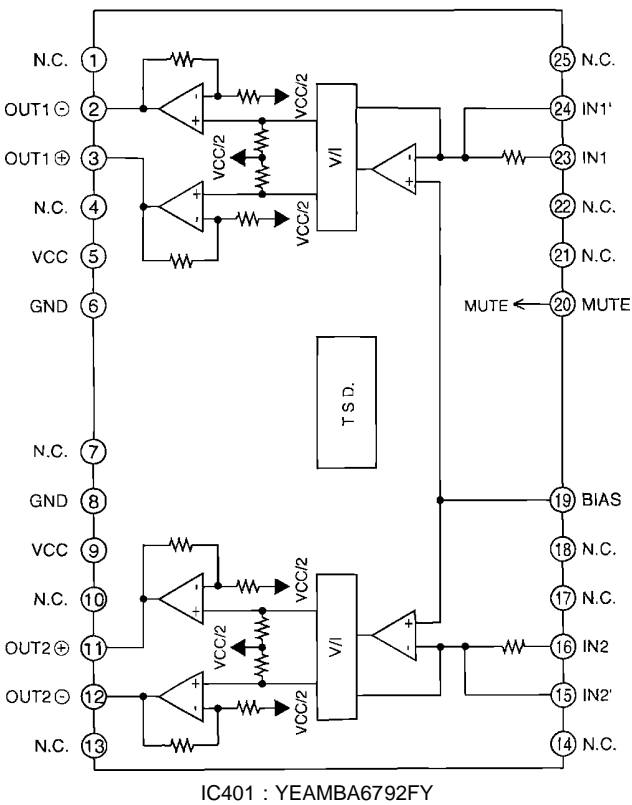
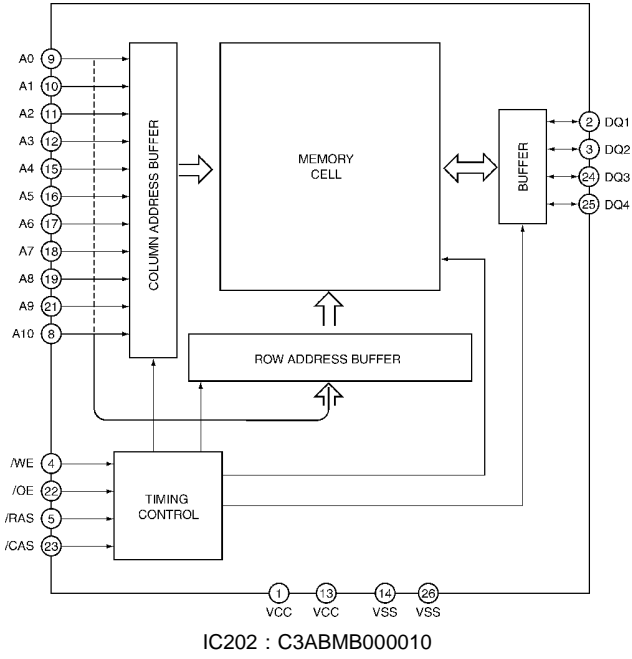
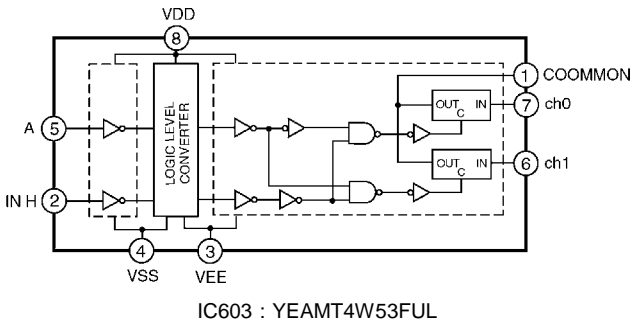


