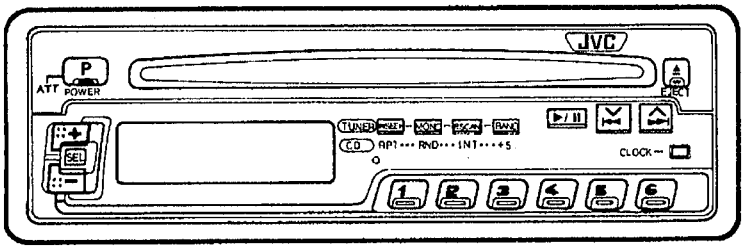
JVC

SERVICE MANUAL

CD RECEIVER

KD-GS40 C/J



COMPACT disc DIGITAL AUDIO

Area Suffix

C ..... Canada

J ..... U.S.A.

Contents

No. 49207
April 1994

1.Precautions

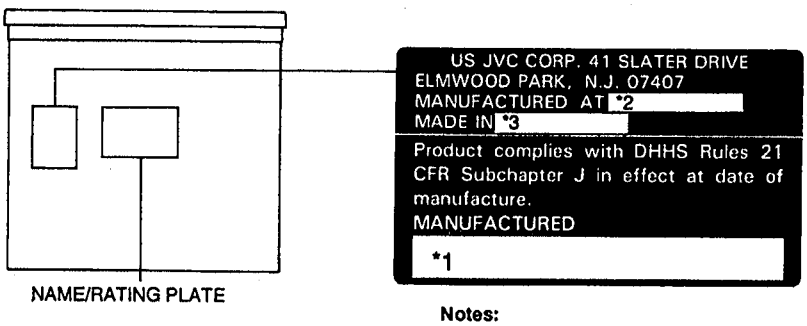
IMPORTANT FOR LASER PRODUCTS (For U.S.A. only)

Precautions

1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the top cover. There are no user-serviceable parts inside. Leave all servicing to qualified service personnel.
4. **CAUTION:** This CD player uses invisible laser radiation, however, is equipped with safety switches to prevent radiation emission when unloading CDs. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Identification And Certification Labels

Bottom panel of the main unit



Notes:
*1 The date of manufacture.
*2 The ID code of manufacturing plant.
*3 Marking of country origin.

2. Specifications

CD PLAYER SECTION
Type: Compact disc player
Signal Detection System: Non-contact optical pickup (semiconductor laser)
Number of Channels: 2 channels (stereo)

Frequency Response: 5 to 20,000 Hz
Dynamic Range: 95 dB
Signal-to-Noise Ratio: 97 dB
Wow & Flutter: Less than measurable limit

AUDIO AMPLIFIER SECTION
Maximum Power Output: (Front) 22 W per channel
(Rear) 22 W per channel
Continuous Power Output (RMS): (Front) 8 W per channel into 4 Ω, 40 to 20,000 Hz at no more than 0.8% total harmonic distortion. (Rear) 8 W per channel into 4 Ω, 40 to 20,000 Hz at no more than 0.8% total harmonic distortion.
Load Impedance: 4 Ω (4 to 8 Ω allowance)
Tone Control Range
Bass: ±10 dB at 100 Hz
Treble: ±10 dB at 10 kHz
Frequency Response: 40 to 20,000 Hz
Signal-to-Noise Ratio: 70 dB

RADIO SECTION
Frequency Range
FM: 87.5 to 107.9 MHz
(with channel interval set to 200 kHz)
87.5 to 108.0 MHz
(with channel interval set to 100 kHz)
AM: 530 to 1,710 kHz
(with channel interval set to 10 kHz)
531 to 1,602 kHz
(with channel interval set to 9 kHz)

[FM Tuner]
Usable Sensitivity: 12.1 dBf (1.1 μV/75 Ω)
50 dB Quieting Sensitivity: 16.3 dBf (1.8 μV/75 Ω)

Alternate Channel Selectivity: (400 kHz): 65 dB
Frequency Response: 40 to 15,000 Hz
Stereo Separation: 35 dB
Capture Ratio: 2.0 dB

[AM Tuner]
Sensitivity: 20 μV
Selectivity: 35 dB

GENERAL
Power Requirement
Operating Voltage: DC 14.4 volts (11 to 16 volts allowance)
Grounding System: Negative ground
Dimensions (W x H x D) Installation Size: 178 x 50 x 151 mm (7-1/16" x 2" x 6")
Panel Size: 190 x 58 x 13 mm (7-1/2" x 2-5/16" x 9/16")
Gross Weight: 2.1 kg (4.7 lbs)

Design and specifications subject to change without notice.

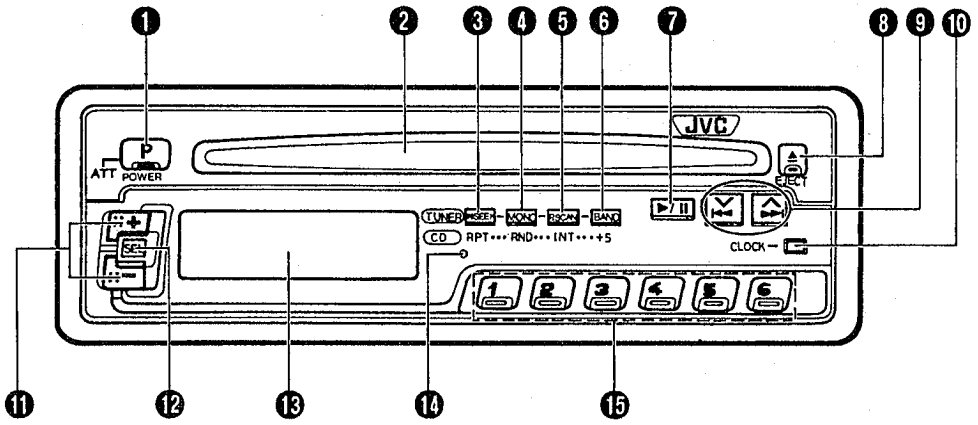
If a kit is necessary for your car, consult your telephone directory for the nearest car audio speciality shop.

3. Main Features

- "Direct-in" disc loading system
- Direct Access Play/Skip Play/Search Play/ Repeat Play/Random Play/Intro Play
- AM/FM Stereo PLL Synthesizer Tuner
- 24-Station Preset Tuning (FM-18, AM-6)
- Preset Scan/Seek/Manual Tuning
- 4-Channel Amplifier System
- Maximum Power Output of 22 watts per channel (Front)/22 watts per channel (Rear)
- Digital Clock Display

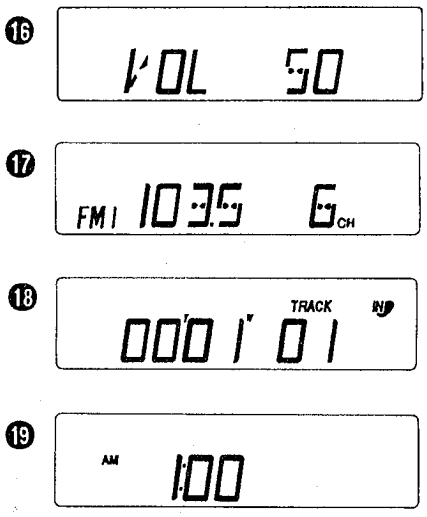
4. Instructions (Extract)

LOCATION OF CONTROLS



❶ POWER (P)/Attenuator (ATT) switch
POWER: Press to turn the power ON. Press for more than 1 second to turn the power OFF.
ATT: When this button is pressed during operation, the volume drops and the ATT indicator blinks. Press again to return to the original volume.
❷ CD loading slot
❸ Manual (M)/SEEK button
Repeat (RPT) button
❹ MONO button
Random (RND) button
❺ Preset Scan (P. SCAN) button
Intro (INT) button
❻ BAND/+5 button
❼ Play (►)/Pause(❚❚) button
❽ Eject (▲) button
❾ Tuning/Time Adjustment/Skip (search) button
Down frequency/Hour adjustment (⩒)/(|◄◄)
Up frequency/Minute adjustment (⩓)/(►►|)
❿ CLOCK button

⓫ Level Control buttons
Use to adjust the volume, bass, treble, fader, balance and loudness. (See page 16.)
⓬ Electronic Control Mode Select (SEL) button
⓭ Display window
⓮ Microcomputer Reset button
⓯ Preset Station buttons (No.1 to No.6)
Track Number buttons (No.1 to No.6)



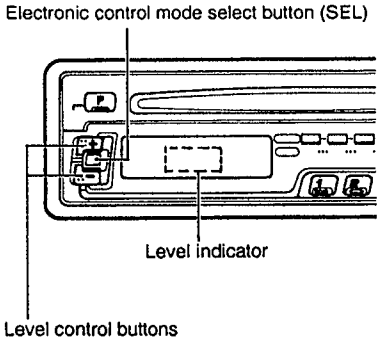
⓰ Indicators (for Audio Control section)
Volume (VOL)
Bass (BAS)
Treble (TRE)
Fader (FAD)
Balance (BAL)
Loudness (LOUD)
Attenuator (ATT)
Level indicator

⓱ Indicators (for Tuner section)
Band (FM1-FM2-FM3-AM)
Radio frequency
Preset Station
SEEK
Mono (MO)
FM Stereo (ST)

⓲ Indicators (for CD player section)
LOAD
IN
PLAY
TRACK
Track number
RPT
RND
EJECT
NO DISC

⓳ Indicators (for other controls)
Time
AM
PM

Audio Level Control



Loudness Control

At low volumes, the human ear is less sensitive to low and high frequencies. When the volume is low, set the loudness control to ON to boost these frequencies and produce well-balanced sound.

Electronic control mode		
VOL Volume	Decreases (00 – 50)	Boosts (00 – 50)
BAS Bass	Decreases (–08) – 00	Boosts 00 – (+08)
TRE Treble	Decreases (–08) – 00	Boosts 00 – (+08)
FAD Fader	Rear (R10 – 00)	Front (00 – F10)
BAL Balance	Left (L10 – 00)	Right (00 – R10)
LOUD Loudness	Off	On

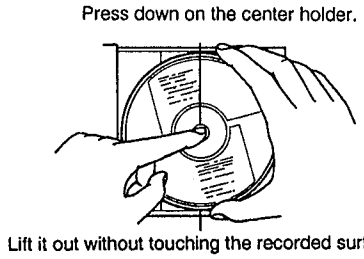
CONCERNING COMPACT DISCS

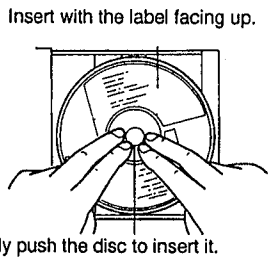
- Use only CDs with the following mark:

COMPACT disc DIGITAL AUDIO

Notes On Handling Discs

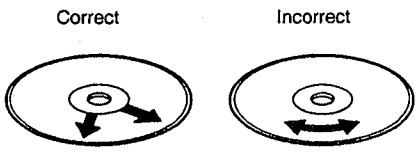
Be sure to keep the discs in their cases. If discs are piled on top of one another without their cases, they may be damaged.
Do NOT put discs where they will be exposed to direct sunlight or in places subject to high temperatures and humidity. Avoid leaving discs in your car.





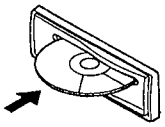
Maintenance Of Discs

- When fingerprints or dirt adhere to a disc, wipe it clean with a soft, dry cloth, from the inside toward the edge. If it is difficult to clean, wipe the disc with a cloth moistened with water.
- Do NOT use record cleaners, benzine, alcohol or anti-static agents.



Loading Discs

Insert a disc (label up) into the loading slot. (When the disc is inserted part-way, it is drawn in and play starts automatically.)



Notes:

- This unit is equipped with a two-disc insertion prevention mechanism; when disc insertion is interrupted, the next disc is NOT inserted immediately afterwards. In this case, wait a short period of time or press the EJECT (⏏) button to release this mechanism, and insert the disc again.
- When a disc is loaded upside down, "NO DISC" is shown in the display and the disc is automatically ejected.

Unloading Discs

To unload a disc, press the ⏏ button; the CD pops out allowing disc removal.

- When removing discs, avoid touching the recorded surface.

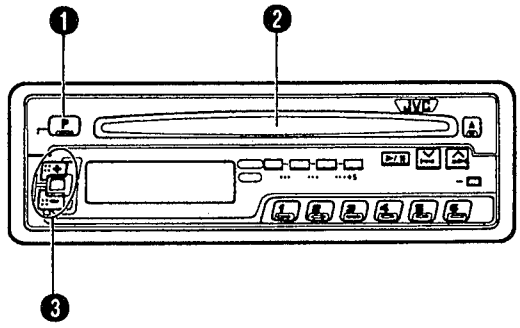
- 8-cm (3-3/16") compact discs (CD singles) CANNOT be played on this unit. If the disc is inserted, it will be ejected automatically.

PLAYING COMPACT DISCS

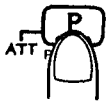
How To Play All Tracks

The following example shows a CD containing 10 tracks with a total playback time of 50 minutes, 45 seconds.

Operate in the order shown.

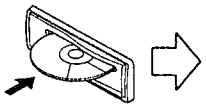


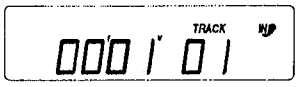
❶



Switch on.

❷ LOAD



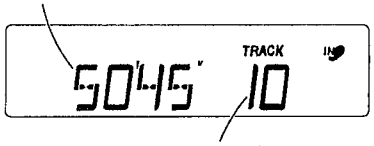


Insert the disc.

❸ VOL SEL BAS/TRE/FAD/BAL/LOUD/VOL

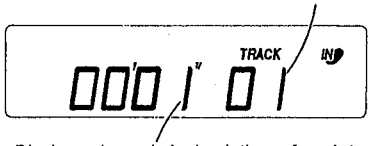
Adjust. See page 16.

Total playback time.



Total number of tracks (tunes).

Track (tune) number.



Displays elapsed playback time of each tune being played back.

Direct Access Playback

When the numbered button of a required track is pressed, that track is played back immediately.

- To playback tracks numbered 1 to 6, press the required Track No. button.
- To playback tracks numbered 7 to 99, press the +5* button the required number of times and then the Track No. button.

* +5 button
Each time this button is pressed, the number increases in increments of 5.

Skip Playback

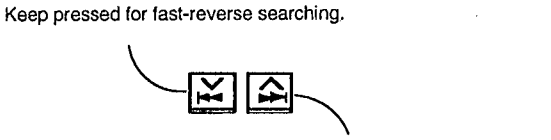
- During playback, you can easily skip to the beginning of the previous, current, or next track, and playback will start again from there.

How to listen to the next track...
Press the (►►I) button once to skip to the beginning of the next track.
How to listen to the previous track...
Press the (I◄◄) button once to skip to the beginning of the current track, then again to skip to the previous track.

Search Playback

(How to locate a required position on the disc.)

- The required position can be located using fast-forward or reverse search during playback.
- Hold down the button to commence searching. (The search speed increases the longer the button is pressed.)
- Since a low sound level can be heard (approx. one quarter of playback), monitor the sound and release the button when the required position is located.



Random Playback

This unit's microcomputer can automatically select tracks on a disc in random order. Press the RND button during playback to start random play. Pressing it again cancels the mode.

Repeat Playback

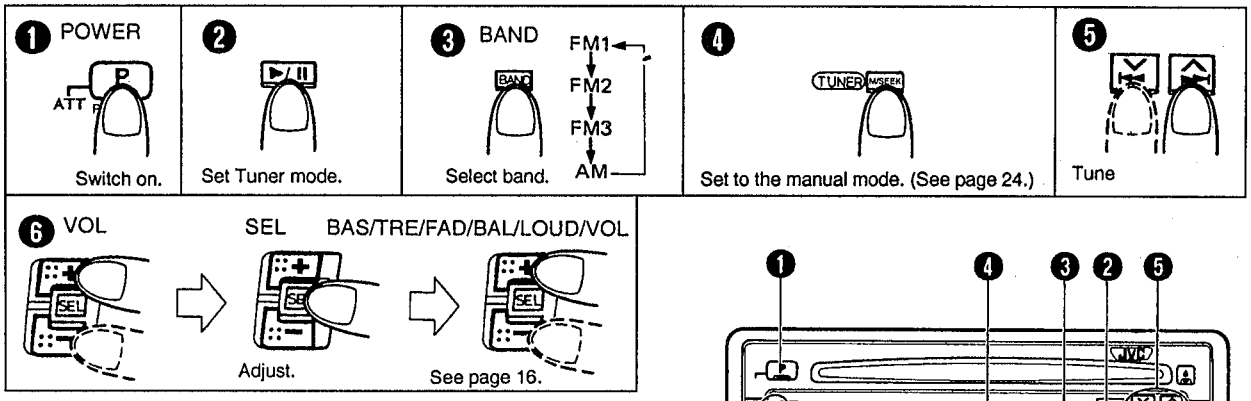
When the RPT button is pressed, the current track is played again. Press RPT again to cancel repeat playback. The RPT indication goes out and all-tracks playback is resumed.

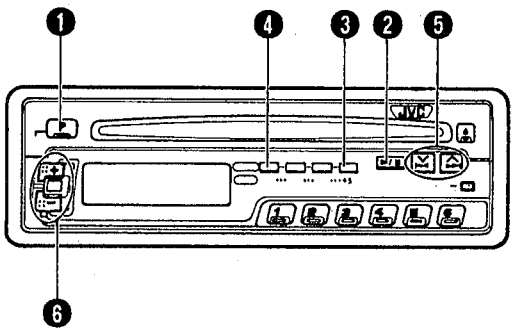
Intro Scan

When the INT button is pressed, the first 15 seconds of each track are played sequentially. During INTRO play, the current Track No. blinks in the display. When you want to start playback, press the INT button again.

RADIO OPERATION

Operate in the order shown.





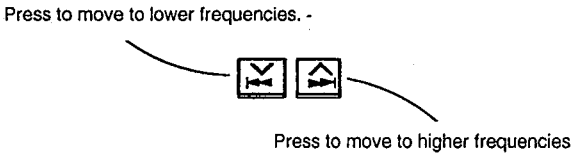
Manual Tuning

Set Manual mode using the M/SEEK button. When "SEEK" is not displayed, the unit is in Manual mode. Then, by pressing the Tuning button, you can move up/down the frequency band. The band is scanned as long as either side of the button is pressed.

Frequency scan steps are as follows:
FM — in 200 kHz/100kHz units
AM — in 10 kHz/9kHz units

Seek Tuning

Set Seek mode using the M/SEEK button; the indicator lights. Then, by pressing the ⩓ (UP) or ⩔ (DOWN) button the unit tunes to the adjacent station with a higher or lower frequency.



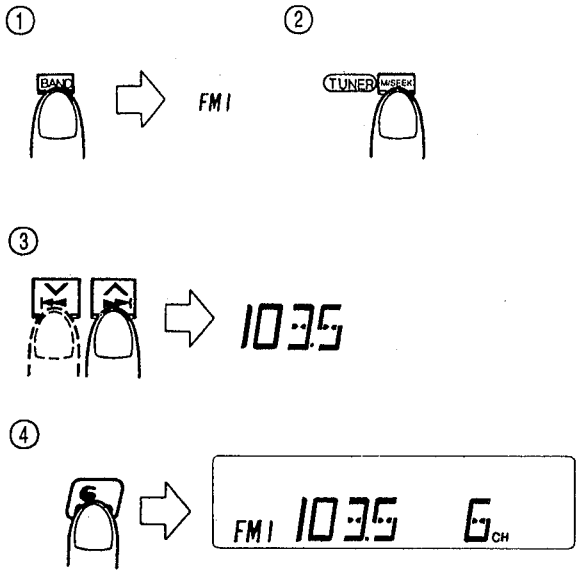
Preset Button Tuning

How to Preset Stations
6 stations in each band (FM1, FM2, FM3 and AM) can be preset as follows:

- Example (when presetting Preset Station button "6" to an FM station at 103.5 MHz)

① Select the FM1 band using the BAND button.
② Set Manual mode.
③ Tune to the desired station.
④ Press Preset Station button "6" for more than 2 seconds. (When "6" blinks in the Preset Station display, the station is preset.)