12.2. Tape Block

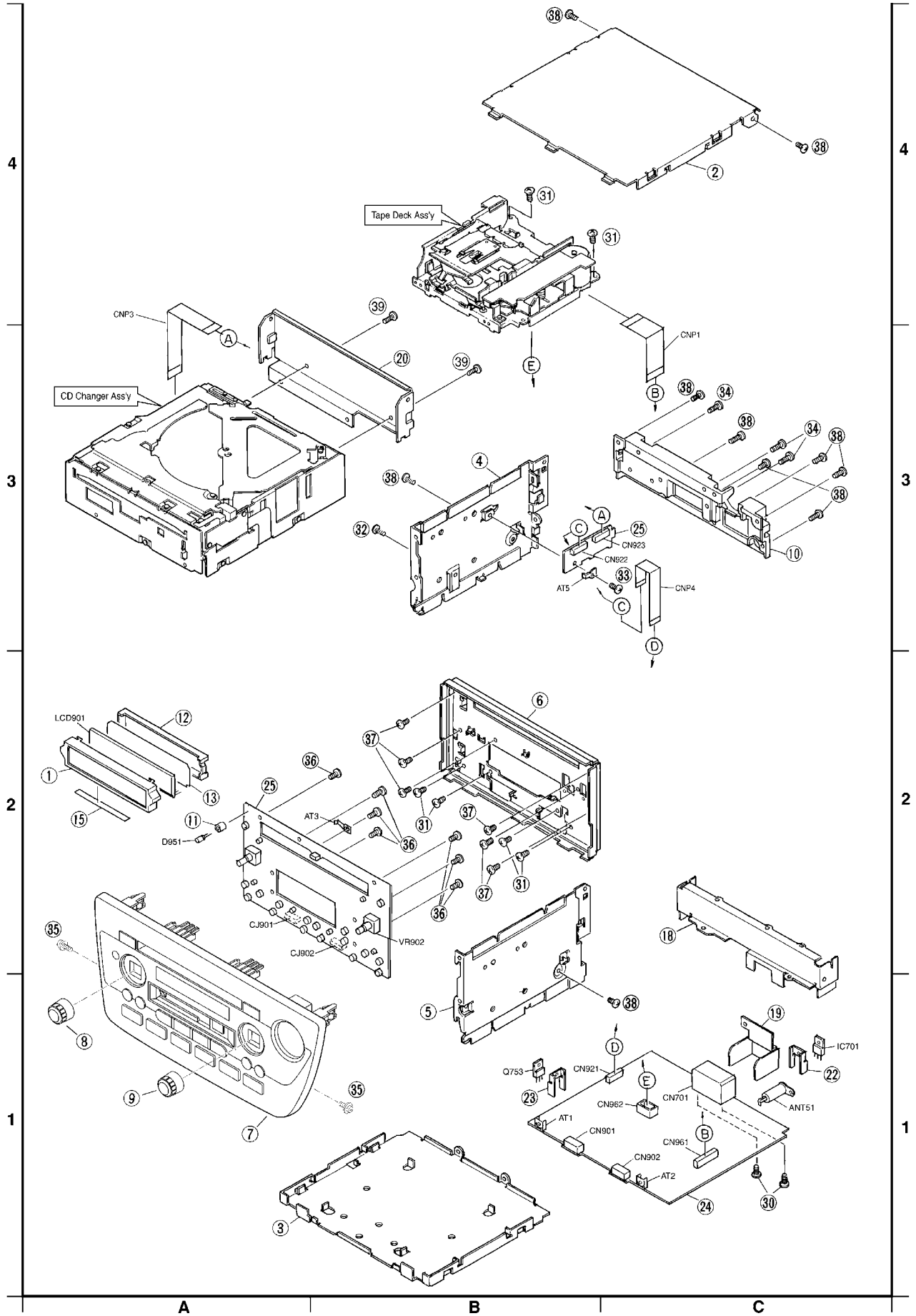


12.3. CD Servo Block