- Repeat the above procedure for the other 5 Preset Station buttons and other bands (FM2, FM3 and AM).



Notes:
- A previously preset station is erased when a new station is stored in memory.
- The preset stations are erased when the power supply to the memory circuit is interrupted during battery replacement, etc. When this occurs, preset the stations again.

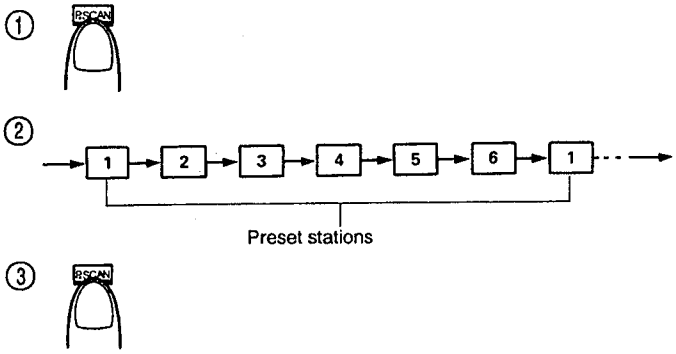
Preset Tuning

① Select the band.
② Press the required Preset Station buttons (No.1 to No.6).

Preset Scan Button Tuning

This function makes it possible to automatically scan preset FM and AM stations.

① Press the P. SCAN button.
② Scanning is performed in the order of the preset stations in each frequency band (FM1, FM2, FM3 and AM). Each preset station is heard for approx. 5 seconds.
③ When the required station is heard, press the P. SCAN button again.



Mono Button

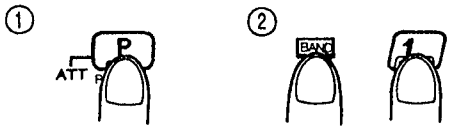
When listening to FM, set the MONO button to stereo or mono.

Note:
Set to mono when a stereo FM broadcast is too noisy and cannot be heard satisfactorily.

To Change The Intervals Between Channels

When this unit is shipped, the channel intervals are set to 10 kHz for AM and 200 kHz for FM. If the unit is used in an area other than North or South America, adjust as follows:

① Switch the power ON.
② While pressing the BAND button, press Preset Station button 1 for more than 3 seconds.



Performing this procedure sets the channel intervals to 9 kHz for AM and 100 kHz for FM.

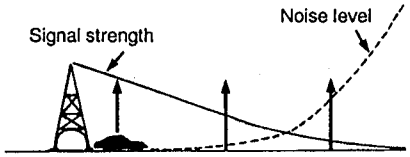
To change back to the original intervals, repeat the above operation.

FM Pulse Noise Suppressor

This unit has built-in circuitry to effectively eliminate engine noise picked up by the antenna, etc. in the form of FM pulses, for a more favorable FM reception.

Automatic FM Noise Suppressor (AFNS)

This unit incorporates an automatic FM noise suppression circuit to ensure satisfactory reception of FM broadcasts when a vehicle is moving and signal strengths are continuously fluctuating.



Signal strength	A	B	C
	Strong	Not so strong	Weak
Auto blend	Stereo	Blend	Mono
Auto high-cut	–	→	(Operates)

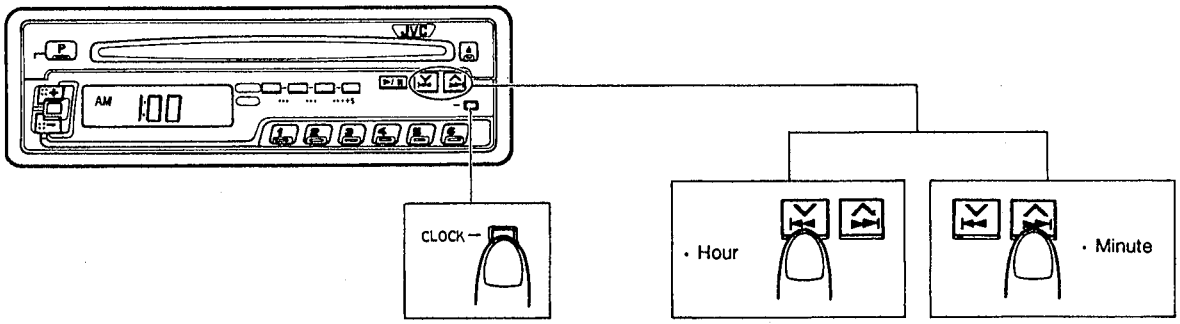
DIGITAL CLOCK DISPLAY

To select Time mode, press the CLOCK button. When the radio or a CD is operated in Time mode, the displayed time switches to the frequency or elapsed playback time, and returns to Time mode after a few seconds. Press the CLOCK button again to cancel Time mode.

How To Adjust The Time

Make sure the display is in Time mode, then, while pressing the CLOCK button, press the Hour Adjustment button (DOWN) (≪) to adjust the "hours", and press the Minute Adjustment button (UP) (≫) to adjust the "minutes".

- Each time the hour digits change from 11 to 12, the display alternates between AM and PM. (12 midnight is indicated as "AM 12:00" and 12 noon is indicated as "PM 12:00".)

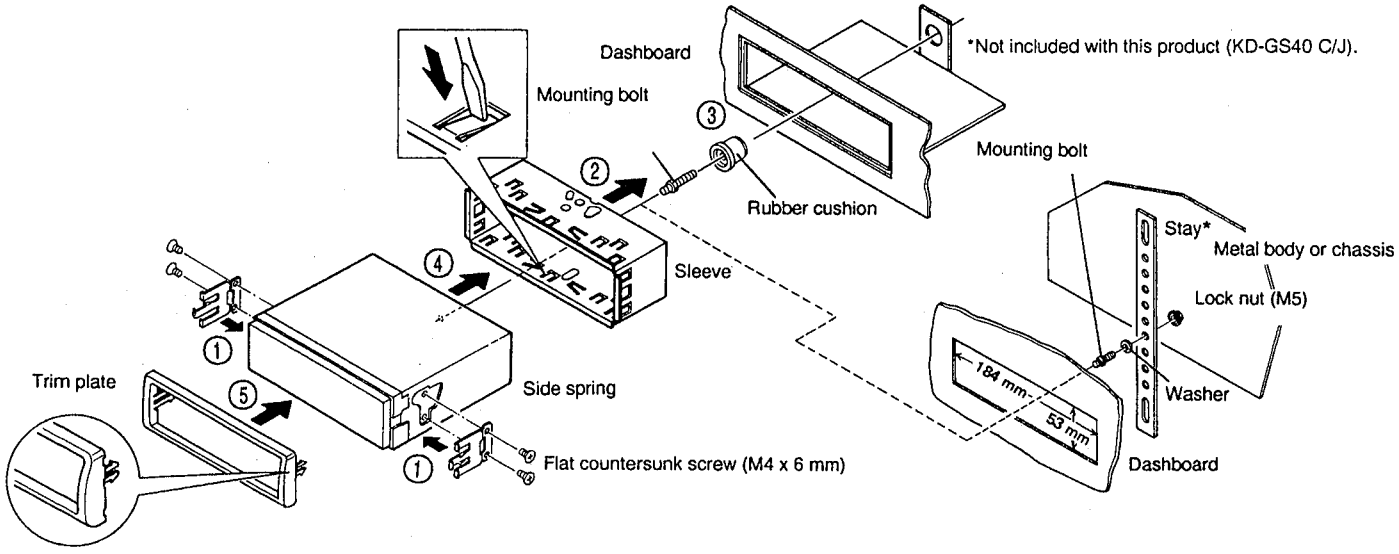


INSTALLATION (IN-DASH MOUNTING)

- The following illustration shows a typical installation. However, you should make adjustments corresponding to your specific car. If you have any questions or require information regarding installation kits, consult your JVC car audio dealer or a company supplying kits.

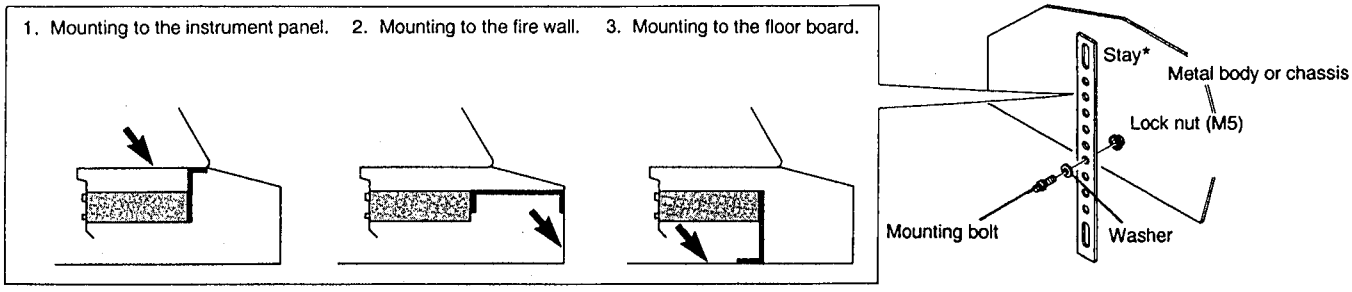
① Attach the 2 side springs.
② Install the sleeve in the dashboard.
* After the sleeve is correctly installed in the dashboard, bend the appropriate tabs to hold the sleeve firmly in place, as shown.
③ Fix the mounting bolt to the rear of the unit's body and place the rubber cushion over the end of the bolt.
④ Slide the unit into the sleeve until they are locked together.
⑤ Mount the trim plate.

- Follow the numbers for mounting.



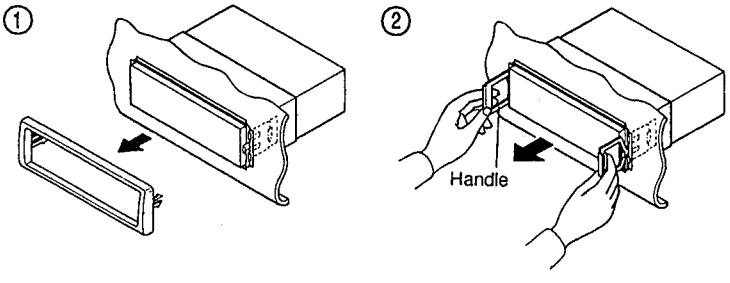
- Examples for use of the back stay:

*Not included with this product (KD-GS40 C/J).



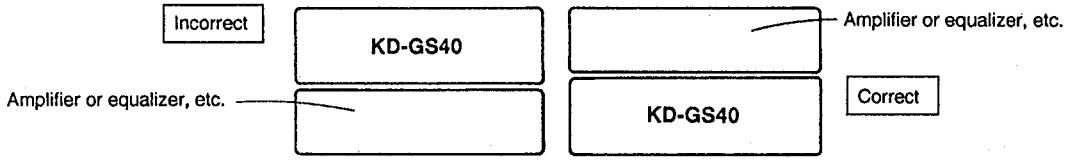
Removing the unit

- Before removing the unit, release the rear section.
① Remove the trim plate by pulling it forward.
② Insert the 2 handles between the side springs and the sleeve, as shown. Then, while gently pulling the handles away from each other, slide out the unit.



Installing With Other Equipment

When installing this unit with other equipment, make sure it is positioned under them so its temperature does not rise.

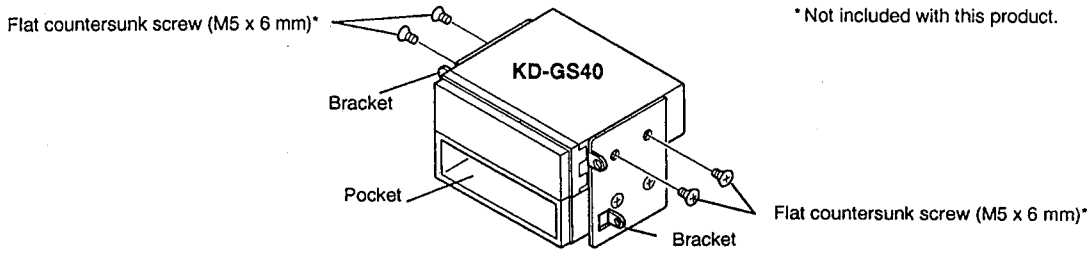


When installing the unit without using the sleeve.

In a Toyota for example, first remove the car radio and install the CD receiver in its place.

Notes:

1. When installing the unit on the mounting bracket, be sure to use the 6 mm-long screws. If longer screws are used, they could damage the unit.
2. This unit should be installed horizontally. If not possible, install it at an inclination of 20° or less with respect to the front panel.



ELECTRICAL CONNECTIONS

To prevent short circuits, we recommend that you disconnect the battery's negative terminal and make all electrical connections before installing the unit. If you are not sure how to install this unit correctly, have it installed by a qualified technician.

Note:
This unit is designed for a 12-volt DC negative ground. If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC car audio dealers.

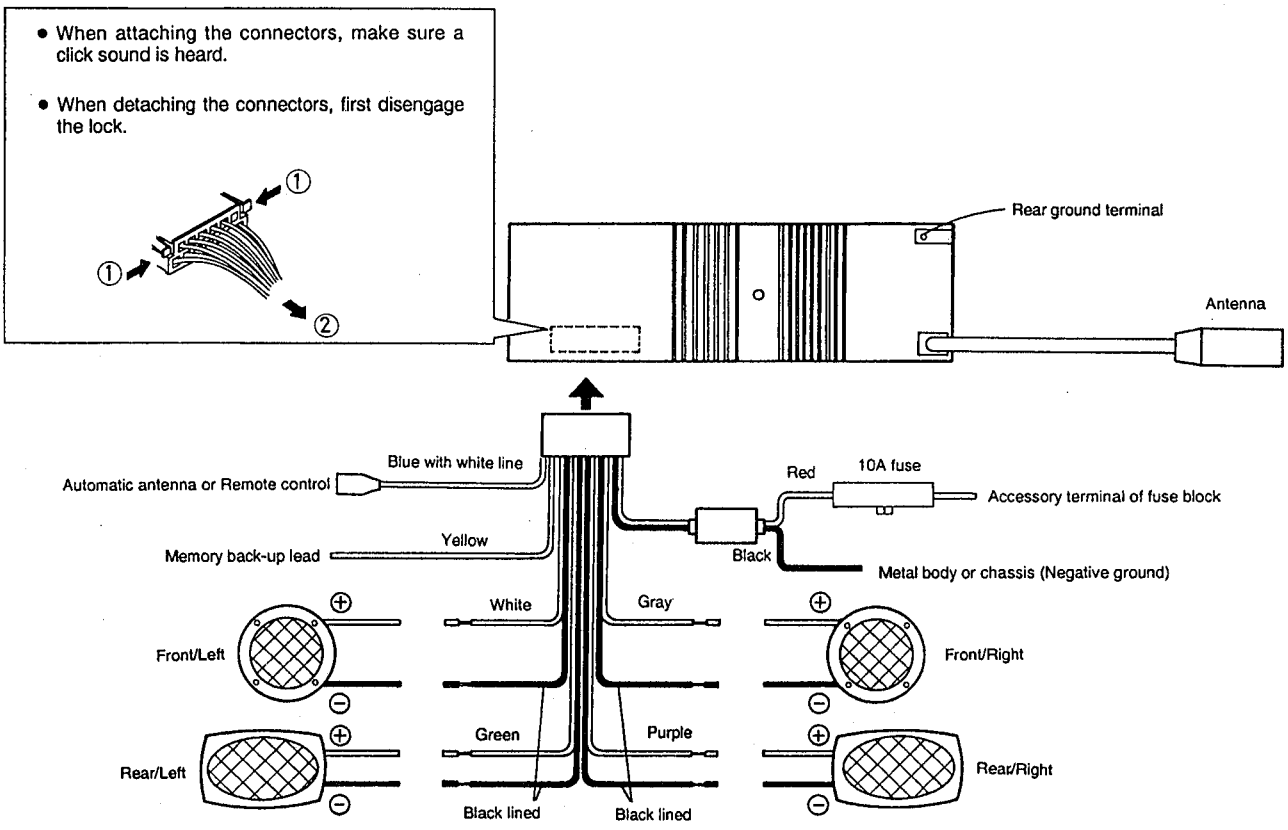
- Maximum input of the speakers should be more than 22 watts at the rear and 22 watts at the front, with an impedance of 4 to 8 ohms.

CAUTIONS:
As this unit uses BTL (Balanced Transformerless) amplifier circuitry (floating ground system), please comply with the following:

1. **Do NOT connect the black-lined speaker leads to a common point.**
2. **Do NOT connect the speaker leads to the metal body or chassis.**
3. **Cover the terminals of the leads that are NOT used with insulating tape, to prevent them from shorting.**

- **Be sure to ground this unit to the car's chassis.**

A. 4-Speaker Connections



B. Automatic Antenna Connections

To use the automatic antenna, connect its remote lead (blue with white lines) terminal. For details of installation, see the automatic antenna's Instruction Manual.

C. Memory Back-Up Lead

Connect this lead to a LIVE power source (supplied even when vehicle ignition is OFF).

D. Fader Control

- When used in a 4-speaker system
  Use this control to balance the volume levels of the front and rear speakers. Set Fader mode using the SEL button and press the + Level Control button to decrease the volume level of the rear speakers, and - to decrease that of the front speakers. The overall volume level can be adjusted in Volume mode. (See page 16.)
- When used in a 2-speaker system
  Set this control to the center position ("00" is displayed).