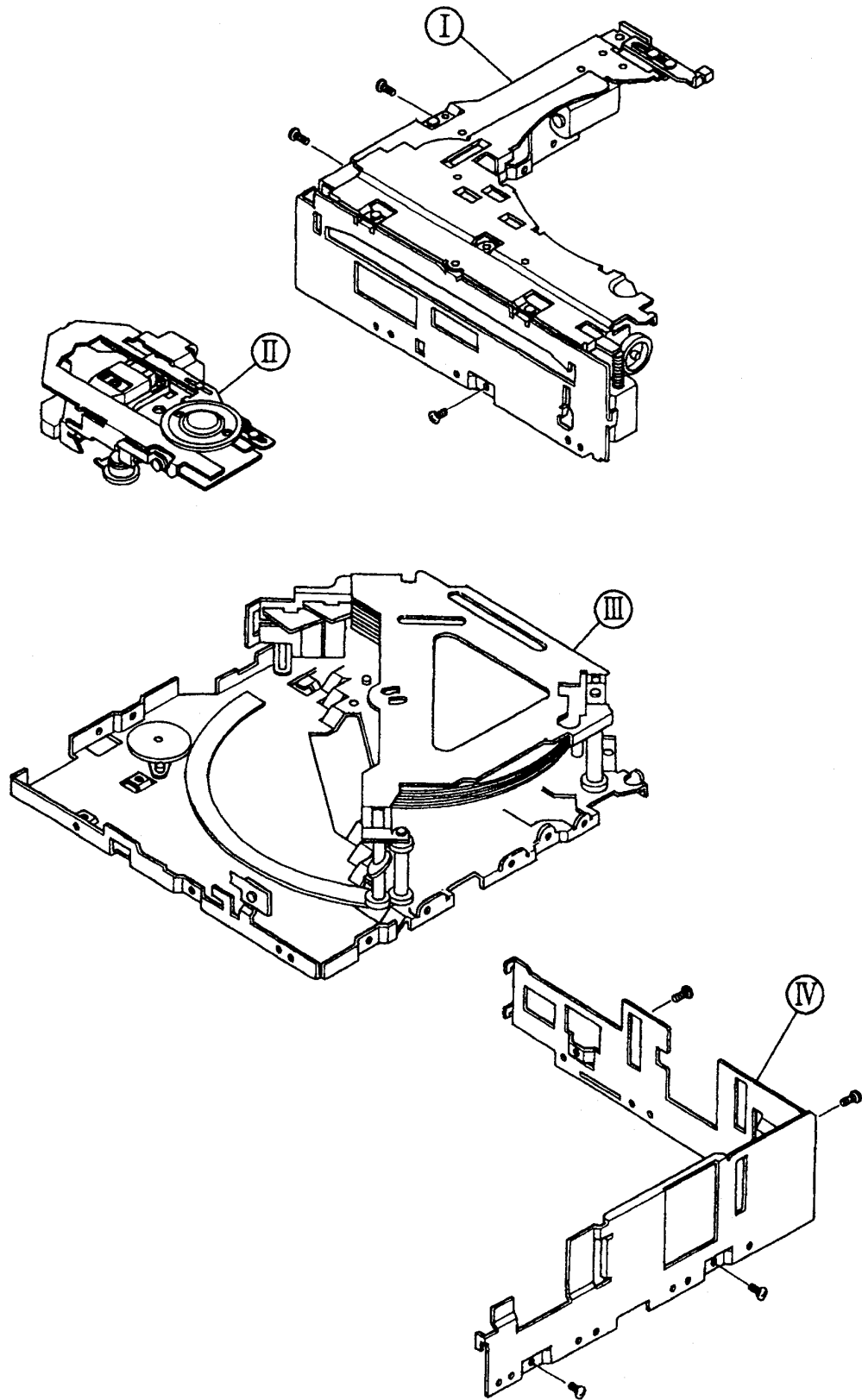




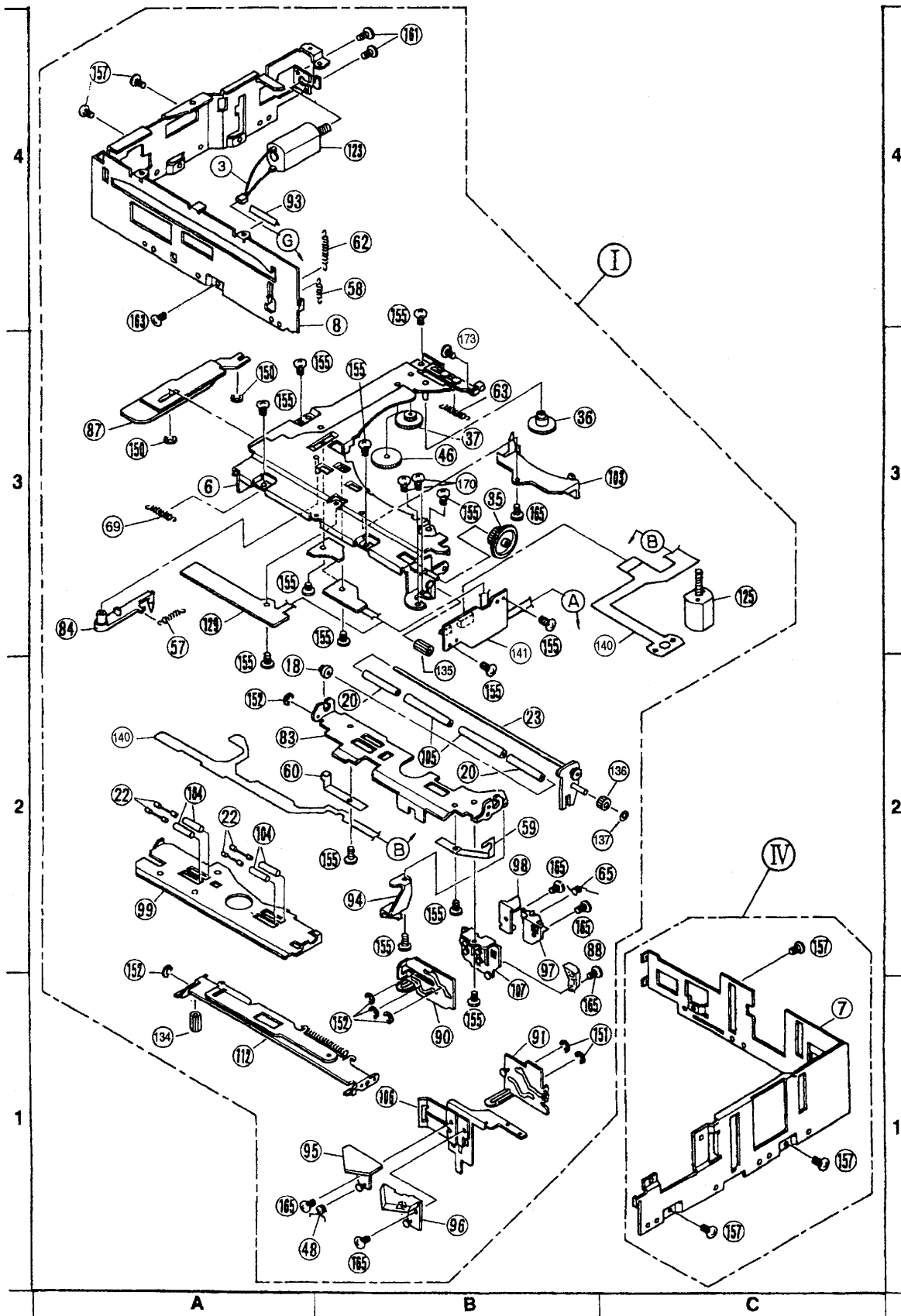