5. Location of Main Parts

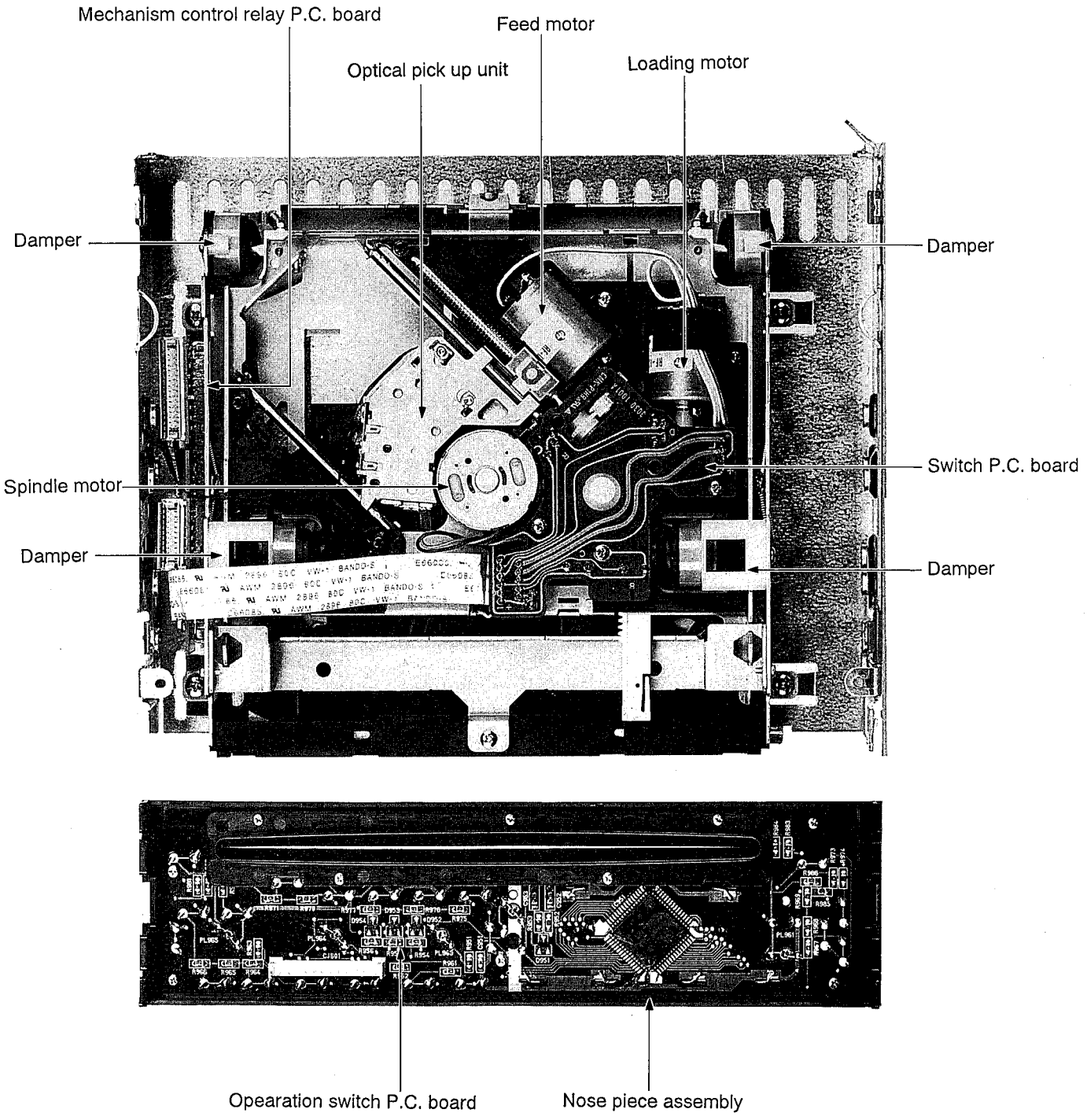


Fig. 5-1

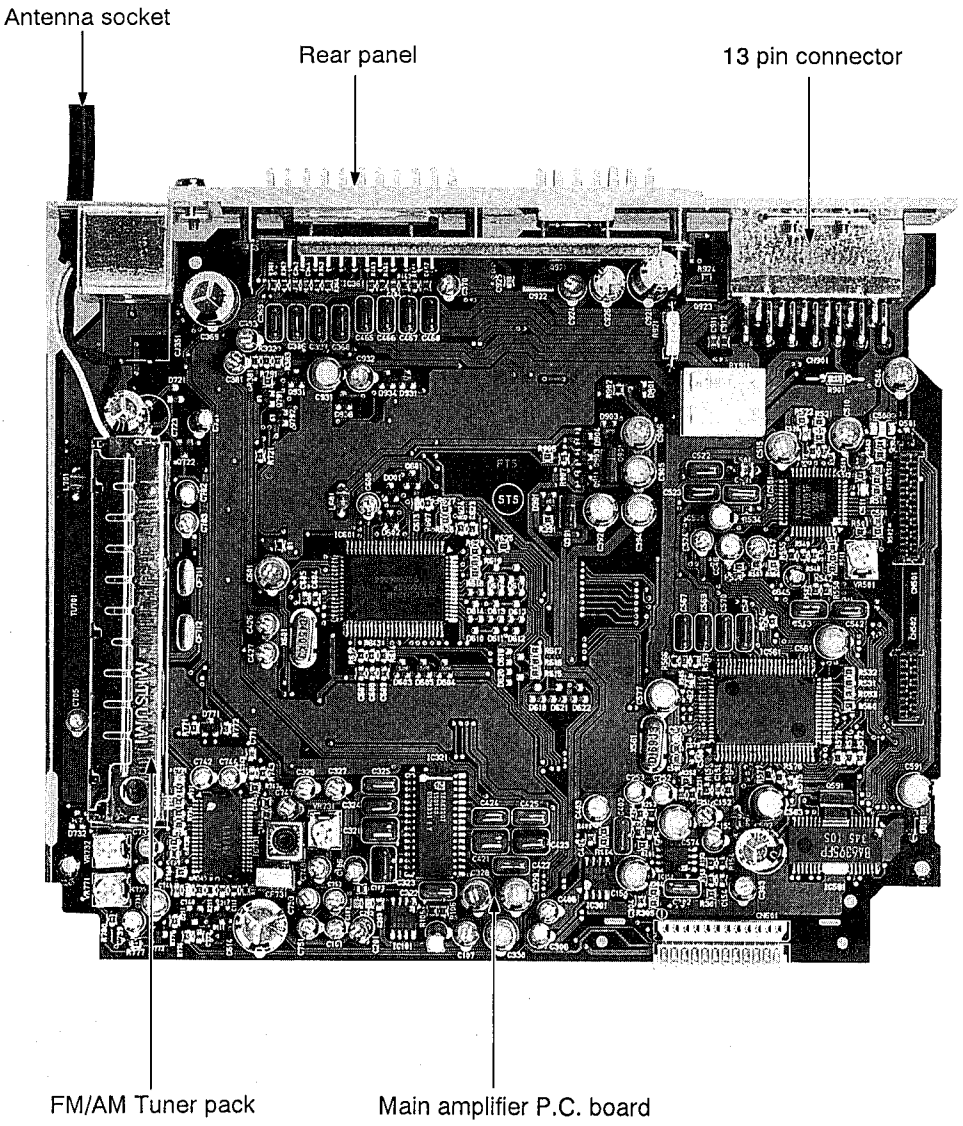

Antenna socket
Rear panel
13 pin connector
FM/AM Tuner pack
Main amplifier P.C. board

Fig. 5-2

6. Removal of Main Parts

■ Removal of Bottom cover(Fig. 6 – 1 and Fig. 6 – 2)

1. Place the set upside down to expose the bottom cover.
2. Remove one screw (1)retaining the bottom cover from the rear of the set.
3. Insert an ordinary(–)screwdriver into the gap in the hooks (a, b, c, d)one after another to raise the bottom cover so as to disengage it from the chassis.

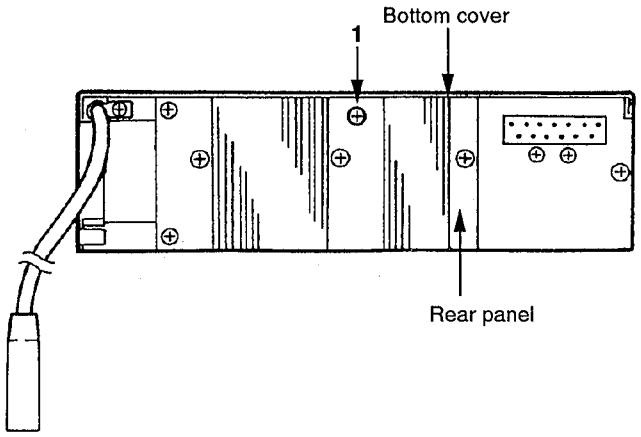


Fig. 6 – 1

■ Removal of nose piece assembly (Fig. 6 – 2)

1. Insert an ordinary(–)screwdriver into the gap in the hooks (e, f, g, h)one after another to separate the nose piece assembly from the main unit for removal.
2. The connector CP601 on the operation switch P.C. board and the connector CJ601 on the main amplifiter P.C. board will be disconnected automatically.

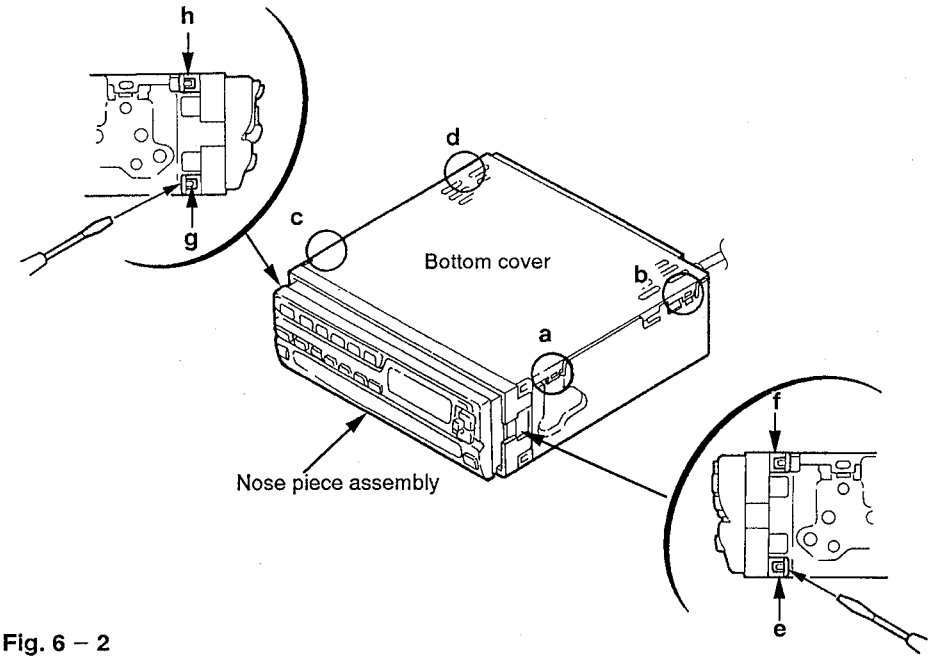


Fig. 6 – 2

■ Removal of main P.C. board assembly

(Fig.6 – 3 , 6 – 4)

1. Remove the bottom cover. (Refer to "Removal of bottom cover".)
2. Remove the nose piece assembly (Refer to "Removal of noce piece assembly")
3. Remove two screws "2" retaining the main P.C. board assembly from the rear of the set.
4. Remove two screws "3" retaining the main P.C. board.
5. Disengage two pawls(i , j)retaining the main P.C. board from the chassis.
6. Disconnect the connection between the 16pin connector CN501 on the main P.C. board and the 16pin connector on the CD mechanism control relay P.C. board, and connection between the 10pin connector CN502 on the main P.C. board and the 10pin connector on the CD mechanism control relay P.C. board respectively with an ordinary (–) screwdriver, etc.

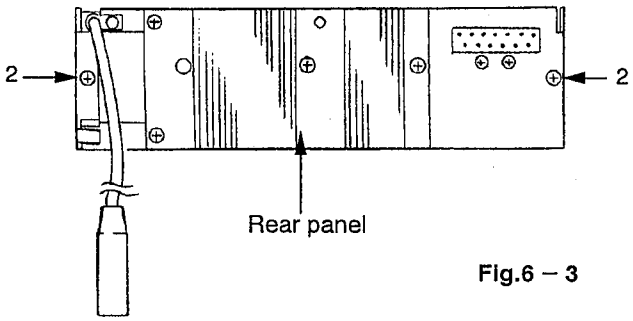


Fig.6 – 3

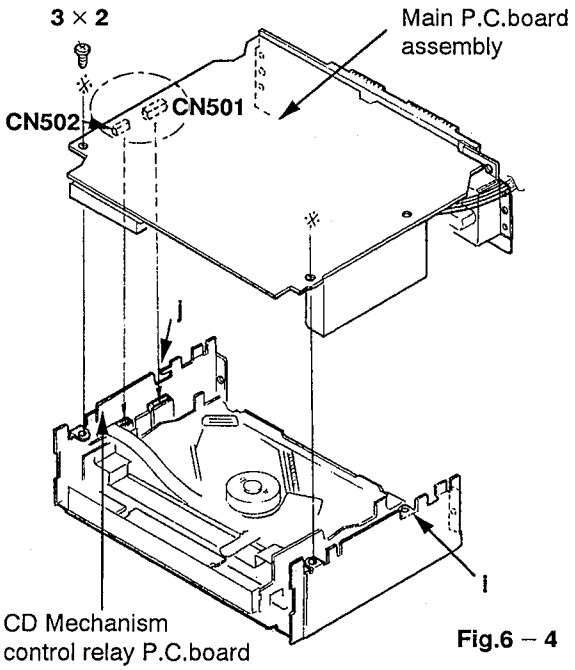


Fig.6 – 4

■ Removal of CD mechanism assembly

(Fig.6 – 5)

1. Remove the bottom cover. (Refer to "Removal of bottom cover")
2. Remove the front chassis. (Refer to front chassis".)
3. Remove the main P.C. board. (Refer to "Removal of main P.C. board".)
4. Remove four screws "4" retaining the CD mechanism assembly from the chassis.

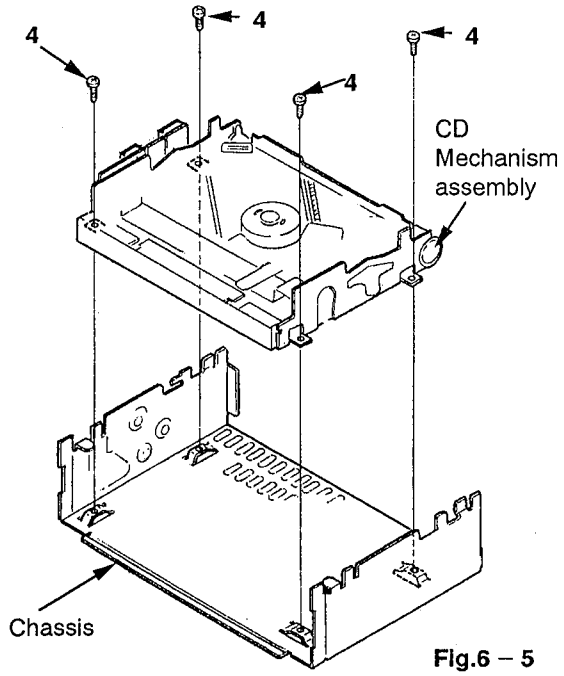


Fig.6 – 5

■ Removal of CD pickup (Fig.6 – 6 , 6 – 7 , 6 – 8)

1. Remove the bottom cover. (Refer to "Removal of bottom cover".)
2. Remove the CD mechanism assembly. (Refer to "Removal of CD mechanism assembly".)
3. Plase the CD mechanism assembly to expose the bottom side upward, and remove a screw "6" retaining the pickup shaft (A) to remove it together with the shaft holder.
4. Loosen a screw "7" retaining the pickup shaft (A) in the other side.
5. Loosen a screw "8" retaining the pickup shaft (B).
6. Disconnect the 11pin F.P.C. wire and the 4pin F.P.C. wire respectively from the CD mechanism control relay P.C. board.
7. Take CD pickup unit out of the CD mechanism assembly.

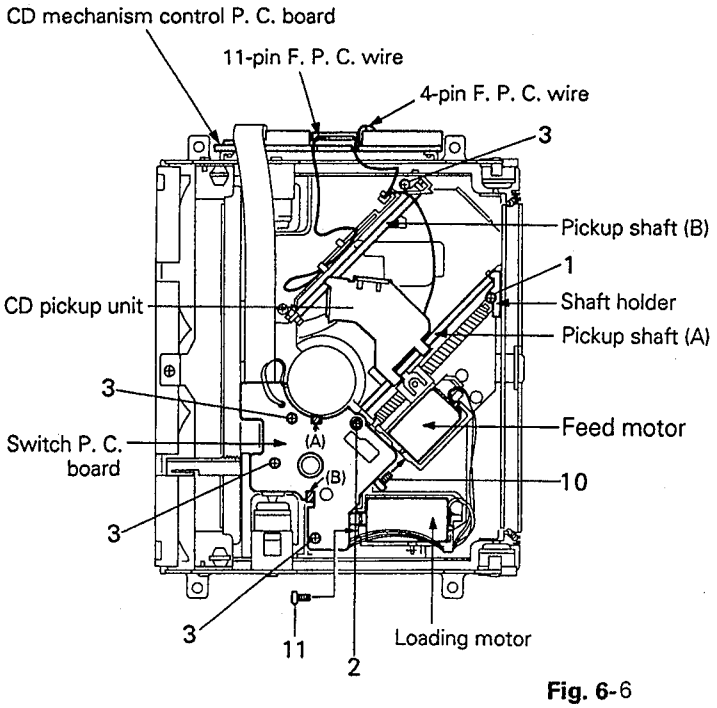


Fig. 6-6

● Cautions for removing and reassembling

1) For disconnecting the 11pin and 4pin F.P.C. wires, first move the connector in the direction of the arrow shown in Fig. 6 – 7.
2) When reassembling, arrange the 11pin and 4pin F.P.C. wires as shown in Fig. 6 – 7 and Fig. 6 – 8.

■ Removal of feed motor and loading motor assembly (Fig. 6 – 6)

1. Remove three screws "9" retaining the switch P.C. board from the CD mechanism assembly.
2. Extend two hooks (A,B)retaining the switch P.C. board in the direction of the arrow respectively to release the P.C. board from them.
3. Lift the switch P.C. board slightly upward and unsolder the blue and pink wires connected with the feed motor from the switch P.C. board.
4. Unsolder the red and black wires connected with the loading motor from the switch P.C. board.
5. Remove a screw "10" retaining the feed motor.
6. Remove a screw "11" retaining the loading motor.

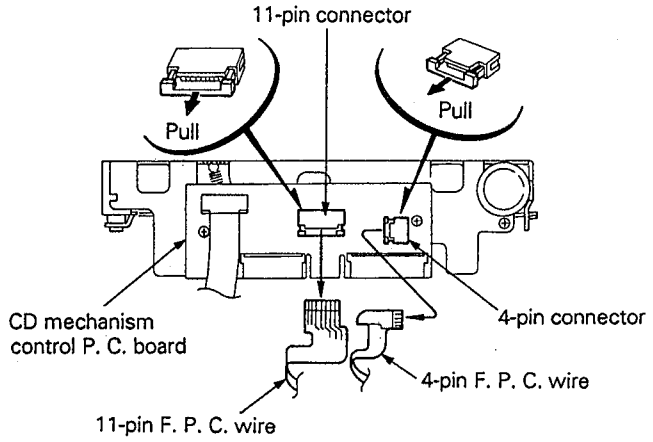


Fig. 6-7

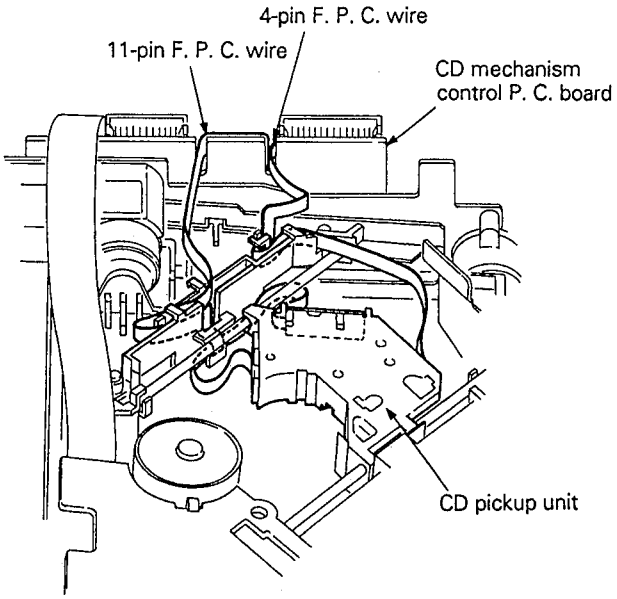


Fig. 6-8

7. Analytic Drawing and Parts List

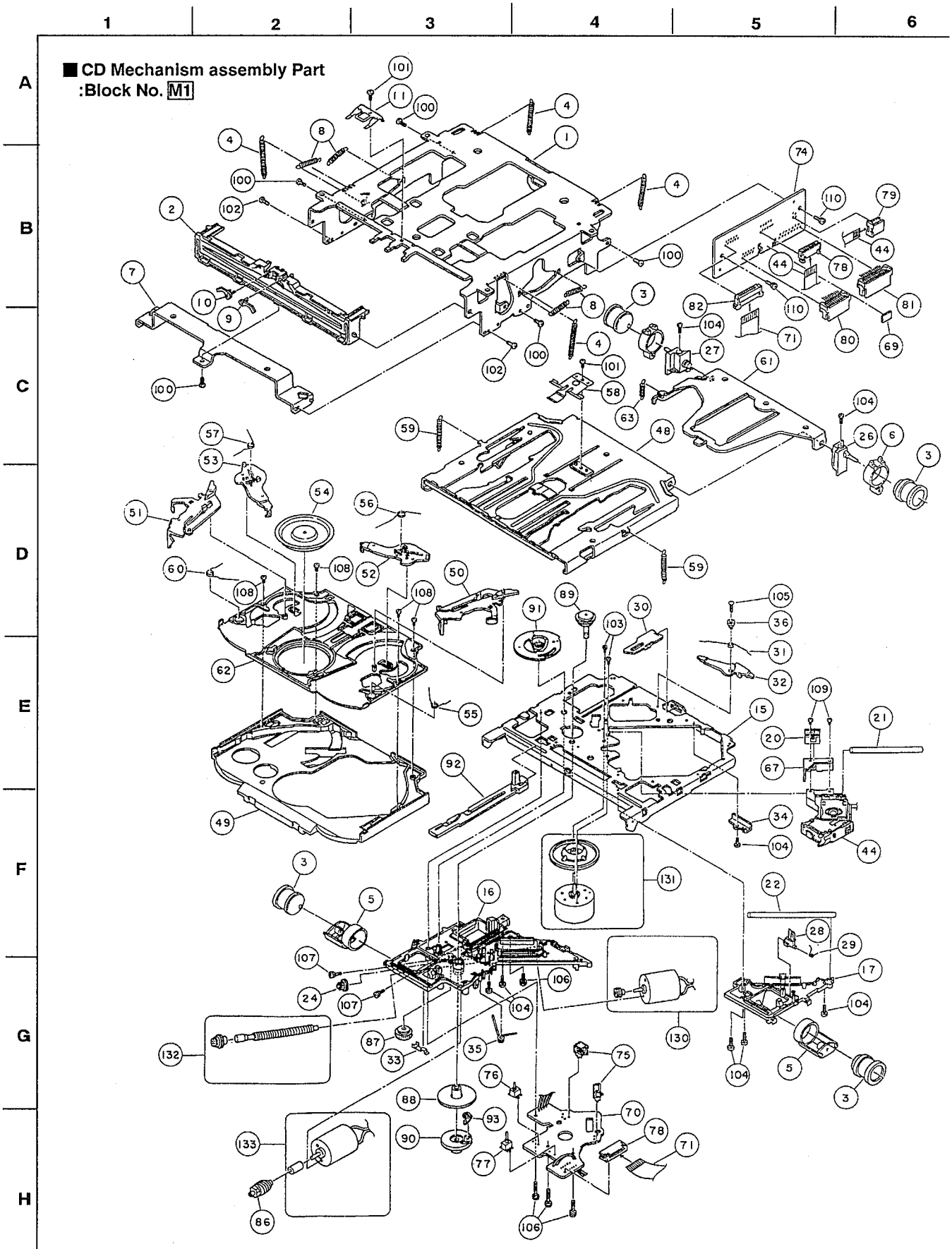


Fig. 7-1

■ **CD Mechanism assembly parts list**

BLOCK NO. M1MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	30300101T	CHASSIS FRAME		1		
	2	30300102T	DISC GUIDE		1		
	3	30300104T	DAMPER		4		
	4	30300105T	TORSION SPRING	"A"	4		
	5	30300108T	CONTROL BRACKET		2		
	6	30300109T	CONTROL BRACKET		2		
	7	30300110T	GUIDE BRACKET		1		
	8	30300111T	TORSION SPRING		4		
	9	30300113T	DISC STOPPER R		1		
	10	30300114T	DISC STOPPER		1		
	11	30300115T	SPRING PLATE		1		
	15	30300501T	DISK BASE		1		
	16	30300502T	STOPPER BASE		1		
	17	30300503T	BRACKET GUIDE		1		
	18	30300504T	TURN TABLE		1		
	19	30300505T	FEED SCREW		1		
	20	30300506T	NUT		1		
	21	30300507T	DRIVE SHAFT(A)		1		
	22	30300508T	DRIVE SHAFT(B)		1		
	23	30300509T	PU GEAR(A)		1		
	24	30300510T	PU GEAR(B)		1		
	25	30300511T	PU GEAR(C)		1		
	26	30300512T	COVER BRACKET R	T GUIDE BASE	1		
	27	30300513T	COVER BRACKET L	T GUIDE BASE	1		
	28	30300514T	LOCK STOPPER		1		
	29	30300515T	LEVER SPRING		1		
	30	30300516T	CLAMP		1		
	31	30300517T	TORSION SPRING		1		
	32	30300518T	SWING PLATE		1		
	33	30300519T	SWING PLATE		1		
	34	30300520T	JOINT HOLDER		1		
	35	30300521T	TORSION SPRING		1		
	36	30300522T	COLLAR		1		
	42	60020715T	MOTOR		2		
	43	60020904T	MOTOR		1		
	44	69011603T	PICK UP	OPTIMA60MZ	1		
	48	30300601T	STOPPER BASE		1		
	49	30300602T	STOPPER BASE		1		
	50	30300604T	SELECT ARM R		1		
	51	30300605T	SELECT ARM L		1		
	52	30300606T	STOPPER R		1		
	53	30300607T	STOPPER L		1		
	54	30300608T	CLAMP		1		
	55	30300609T	TORSION SPRING		1		
	56	30300610T	TORSION SPRING		1		
	57	30300611T	TORSION SPRING		1		
	58	30300612T	SPRING PLATE		1		
	59	30300613T	TORSION SPRING		2		
	60	30300614T	TORSION SPRING		1		
	61	30300616T	TIMING ARM		1		
	62	30300618T	CONNECTOR COVER		1		
	63	30300617T	TORSION SPRING		1		
	67	30300701T	JOINT HOLDER		1		
	69	19500834T	FFC TAPE		1		

BLOCK NO. M1MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	70	30301001T	PRINTED BOARD		1		
	71	30301003T	F-FFC		1		
	72	30301004T	WIRE(F)		1		
	73	30301005T	WIRE(L)		1		
	74	30301006T	PRINTED BOARD		1		
	75	64020413T	PUSH SWITCH		2		
	76	64020414T	PUSH SWITCH		1		
	77	64020415T	PUSH SWITCH		1		
	78	681402156T	CONN.TERMINAL		2		
	79	681402158T	CONN.TERMINAL		1		
	80	68150225T	CONN.TERMINAL		1		
	81	68150226T	CONN.TERMINAL		1		
	82	68170211T	CONN.TERMINAL		1		
	86	30301101T	LOADING GEAR		1		
	87	30301102T	LOADING GEAR		1		
	88	30301103T	LOADING GEAR		1		
	89	30301104T	LOADING GEAR		1		
	90	30301105T	CLUTCH DISK		1		
	91	30301108T	CAM GEAR		1		
	92	30301109T	GEAR PLATE		1		
	93	30301110T	SELECT LEVER		1		
	94	30301111T	GEAR BOSS	LOADING	1		
	100	9B1220051T	TAPPING SCREW	M2X5	5		
	101	9C0420253T	SCREW	M2X2.5	2		
	102	9P0420041T	SCREW	M2X4	2		
	103	9C0117223T	SCREW	M1.7X2.2	2		
	104	9C2220603T	TAPPING SCREW	M2X6	8		
	105	9C3720803T	TAPPING SCREW	M2X8	1		
	106	9C3920013T	TAPPING SCREW	M2X11	4		
	107	9P0220041T	SCREW	M2X4	2		
	108	9C3817403T	TAPPING SCREW	M1.7X4	4		
	109	9C0117225T	TAPPING SCREW		2		
	110	9P1220051T	TAPPING SCREW		2		
	130	303005301T	DRIVE MOTOR		1		
	131	303005302T	DRIVE MOTOR		1		
	132	303005303T	SCREW		1		
	133	303011301T	LOADING MOTOR		1		

■ Enclosure assembly part : Block No. M2

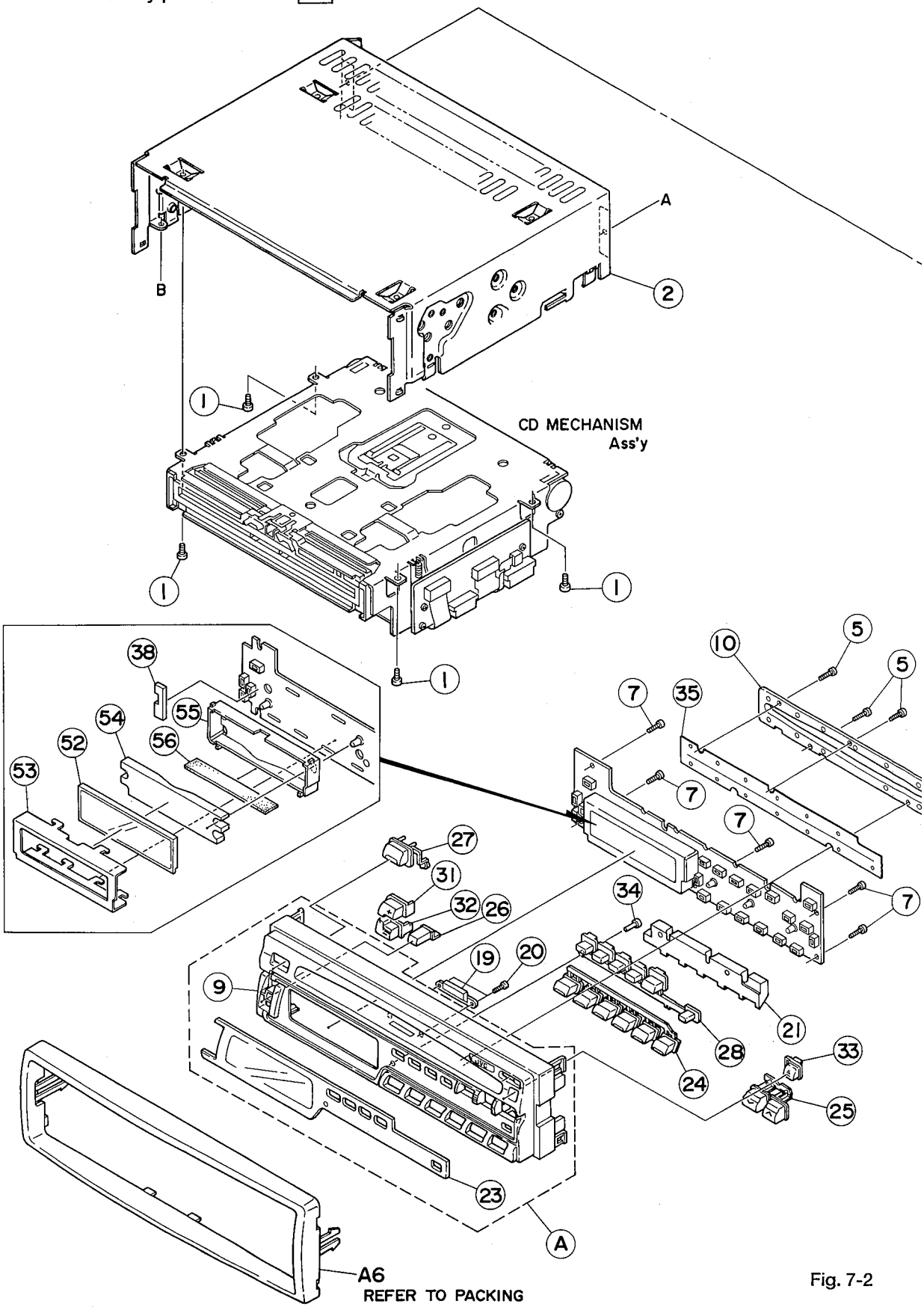
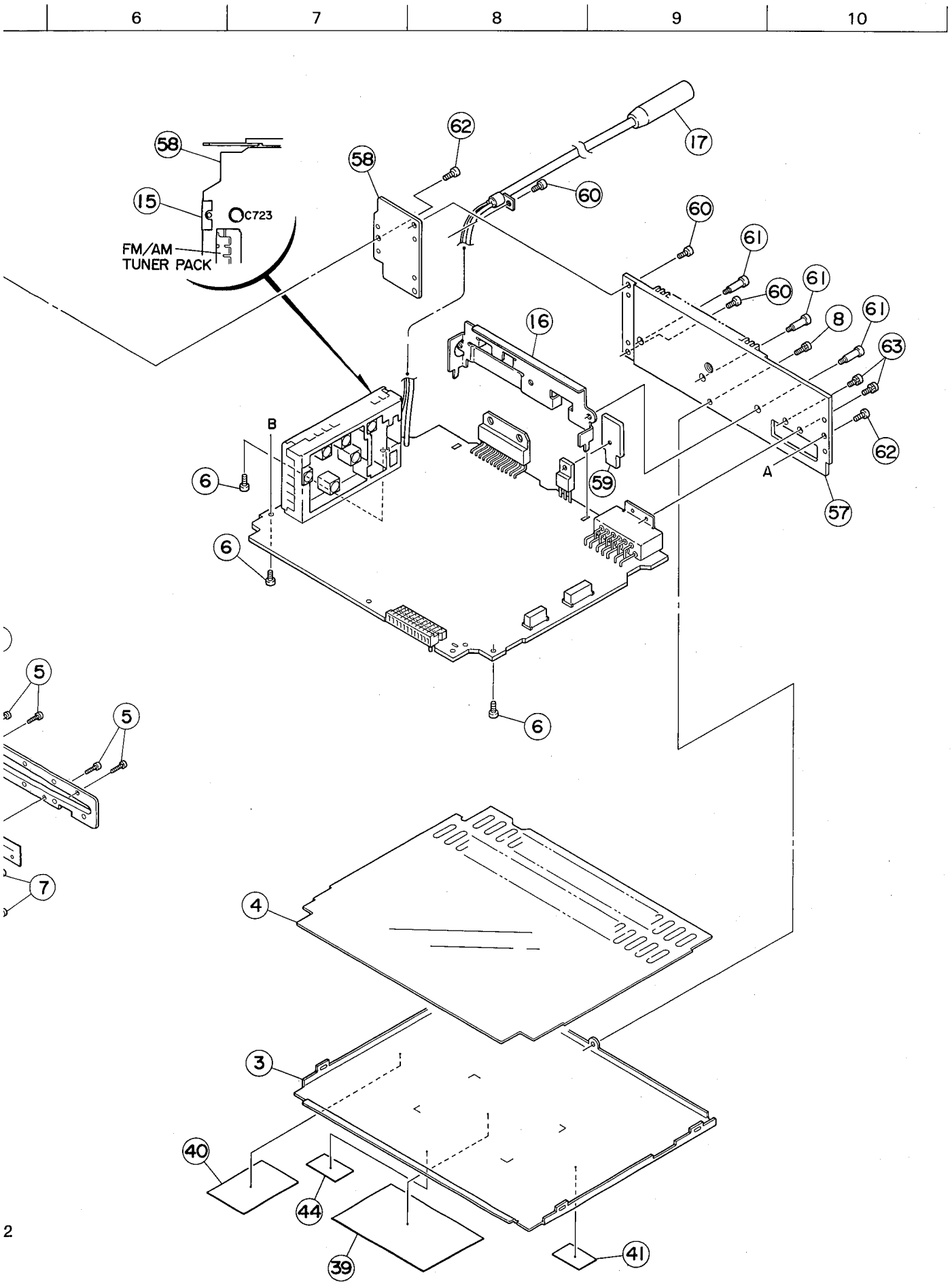


Fig. 7-2


6
7
8
9
10
58
62
17
15
C723
FM/AM
TUNER PACK
60
61
16
63
B
A
59
57
5
4
3
40
44
39
41

■ **Enclosure assembly parts list**

BLOCK NO. M2MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A	ZCKDGS40J-NPA	NOSE PIECE ASSY	REF.9,23	1		
	1	SDST2604Z	SCREW	MECHA.+CHASSIS	4		
	2	VKL1423-001SS	CHASSIS		1		
	3	VKM3798-001SS	BOTTOM COVER		1		
	4	VMA3218-001	INSULATOR		1		
	5	SPSN1755N	MINI SCREW	DETACH BUTTON	5		
	6	VKZ4345-002	SPECIALSCREW	MAIN BOARD+SIDE	3		
	7	SPSN1755N	MINI SCREW		5		
	8	LPSP2608Z	SCREW	REAR SIDE BOTTO	1		
	9	VJG1299-001SS	NOSE PIECE		1		
	10	VKS3683-001	DISC GUIDE		1		
	15	VKL7752-002	EARTH PLATE		1		
	16	VKL7650-002	IC BRACKET		1		
	17	VMP0029-026T	ANTENNA SOCKET		1		
	19	VJK3646-001SS	LIGHT LENS		1		
	20	SPSN1755N	MINI SCREW		2		
	21	VJK2196-001SS	BUTTON LENS		1		
	23	VJK2192-002SS	FINDER		1		
	24	VXP2091-001	PRESET BUTTON		1		
	25	VXP3603-002	UP DOWN BUTTON		1		
	26	VXP3656-001SS	SEL BUTTON		1		
	27	VXP3605-001	POWER BUTTON	A.HBS/MANU	1		
	28	VXP3657-001SS	ILL BUTTON		1		
	31	VXP3611-002	+ BUTTON		1		
	32	VXP3612-002	- BUTTON		1		
	33	VXP3659-001	EJECT BUTTON		1		
	34	VXP5251-001SS	RESET BUTTON		1		
	35	VYTA513-001	BLIND(P)		1		
	38	VYTH529-001	BUTTON CUSHION	SELECT BUTTON	1		
	39	VYN3491-S001SA	NAME PLATE		1		
	40	VND4922-007	CAUTION LABEL		1		
	41	VND5008-001	FCC LABEL(4)		1		
	44	E407097-002	HYATT L.LABEL	J ONLY	1	J	
	52	VGL1159-001	LCD		1		
	53	VKM3796-001	LCD CASE		1		
	54	VJK3622-002	LCD LENS		1		
	55	VKS3647-003	LENS CASE		1		
	56	VMZ0124-001E	LCD CONNECTOR		1		
	57	VJC3262-001	REAR PANEL		1		
	58	VKL7751-001	ANTENNA BRACKET		1		
	59	VMH4041-001	HEAT SINK		1		
	60	SDST2606Z	SCREW		2		
		SDST2606Z	SCREW		1		
	61	VKZ4553-002	SPECIAL SCREW		3		
	62	SDST2606Z	SCREW	FRONT+SIDE(L,R)	2		
	63	LPSP2608Z	SCREW		2		

8. Main Adjustment

■ Test Instruments reqired for adjustment

1. Digital oscilloscope(100 MHz)
2. AM Standard signal generater
3. FM Standard signal generater
4. Stereo modulator
5. Electric voltmeter
6. Digital tester
7. Tracking offset meter
8. Test Disc ····· JVC : CTS – 1000
9. Extension cable for check ····· EXT – GS001KIT

■ Measuring conditions (Amplifier section)

Power supply voltage ····· DC14.4V(10.5~16V)
Load impedance ····· 4 Ω (SPEAKER OUT:2ch)
Output level ····· 1.5V(Speaker out)

● Standard volume position

Balance ····· Center
Fader ····· Center
Tone ····· Flat

Manual tuning up/down frequency

FM : 0.2MHz step
AM : 10kHz step

Setting of referance frequency of SSG

AM mode ····· 400Hz, 30%modulation
FM mono mode ····· 400Hz, 22.5kHz deviation
FM stereo mode ····· 1kHz, 67.5kHz dev., pilot 7.5kHz dev.
Output level ····· 0dB(1 μ , 50 Ω /open terminal)

Dummy load

Exclusive dummy for AM, FM should be used. Useing FM dummy load, 6dB loss occurs between SSG output and antenna input.

Standard input ····· AM:74dB μ , FM:66dB μ

The 6dB loss need not to be considered since direct reading figures are applied in this working standard.

Initial preset stations

Band	1	2	3	4	5
FM1(MHz)	87.5	89.9	97.9	105.9	107.9
AM(kHz)	530	600	1000	1500	1710

■ Tuner section

■ Arrangement of adjusting positions (Test point : refer to page 38.)