14 EXPLODED VIEW (Unit)



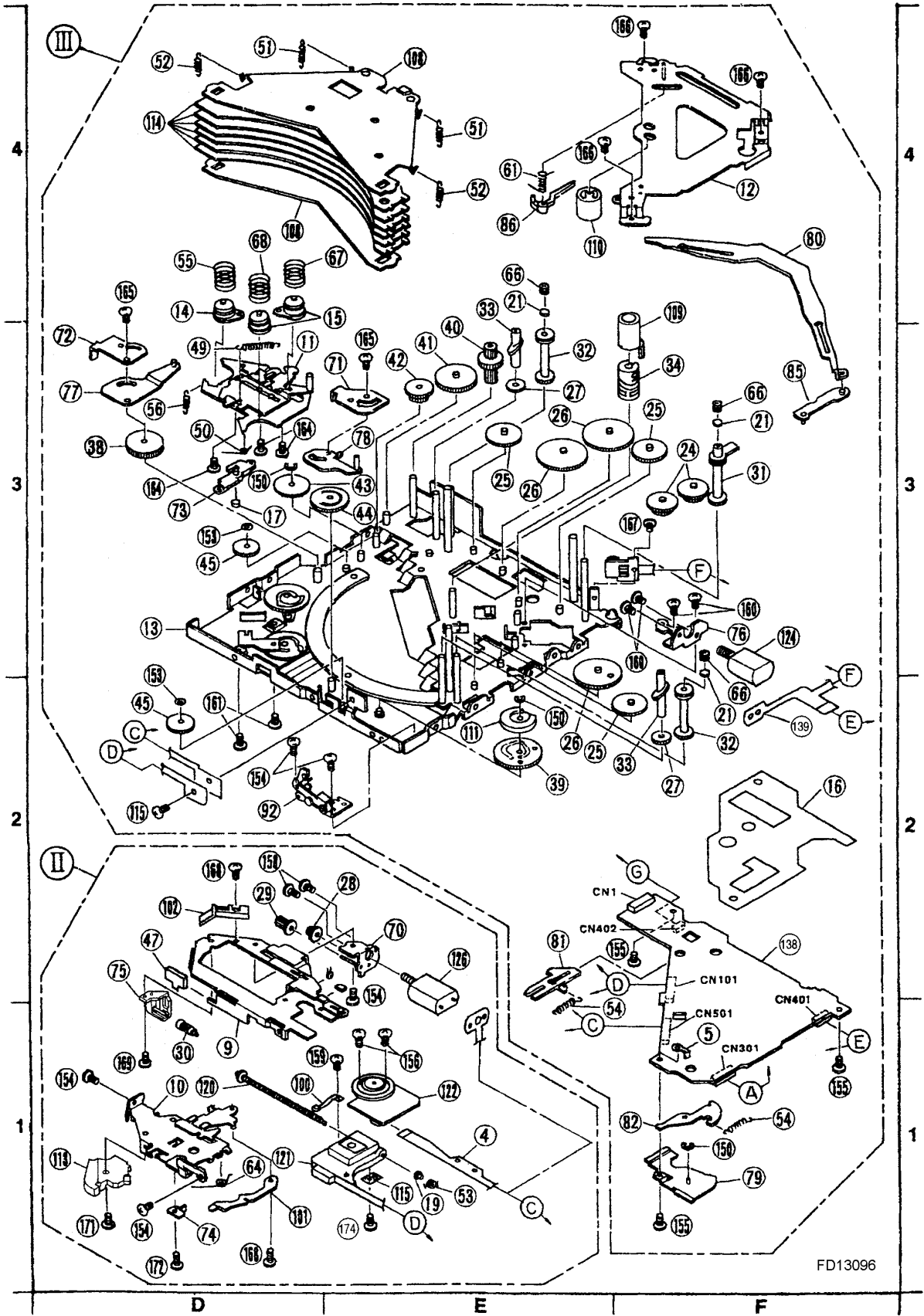
16 EXPLODED VIEW (CD Deck-1)



17 EXPLODED VIEW (CD Deck-2)



18 EXPLODED VIEW (CD Deck-3)



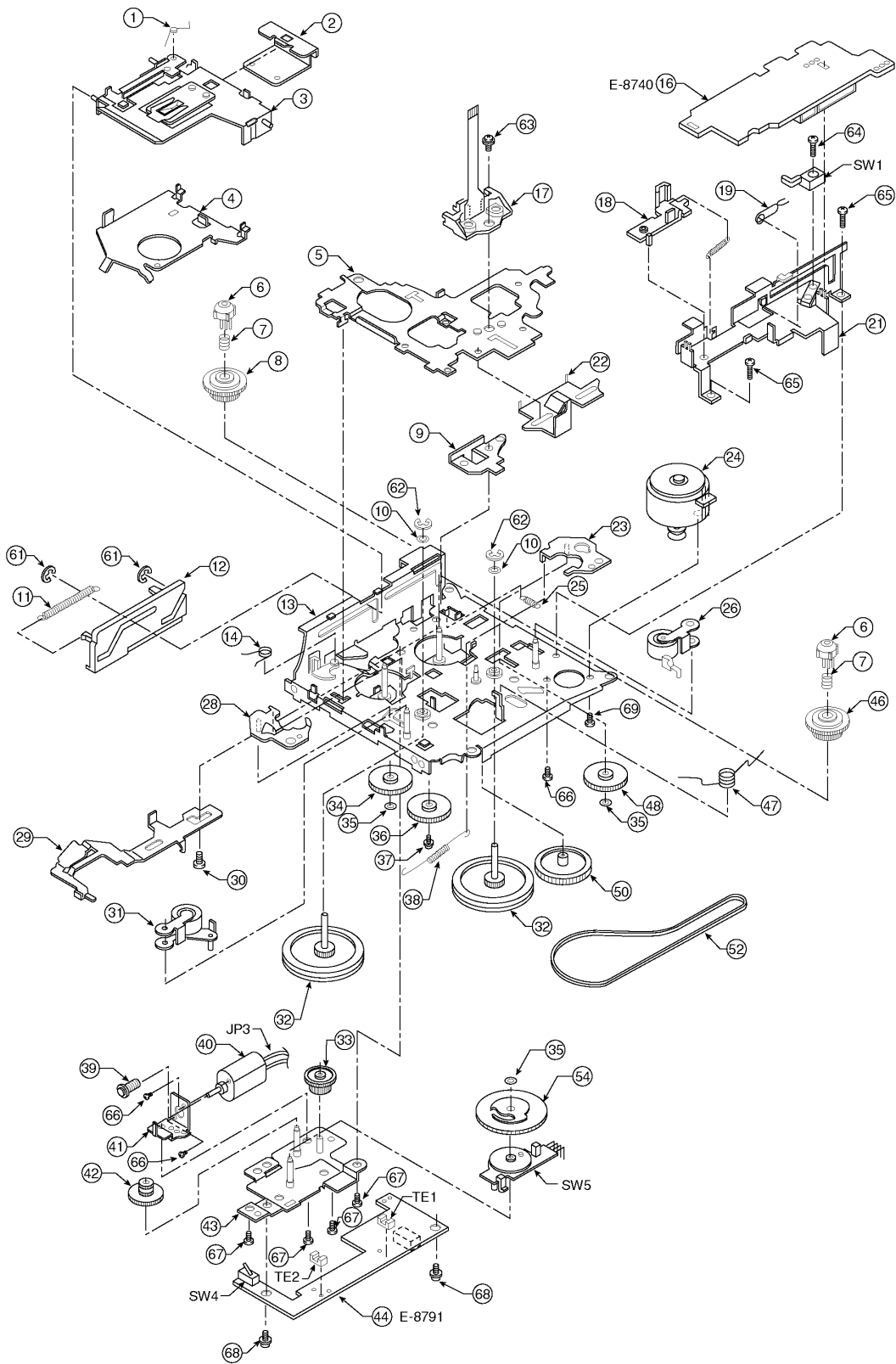
20 EXPLODED VIEW (Tape Deck)