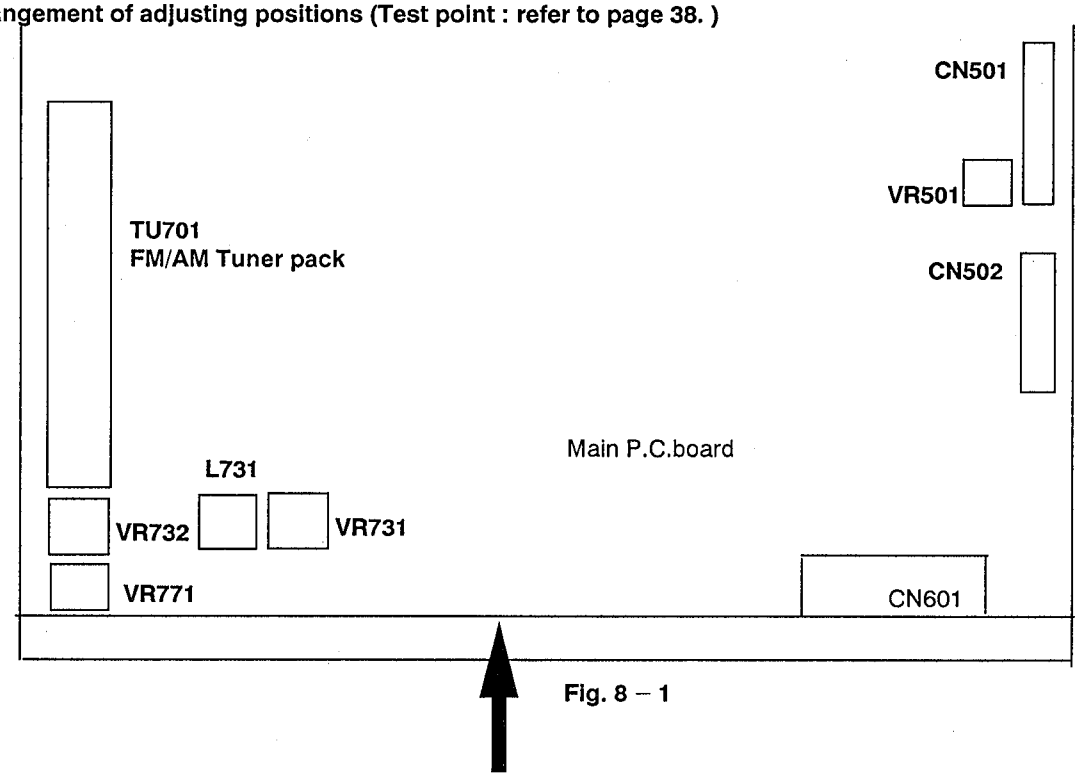


Fig. 8 – 1

■ Connecting procedures of extension cables for check and abjustment

1. Remove the bottom cover. (Refer to "Removal of bottom cover".)
2. Remove the nose piece assembly. (Refer to "Removal of nose piece assembly".)
3. Remove the main P.C. board assembly. (Refer to "Removal of main P.C. board assembly".)
4. Remove the CD mechanism assembly. (Refer to "Removal of CD mechanism assembly".)
5. Fit the nose piece assembly to the main P.C. board assembly with 12 pin connector CN601.
6. Referring to Fig. 8 – 3, connect the 16pin connector on the CD mechanism relay P.C. board with the 16pin connector CN501 on the main P.C. board with the 16pin connector extensin cable, while connect the 10pin connector on the CD mechanism relay P.C. board and the 10pin connector CN502 on the main P.C. board with the 10pin connector extension cable, respectively.
7. For convenience of check and adjustment, plase the CD mechanism assembly on an empty case and the like as shown in Fig.8 – 3.
8. Connect the 13pin cord connector to the set, and also connect the antenna, speakers, power supply necessary for check and adjustment. (Fig.8 – 3)
9. Load the CD mechanism with the test disc CTS – 1000. (Fig.8 – 3)

■ Breakdown of Extension cable kit (Parts number : EXT – GS001KIT)

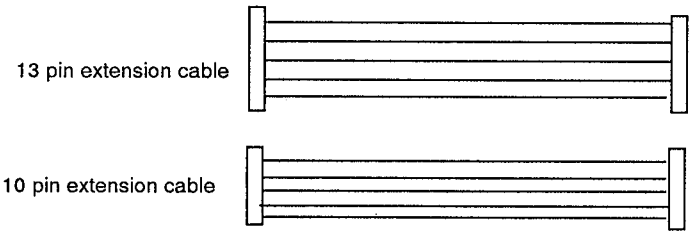


Fig. 8 – 2

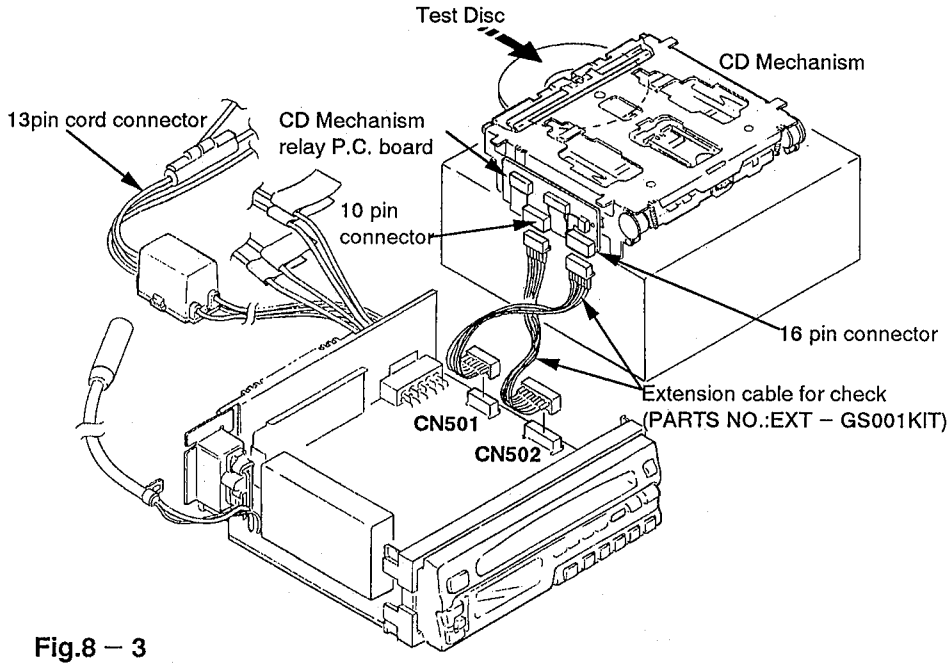
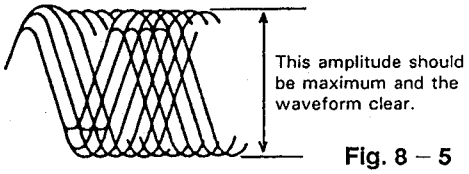
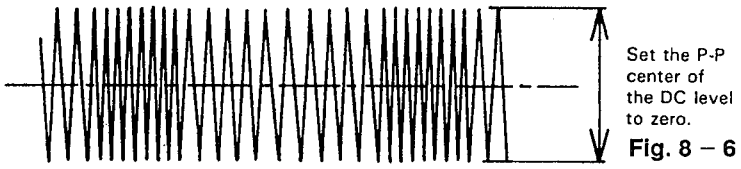


Fig.8 – 3

■ CD Section

Iteme	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
1. TOC check	Oscilloscope	1. Confirm lighting illumination by power on. 2. Not to occur unclear indication and uneven lighting of LCD.		
2. AF level (eye-pattern) check	Measuring instruction Oscilloscope	1. Connect the oscilloscope between TP1 and TP2 to confirm that peak-to-peak value of eye-pattern waveform is within 1.5V ± 300mV Eye pattern waveform  Fig. 8 – 5	Within 1.5V ± 300mV	
3. Tracking offset adjustment	Measuring instruction Oscilloscope	Adjustment procedure 1. Connect the oscilloscope between TP2 and TP3 . 2. Play back the disc. 3. Shot circuit TP2 and TP4. 4. ddjust VR501 so that the DC level of the tracking error signal (oscilloscopee waveforme) becomes zero. when the tracking offset meter is used for measurement, it shorld read "0" (zero). Note : Adjust VR501 so that the waveform is vertically symmetric about the zero level. use a direct coupling oscilloscope input. Tracking offset waveform  Fig. 8 – 6	zero level	VR501
4.Outermost circumference		1. Directly access the outer circumference track 31, check that play is performed normally and that abnormalities including sound jumping do NOT occur.		
5. Outer to inner circumference		1. Skip from the outer circumference track 24 (also possible with other disc's outermost circumference) to track 1 and check the time till play starts. Normally it is less than 5 seconds.		

■ Tuner Section

Iteme	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
1. 0V adjustment	Mesuring instructions FM SSG	1. Adjust L731 to get TP702 DC level 0 ± 10 mV when reciving signal. 2. Confirm DC level 0 ± 30 mV after adjust.	DC level 0 ± 30 mV	L731
2. SD adjustment	Mesuring instructions FM SSG : 97.9MHz, 52dB	Adjust VR771 to get TP703 volt 3.4 ± 0.1V when receiving signal.	3.4 ± 0.1Vl	VR771
3. Separation adjustment	Mesuring instructions FM SSG : 97.9MHz, 60dB	Adjust VR731 so that the deviation between Lch and Rch should be maximum when receiving signal.	deviation : maximum	VR731
4. Usable sensitivity	Mesuring instructions	1. FM : With 97.9 MHz 20 dB reception, the output difference between MOD ON/OFF should be more than 30 dB. 2. AM : With 1000 kHz 36 dB reception, the output difference between MOD ON/OFF should be more than 20 dB.	more than 30 dB. more than 20 dB.	
5. Signal to Noise ratio/Inter-station muting	Mesuring instructions FM SSG	1. With FM reference input reception, the output difference between MOD ON/OFF should be more than 52 dB. 2. When SSG output is changed from 66 dB to -19 dB, the output difference should be more than 10 dB. 3. With AM reference input reception, the output difference between MOD ON/OFF should be more than 46 dB.	more than 52 dB.	
6. Stereo separation / blend	Mesuring instructions FM SSG STEREO modulater	1. When the reference input of stereo reference modulation is received, the separation should be more than 24 dB. 2. Separation 20 dB input should be in the range of 49 to 55 dB. 3. When the MODE and MO buttons are pressed, check that a monaural broadcast is heard. Also check that the MONO and MO indicators light in the LCD display. 4. When the MODE and MO buttons are pressed again, check that a stereo broadcast is heard. Also check that the STEREO and ST indicators light in the LCD display.	more than 24 dB.	

9. Block Diagram

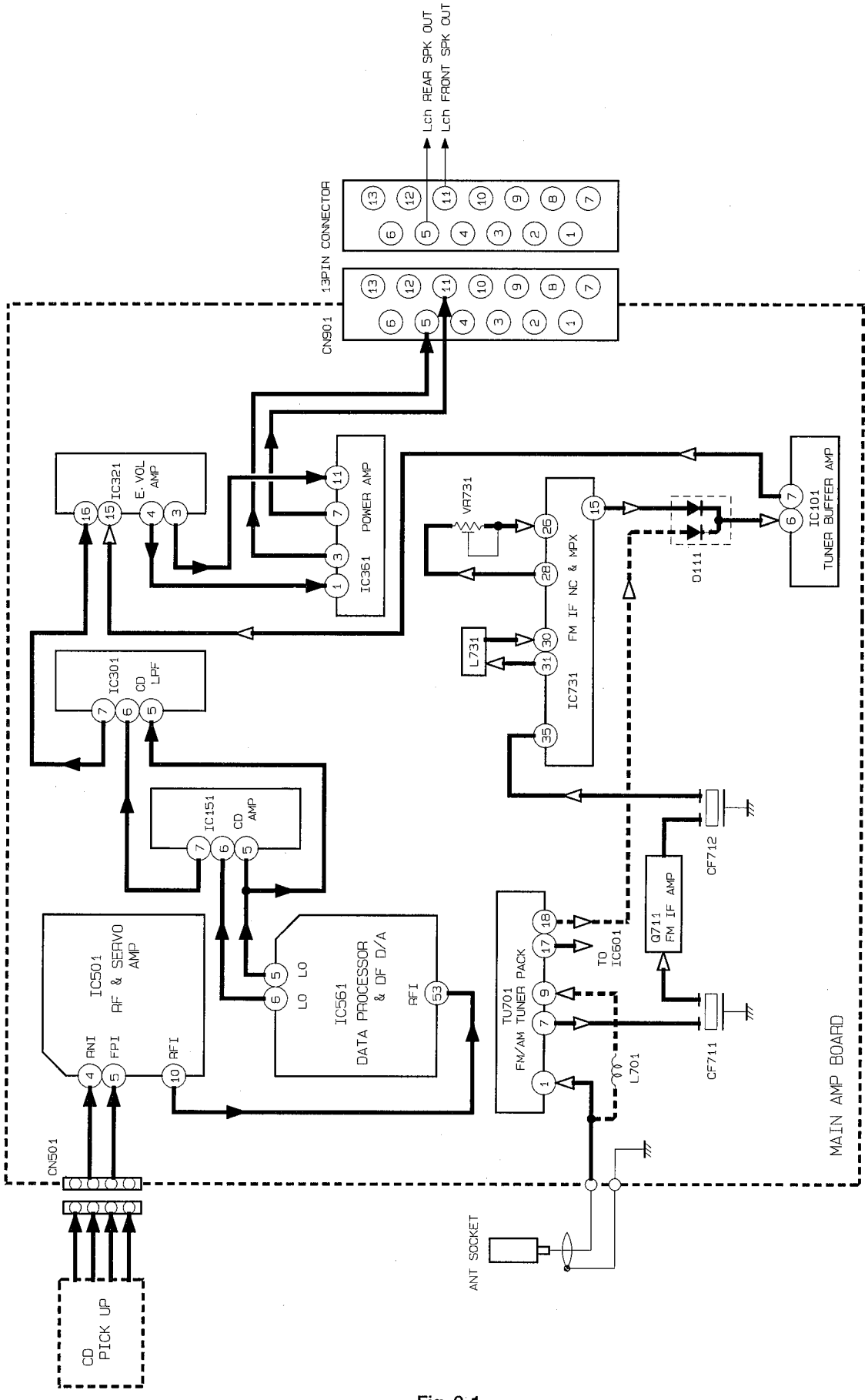
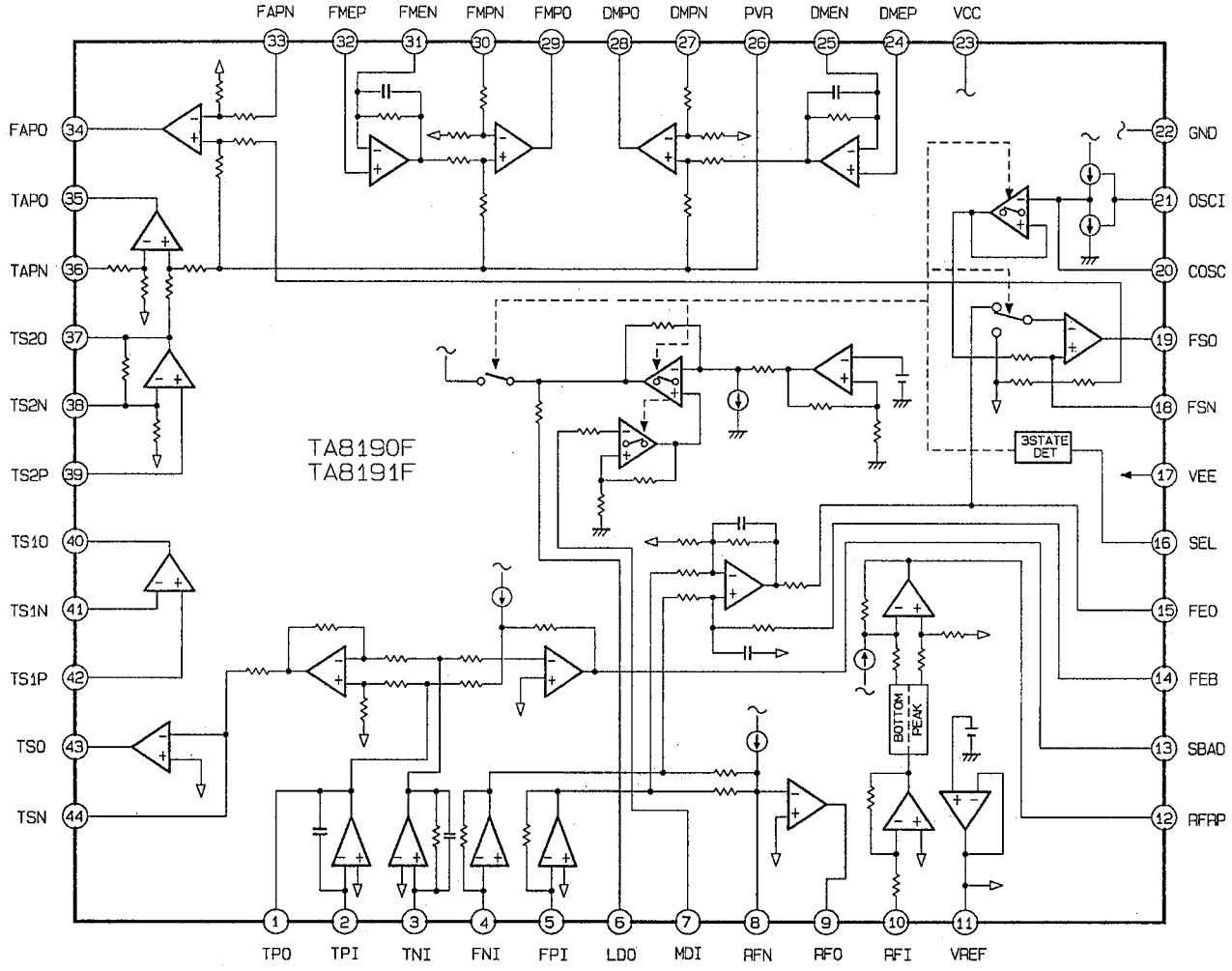