2

2

1

1



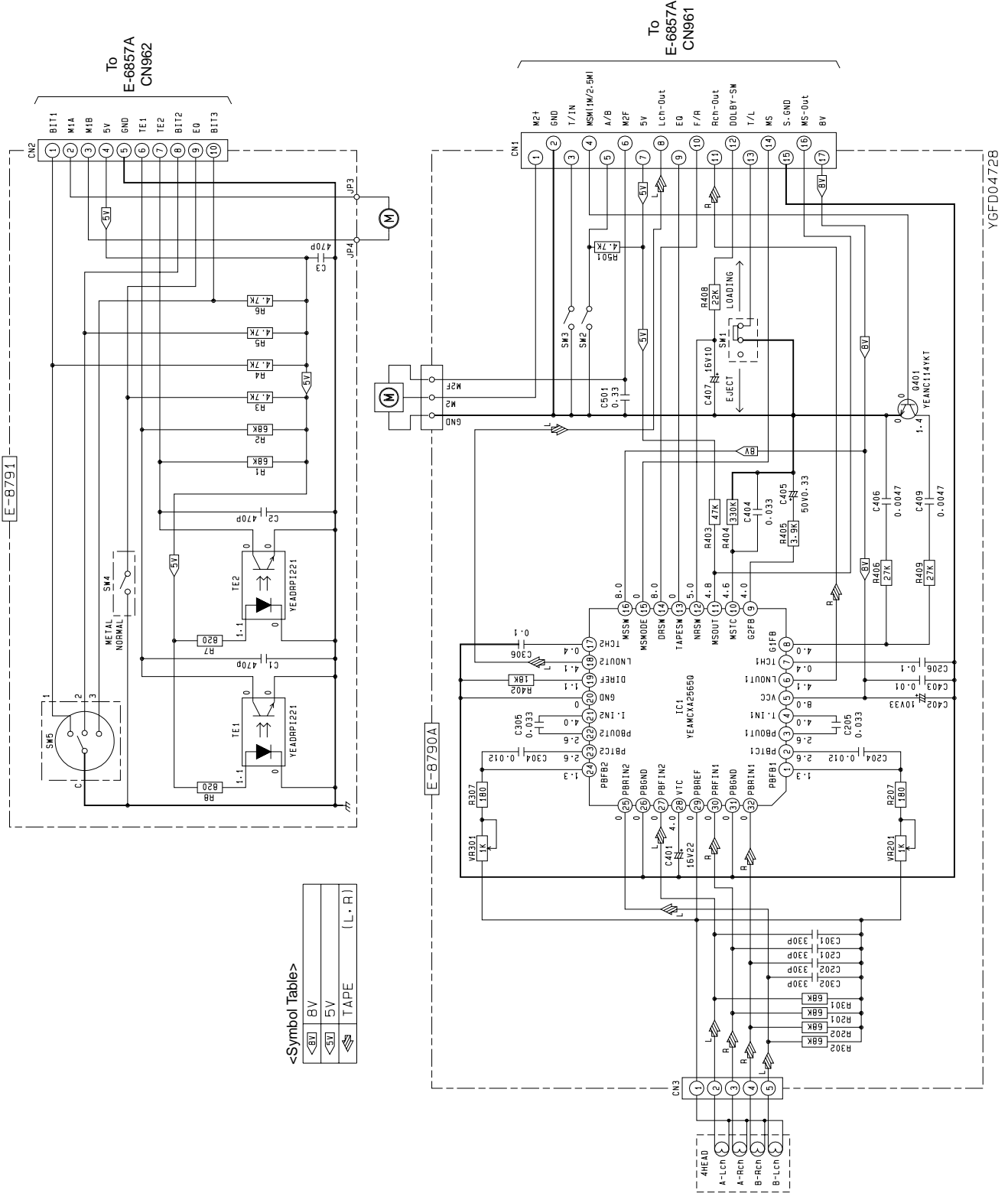
YGFD04728

A

B

22 SCHEMATIC DIAGRAM (1)

22.1. Tape Block

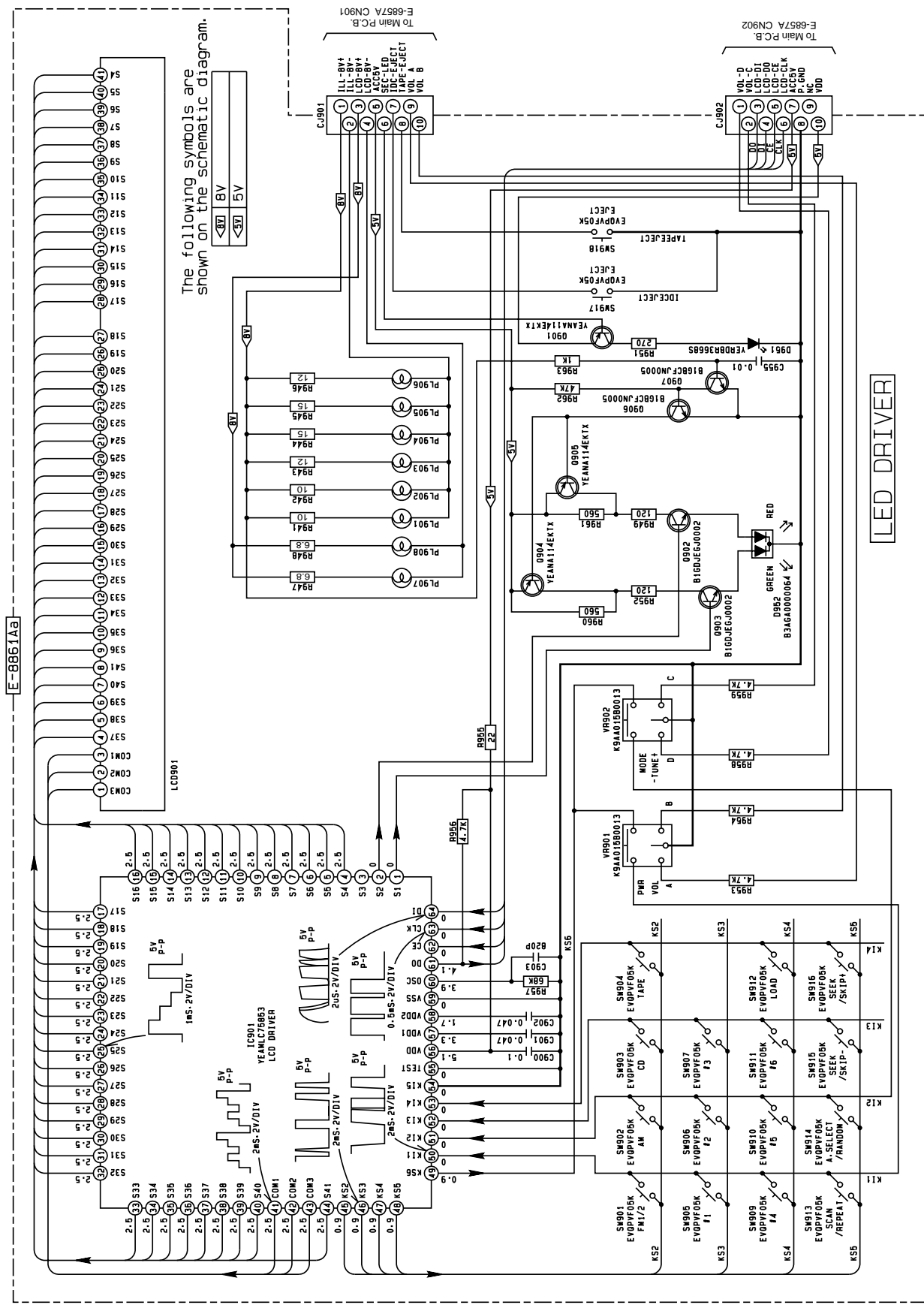


<Symbol Table>

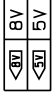
	5V
	BV
	TAPE
	(L, R)