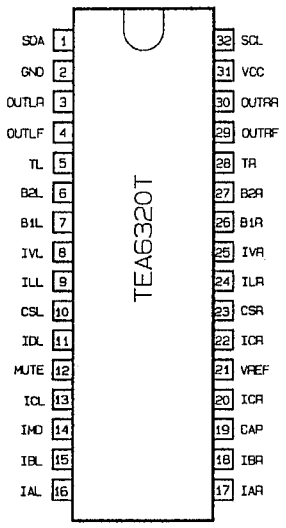
Fig. 9-1

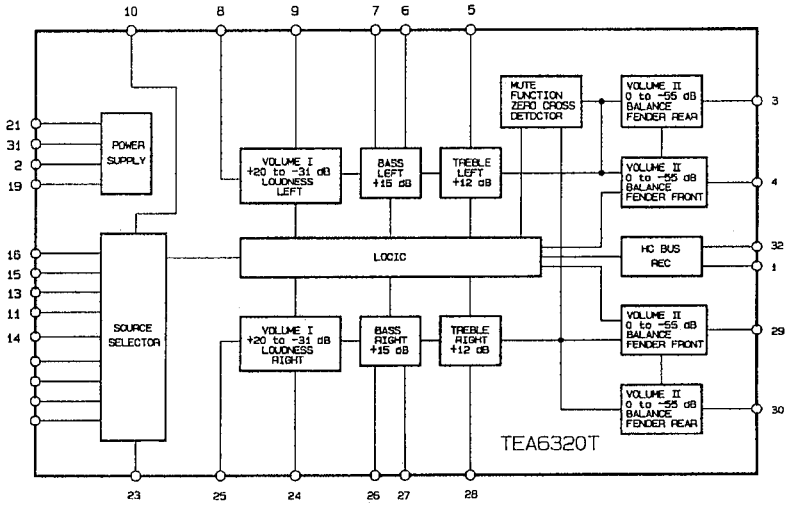
■ Main IC block diagram

● IC501(CD RF & SERVO AMPLIFIER) : TA8191F

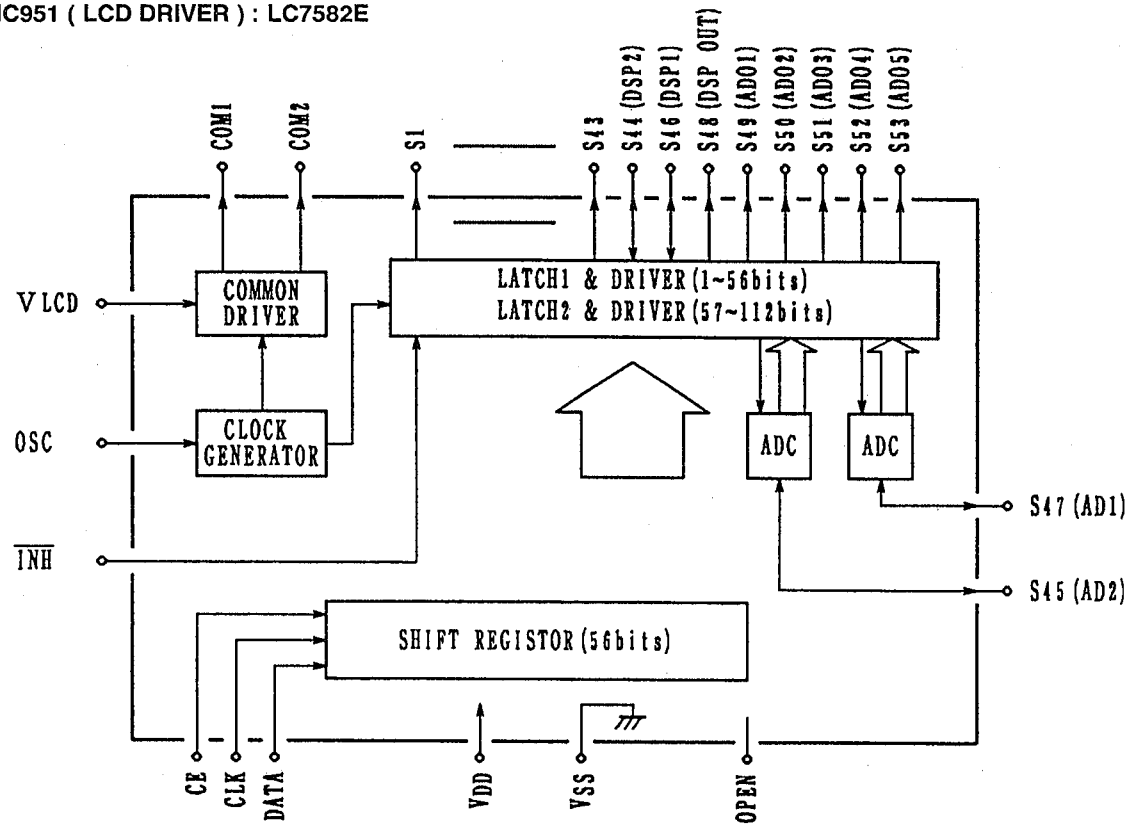


● IC321 (ELECTRICAL VOLUME) : TEA6320T





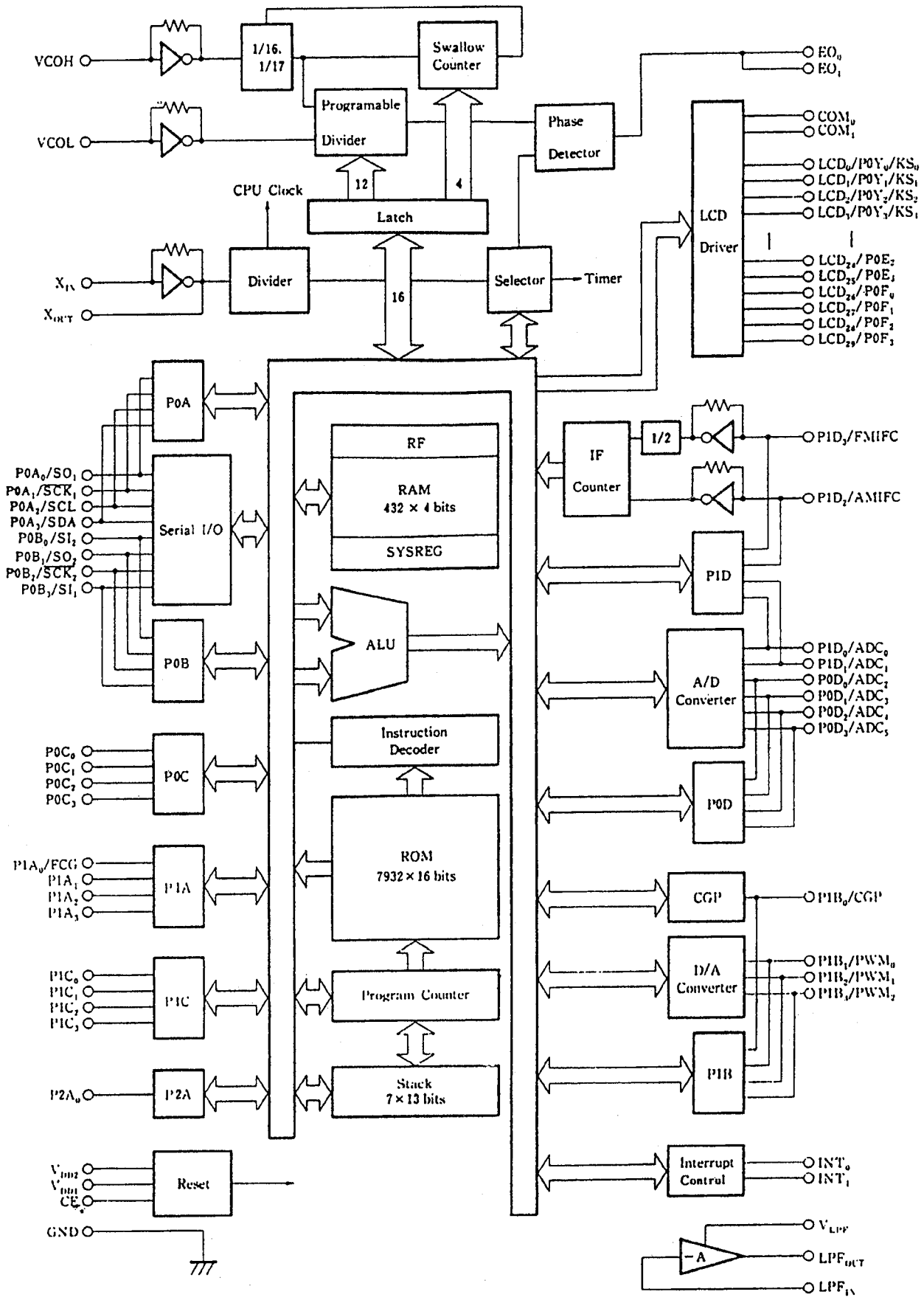
● IC951 (LCD DRIVER) : LC7582E



● **Pin Description**

• S1 to S43	: Segment output pin
• S46(DSP1), S44(DSP2)	: Segment output or DSP input pin
• S47(AD1), S45(AD2)	: Segment output or AD input pin
• S48(DSPOUT)	: Segment output or DSP output pin
• S49 to S53	: Segment output or AD output pin
• COM 1, 2	: Common output pin (COM1 only is used for 1/1 duty)
• VLCD	: LCD bias voltage setting pin
• OSC	: OSC pin
• CE, CLK, DATA	: Input pin for serial data transfer
• VSS, VDD	: Power supply pin
• $\overline{\text{INH}}$	: Display blanking input pin (Available for output driver only . Therefore, serial data can be also transferred during unlighting.)
• OPEN	: No connection

● IC601(DIGITAL TUNING SYSTEM) : μ PD17005GF – E25

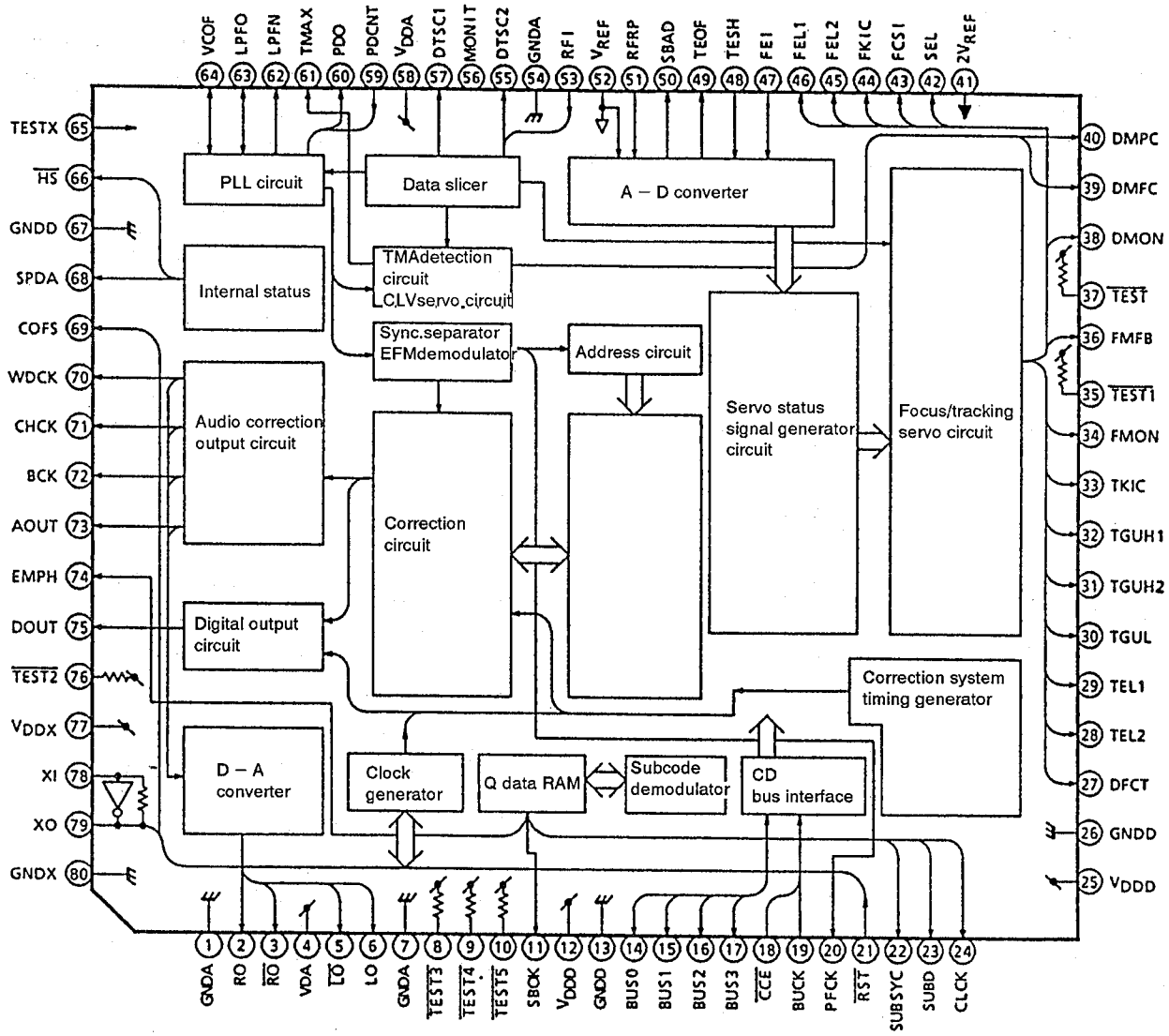


■ Pin function of system control IC (IC601 : μ PD17005GF – E25)

PIN No.	Name of Signal	I/O of micon.	I/O of unit	Initialize after reset	Active mode	Pin function
1	L. FINISH	I			L	Detect to the Loading finish and switch.
2	REST	I			L	Detect the Rest switch
3	SDA	I/O				Electrical volume , data input and output.
4	SCL	O				Electrical volume , clock output.
5		I/O				
6		O				
7		I				
8	DETACH	I			H	Detachable panel release detection
9	TEI	I			L	Detect to the telephone car used
10	ST	I			L	FM/AM radio ST signal input
11	POWER ON	I				Detect when compel power on to do.
12	ACC	I			H	Detect the acssessories.
13	CE	I			H	Micon chip inable terminal
14	BUS 3	I/O				Data input and output signal 3 with TC9236
15	BUS 2	I/O				Data input and output signal 2 with TC9236
16	BUS 1	I/O				Data input and output signal 1 with TC9236
17	BUS 0	I/O				Data input and output signal 0 with TC9236
18	LSI RESET	O			L	Reset signal output TC9236
19	BUCK	O				Output clock signal with TC9236
20	CCE	O			L	Output chip inable signal with TC9236
21		O				
22	AGC	O			H	Output AGC control signal.
23	MONO	O			L	Output MONORALcontrol signal.
24	BAND 1	O			H	Output FM/AM band select signal.
25	BAND 2	O			H	Output LW/SDK band select signal.
26	FM IF COUNT	I			H	Output FM IF count signal.
27	AM IF COUNT	I			H	Output AM IF count signal.
28	SM IN	I			H	Input SM signal.
29	SD IN	I			H	Input Station Detector signal.
30	V_{DD1}					Power supply terminal 1
31	AM OSC	I			H	Input AM local OSC signal
32	FM OSC	I			H	Input FM local OSC signal
33	GND					Ground potential
34	X_{OUT}	O				4.5MHz crystal oscillator connection pin(Output)
35	X_{IN}	I				4.5 MHz crystal oscillator connection pin(Input)
36	ERROR OUT 1	O				Output PLL error signal 1
37	ERROR OUT 2	O				Output PLL error signal 2
38	LPF IN	I				Input LPF signal for biltin PLL
39	LPF OUT	O				Output LPF signal for biltin PLL
40	LPF V_{DD}					LPF Power supply terminal for PLL
41	V_{DD}					Power supply terminal 2
42		O				
43		O				
44		O				
45		O				
46	SCK	O				Output clock signal for LCD driver
47	DATA	O				Output data signal for LCD driver

PIN No.	Name of Signal	I/O of micon.	I/O of unit	Initialize after reset	Active mode	Pin function
48	LCD CE	O			L	Output the chip inable signal for LCD driver
49		O				
50		O				
51	LM 1	O			H	Output the control signal 1 for the loading motor.
52	LM 0	O			H	Output the control signal 0 for the loading motor.
53	RELAY	O			L	Output the relay control signal for power supply
54	CD ON	O			H	Output the power supply control signal for CD
55	CD REMOTE	O			H	Output the remote for CD play
56	TU REMOTE	O			H	Output the antenna remote for Tuner
57	MUTE	O			L	Output the mute control signal for the voice
58		O				
59		O				
60		O				
61		O				
62		O				
63		O				
64		O			L	
65		O			L	
66		O				
67	AM UPCON	O				Detect to the existence select for AM conversion up
68	AM IF COUNT	O				Detect to the existence count for AM IF
69	FM IF COUNT	O				Detect to the existence count for FM IF
70	AREA 2	O				Detect to the insititute 2 for area suffix
71	AREA 1	O				Detect to the insititute 1 for area suffix
72	TUNER SELECT	O				Detect to the existence select for tuner
73	CLOCK SELECT	O				Detect to the select for the 12 or 24 hour
74	CLOCK MODE	O				Detect to the existence select for clock
75	INITIAL SW	O				Input the initial insititute
76	KEY 3	I				Key AD input terminal 3
77	KEY 2	I				Key AD input terminal 2
78	KEY 1	I				Key AD input terminal 1
79	DISC SELECT	I			H	Detect the select for the 8 cm disc
80	L. START	I			L	Detect the start switch for the loading