23 SCHEMATIC DIAGRAM (2)

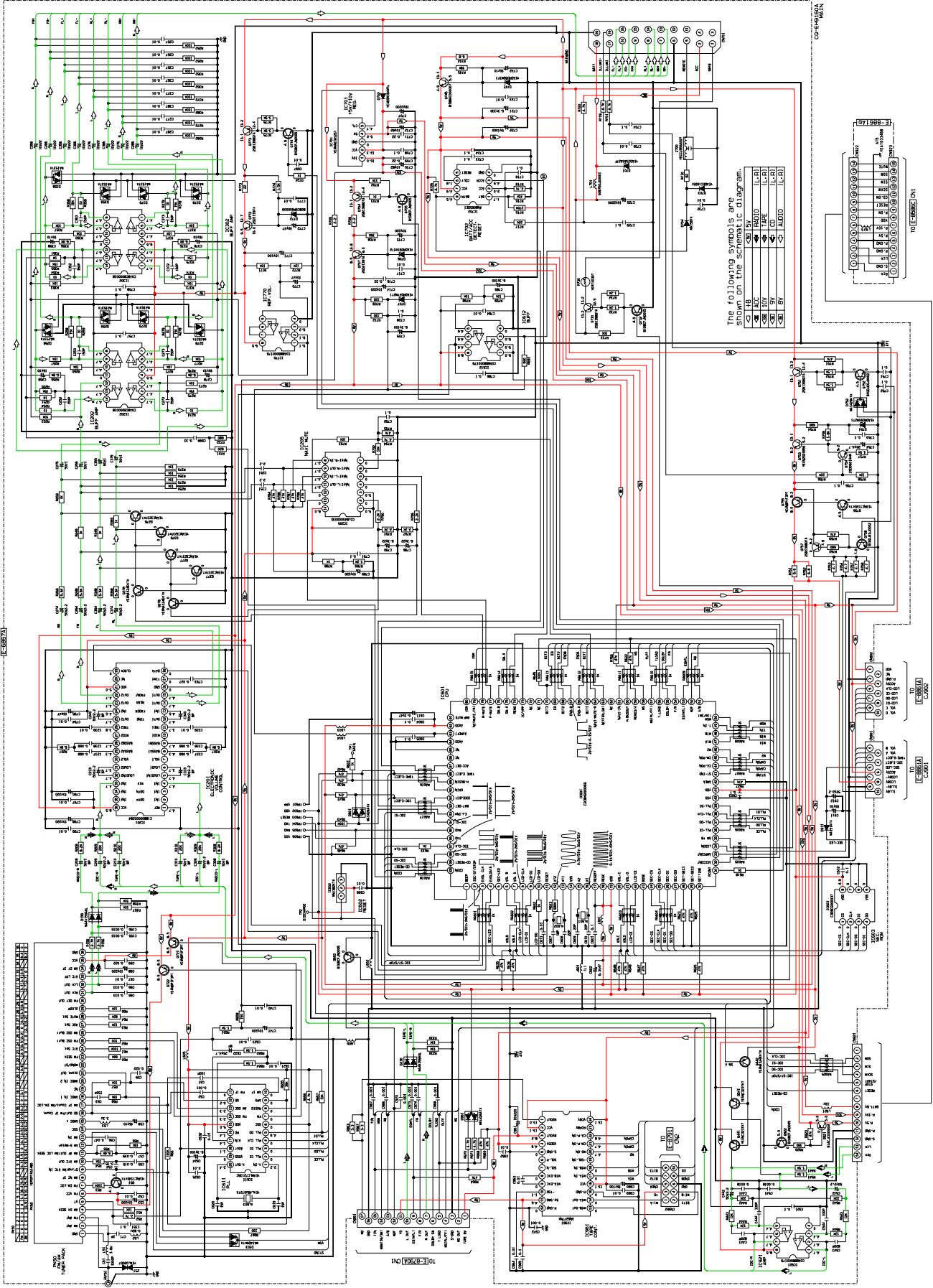
23.1. Display Block



The following symbols are shown on the schematic diagram.



23.2. Main Block



23.3. CD Servo Block