● IC561 (DATA PROCESSOR & DF. D/A) : TC9284AF



10. Wiring Connections

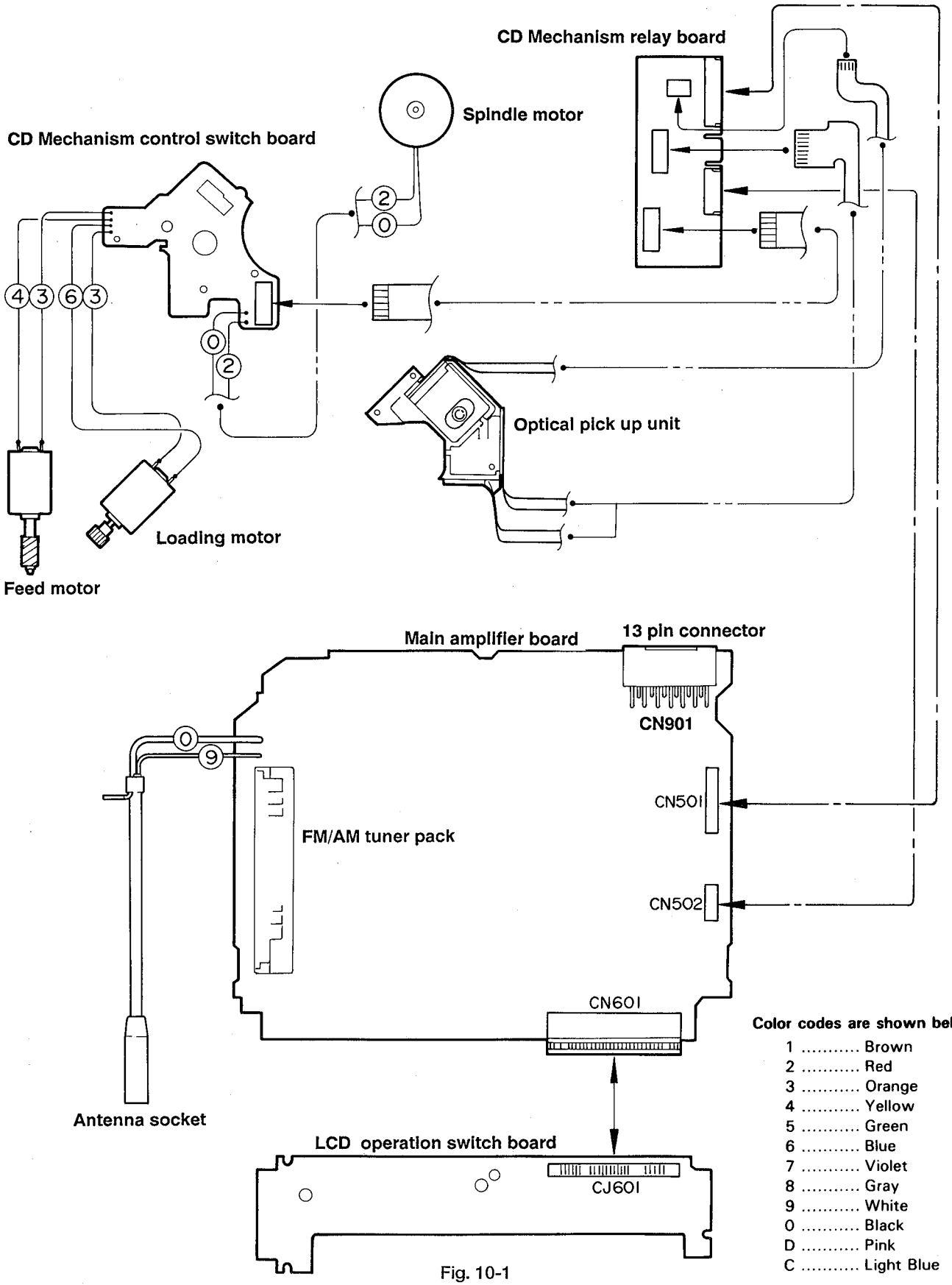


Fig. 10-1

11. Standard Schematic Diagrams

■ FM/AM Tuner Pack : Drawing No. VDH3489-001TV2

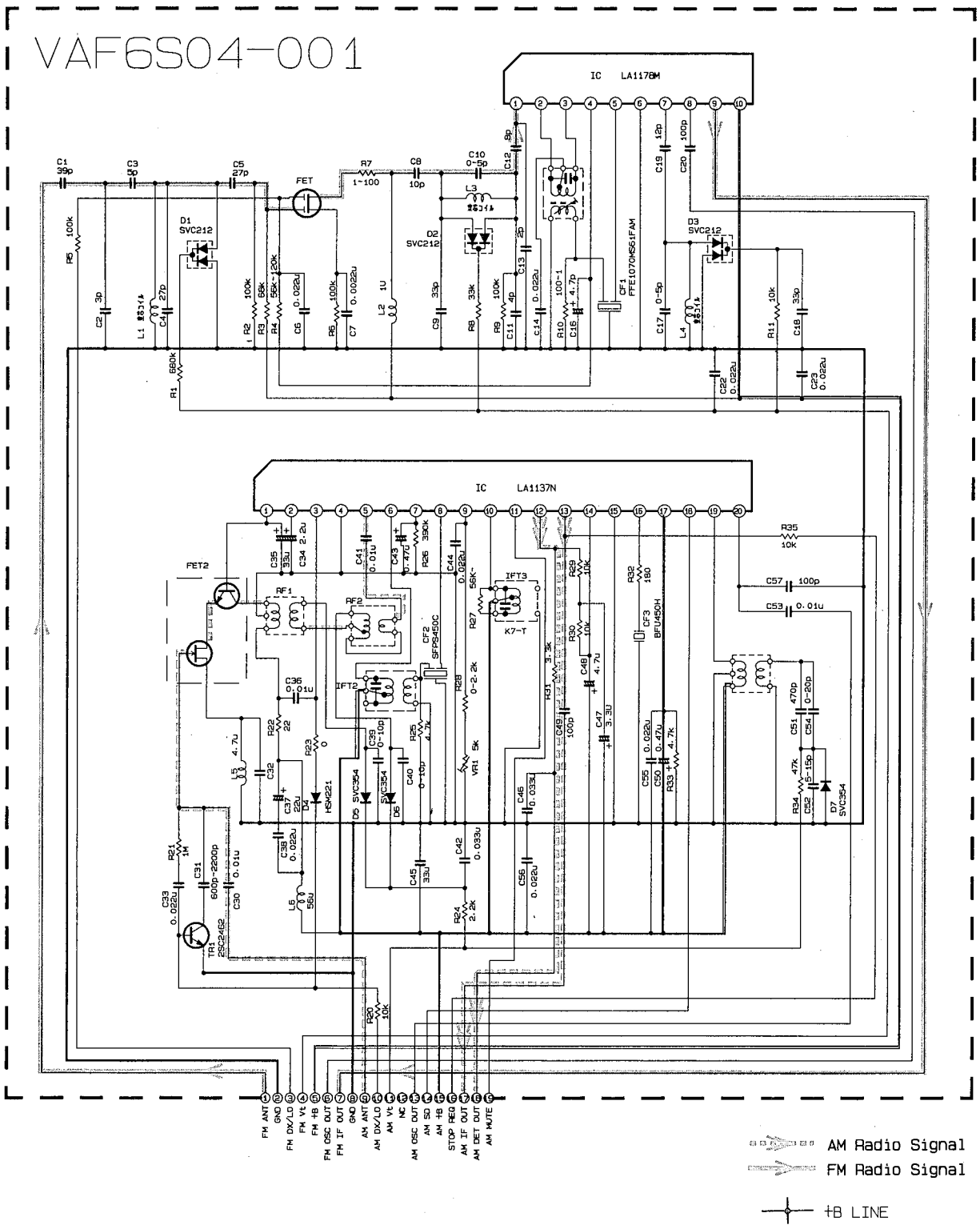
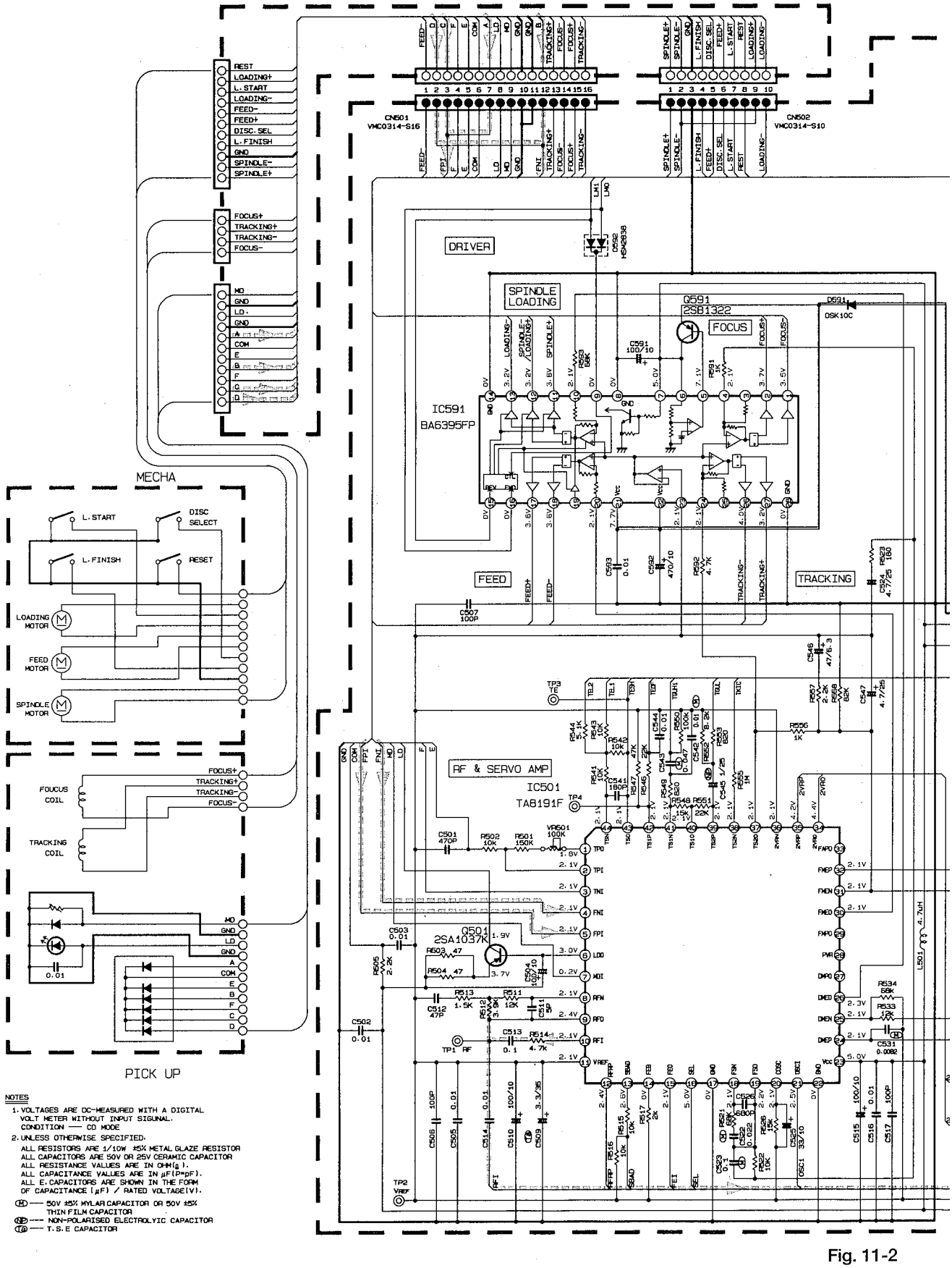


Fig. 11-1

■ CD Amplifier Circuit : Drawing No. VDH3489-001CV



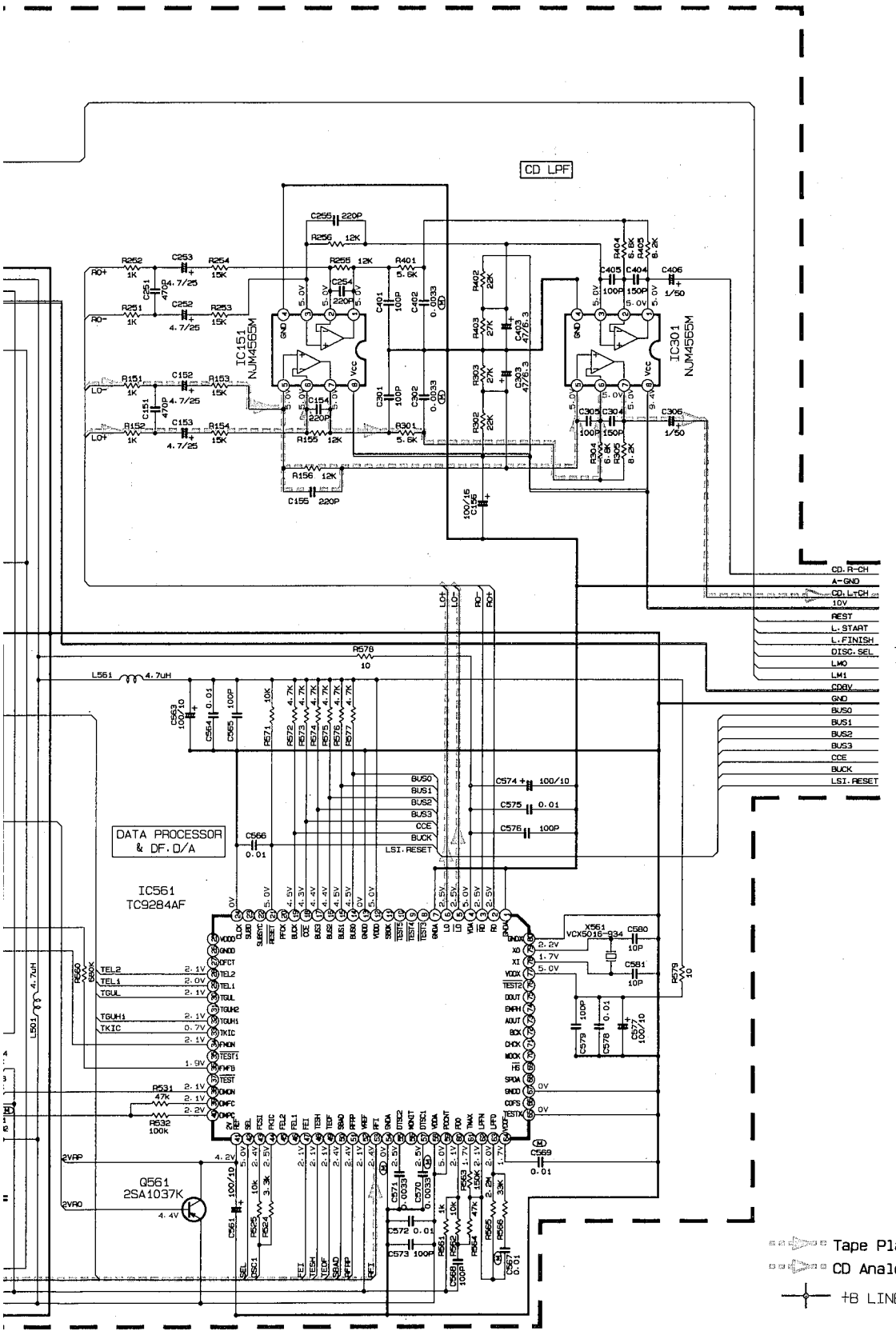
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGUNAL.
   CONDITION —— CD MODE
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR
   ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF) / RATED VOLTAGE(V).

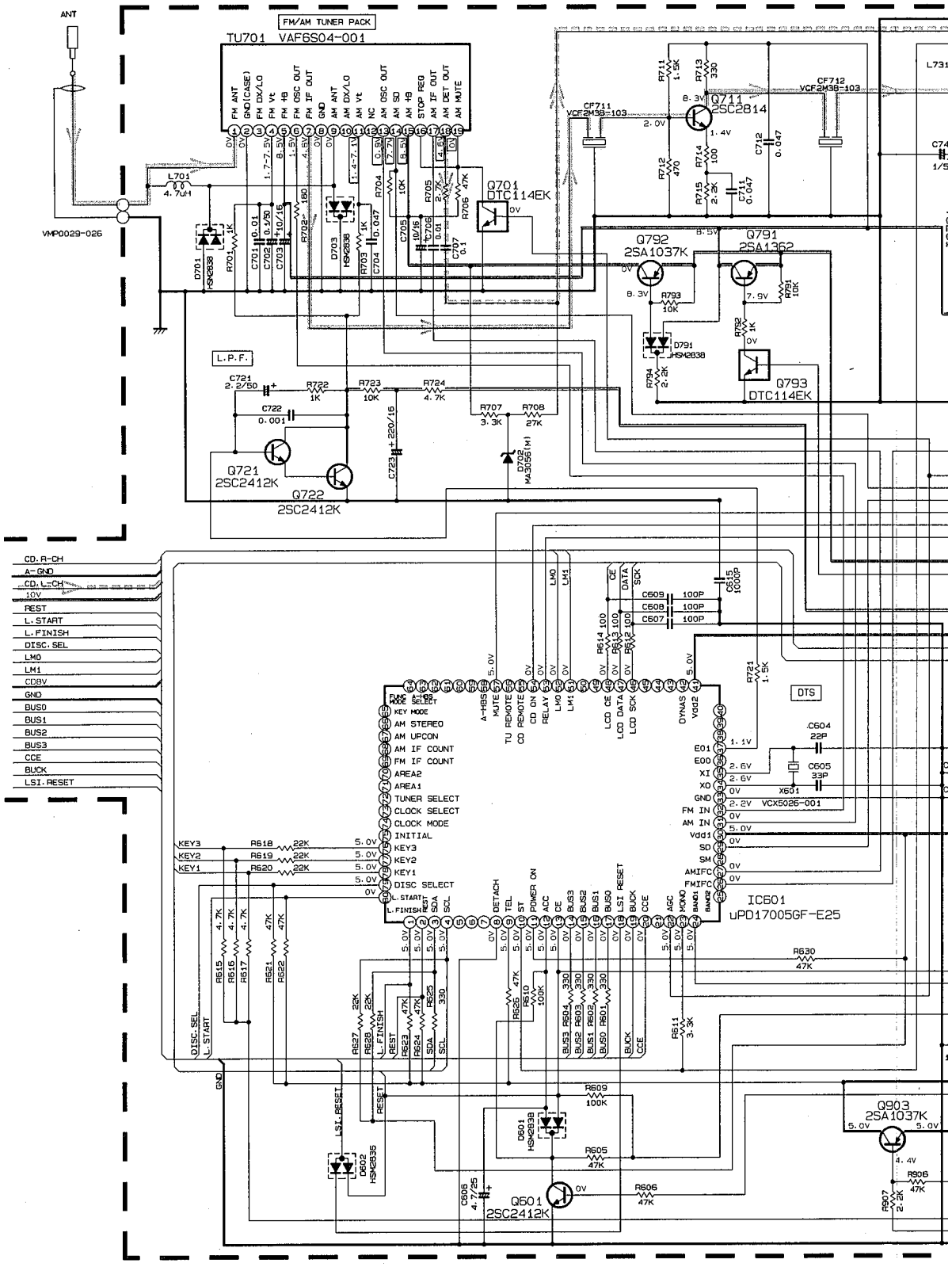
(M) —— 50V ±5% MYLAR CAPACITOR OR 50V ±5% THIN FILM CAPACITOR
(NP) ---- NON-POLARISED ELECTROLYIC CAPACITOR
(T.S.E) —— T.S.E CAPACITOR

Fig. 11-2

6 | 7 | 8 | 9 | 10


CD LPF
IC151
NJM4565M
IC301
NJM4565M
DATA PROCESSOR
& DF. D/A
IC561
TC9284AF
Q561
2SA1037K
CD. R-CH
A-GND
CD. L-CH
10V
REST
L. START
L. FINISH
DISC. SEL
LM0
LM1
CD8V
GND
BUS0
BUS1
BUS2
BUS3
CCE
BUCK
LSI. RESET
To page 36
(D/1)
Tape Playback Signal
CD Analoge Signal
+B LINE

Tuner/DTS Circuit : Drawing No. VDH3491-001TV1



Fig

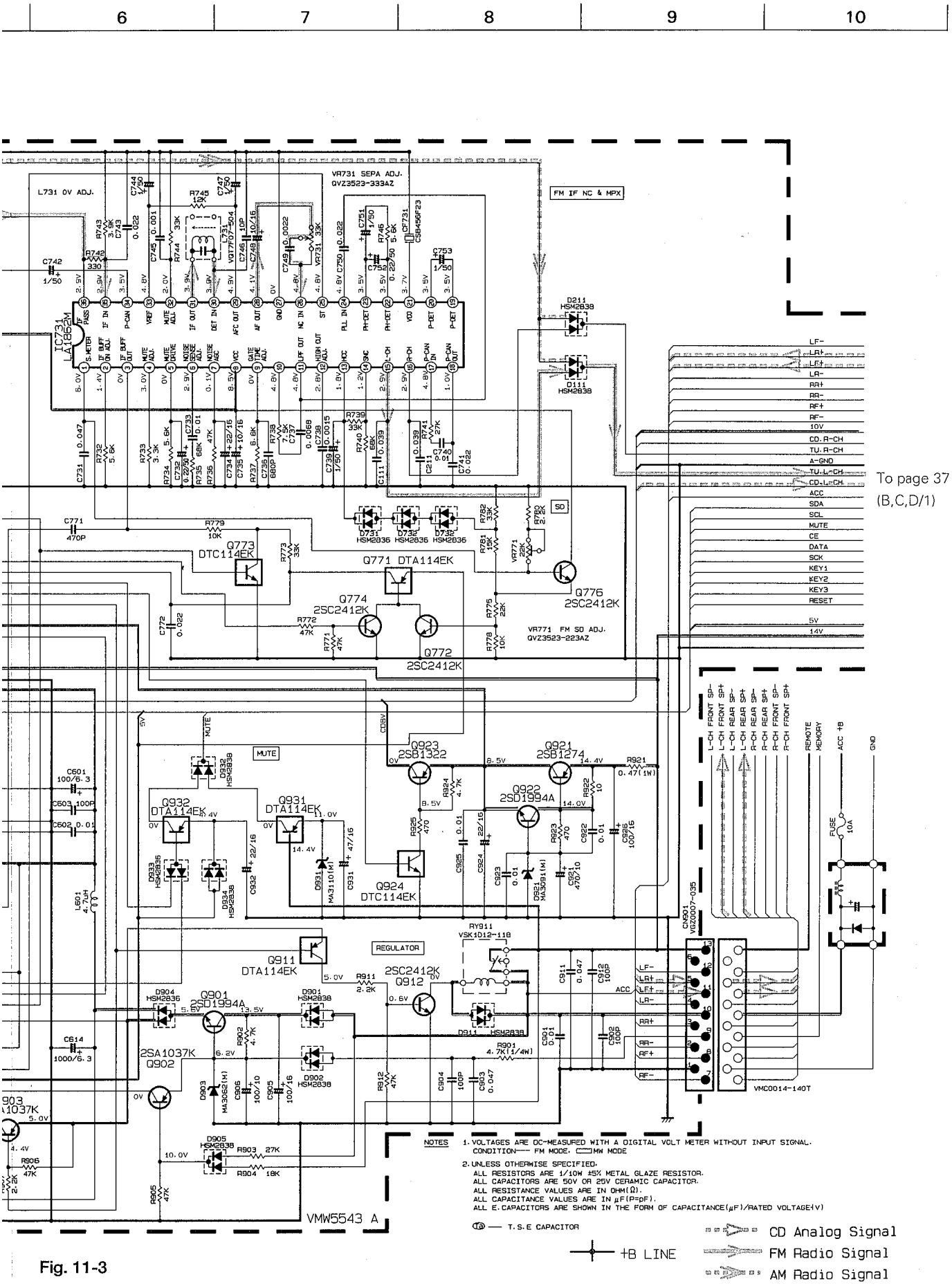
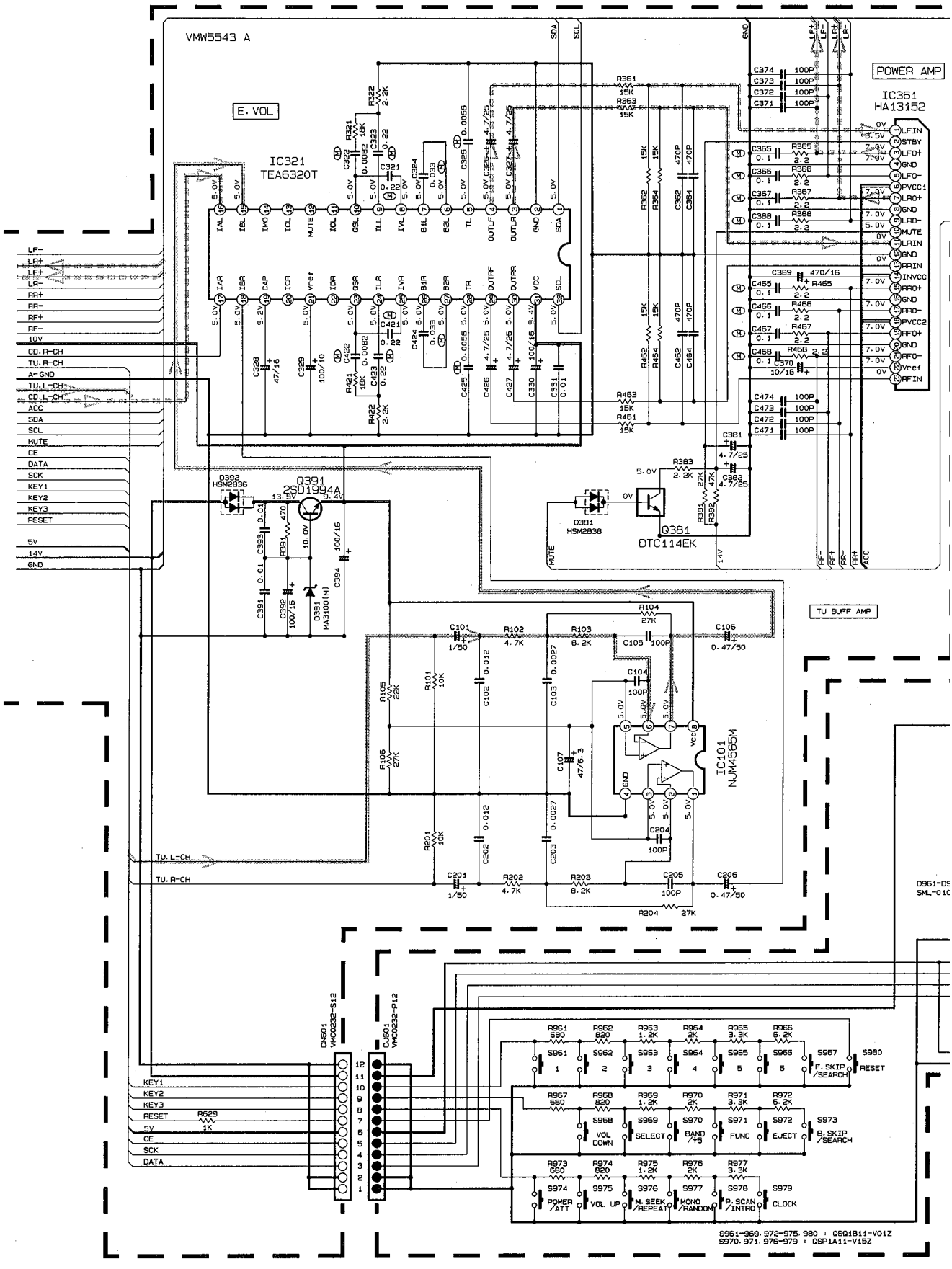

6
7
8
9
10
VR731 SEPA ADJ.
QVZ3523-333AZ
L731 0V ADJ.
FM IF NC & MPX
IC731
LA1862M
D211
HSM2838
D111
HSM2838
To page 37
(B,C,D/1)
SD
D731
HSM2836
D732
HSM2836
D733
HSM2836
Q773
DTC114EK
Q771 DTA114EK
Q774
2SC2412K
Q776
2SC2412K
Q772
2SC2412K
VR771 FM SD ADJ.
QVZ3523-223AZ
MUTE
D932
HSM2838
Q932
DTA114EK
Q931
DTA114EK
Q923
2SB1322
Q921
2SB1274
Q922
2SD1994A
Q924
DTC114EK
D931
MA3110(M)
D921
MA3091(M)
REGULATOR
Q911
DTA114EK
RY911
VSK1D12-118
Q912
2SC2412K
Q901
2SD1994A
Q902
2SA1037K
D901
HSM2838
D902
HSM2838
D903
MA3062(M)
D904
HSM2836
D905
HSM2838
D911
HSM2838
CN901
VSZ0007-035
VMC0014-140T
FUSE
10A
L-CH FRONT SP-
L-CH FRONT SP+
L-CH REAR SP-
L-CH REAR SP+
R-CH REAR SP-
R-CH REAR SP+
R-CH FRONT SP-
R-CH FRONT SP+
REMOTE
MEMORY
ACC +B
GND
LF-
LF+
LR-
LR+
RR+
RR-
RF+
RF-
ACC
10V
CD.R-CH
TU.R-CH
A-GND
TU.L-CH
CD.L-CH
SDA
SCL
MUTE
CE
DATA
SCK
KEY1
KEY2
KEY3
RESET
5V
14V
VMW5543 A
NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
CONDITION— FM MODE, MW MODE
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V)
T.S.E CAPACITOR
+B LINE
CD Analog Signal
FM Radio Signal
AM Radio Signal

Fig. 11-3

Power Amplifier/LCD/Operation Switch Circuit : Drawing No. VDH3491-001AV



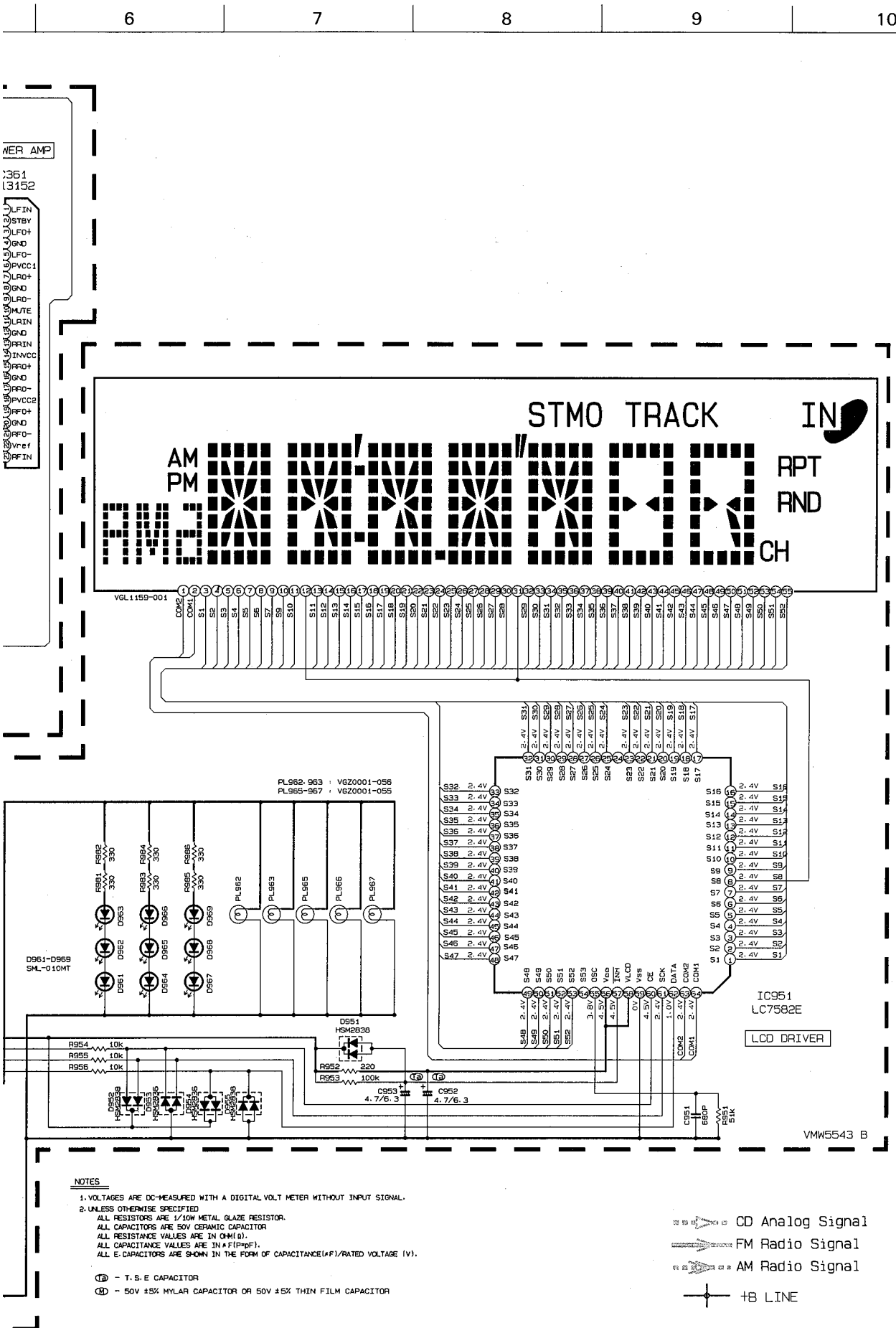
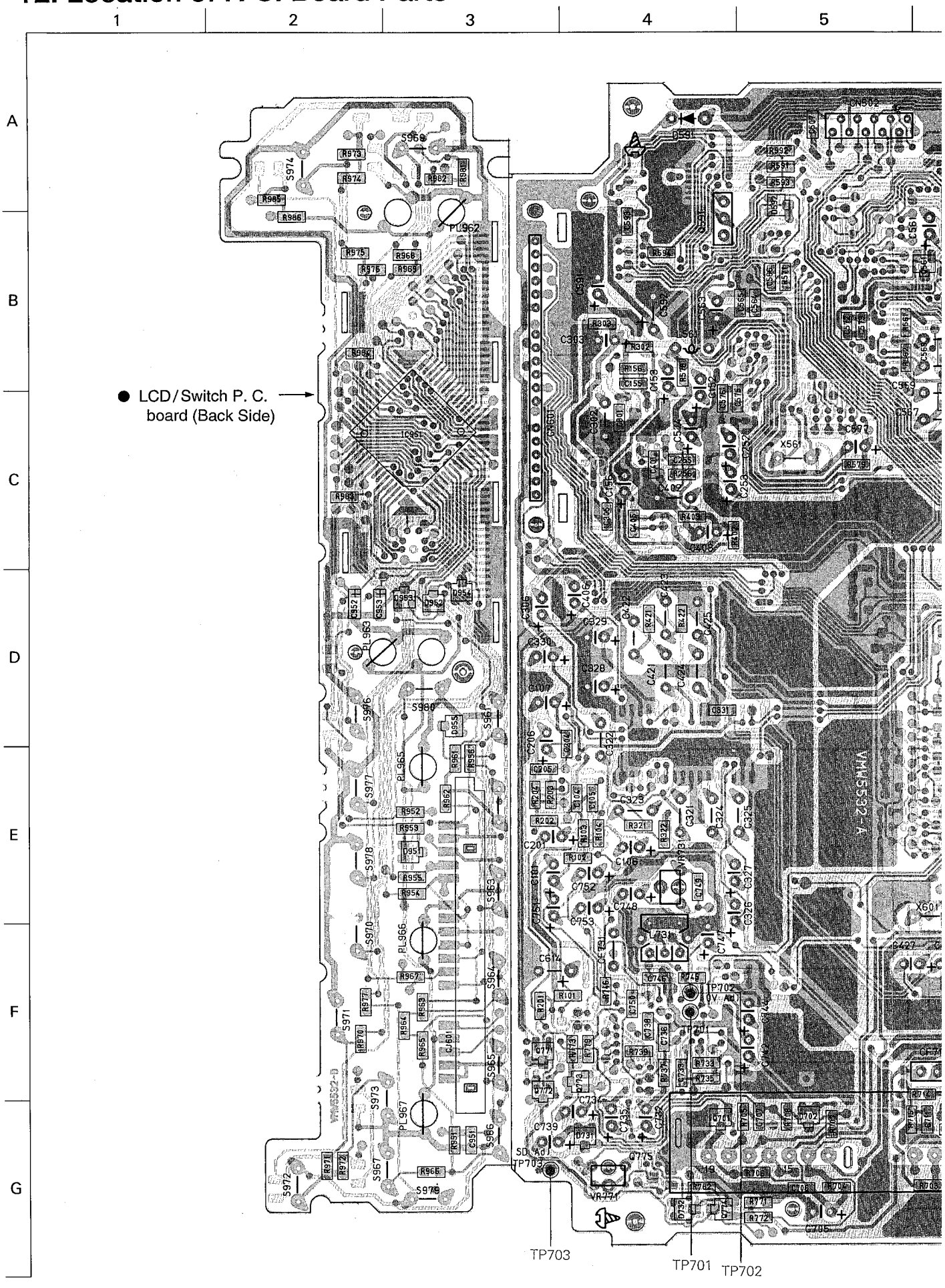

6
7
8
9
10
A
B
C
D
E
F
G
STMO TRACK
IN
AM
PM
RPT
RND
CH
VGL1159-001
PL962·963 : VGZ0001-056
PL965-967 : VGZ0001-055
D961-D969
SML-010MT
IC951
LC7582E
LCD DRIVER
D951
HSM2838
VMW5543 B
NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
2. UNLESS OTHERWISE SPECIFIED
ALL RESISTORS ARE 1/10W METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).
Ⓣ - T.S.E CAPACITOR
Ⓜ - 50V ±5% MYLAR CAPACITOR OR 50V ±5% THIN FILM CAPACITOR
CD Analog Signal
FM Radio Signal
AM Radio Signal
+B LINE

Fig. 11-4

12. Location of P. C. Board Parts



6 7 8 9 10

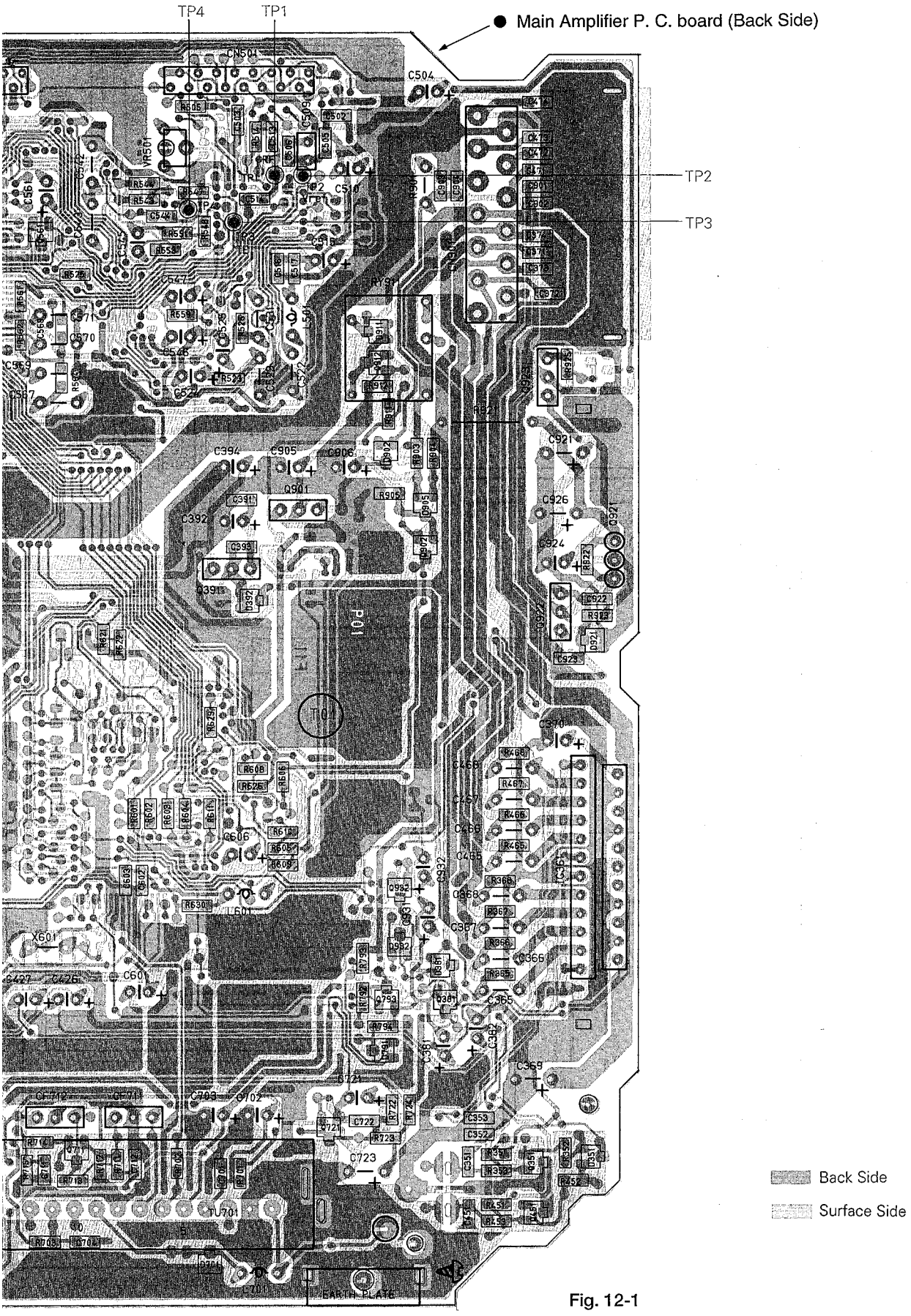
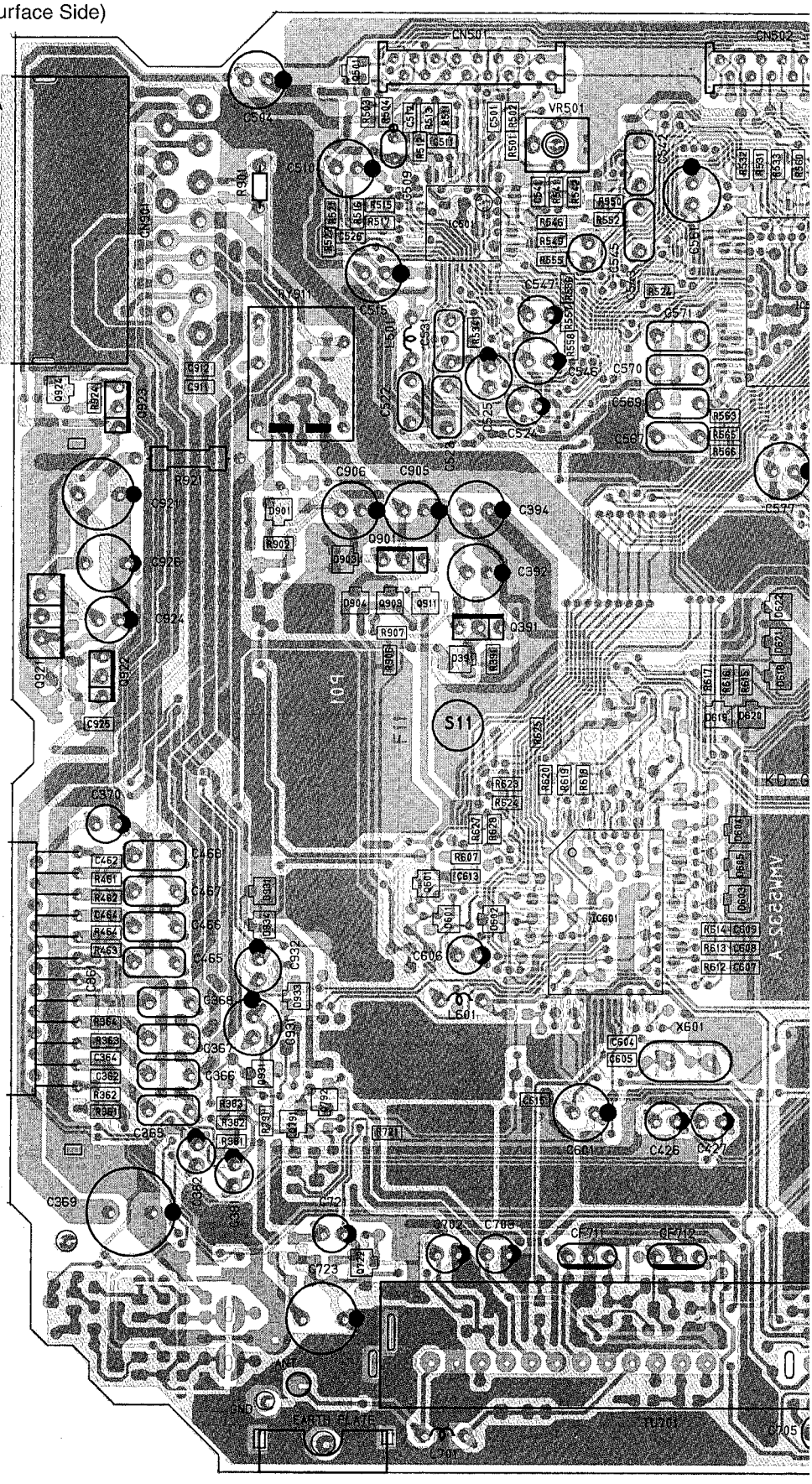


Fig. 12-1

● Main Amplifier P. C. board (Surface Side)



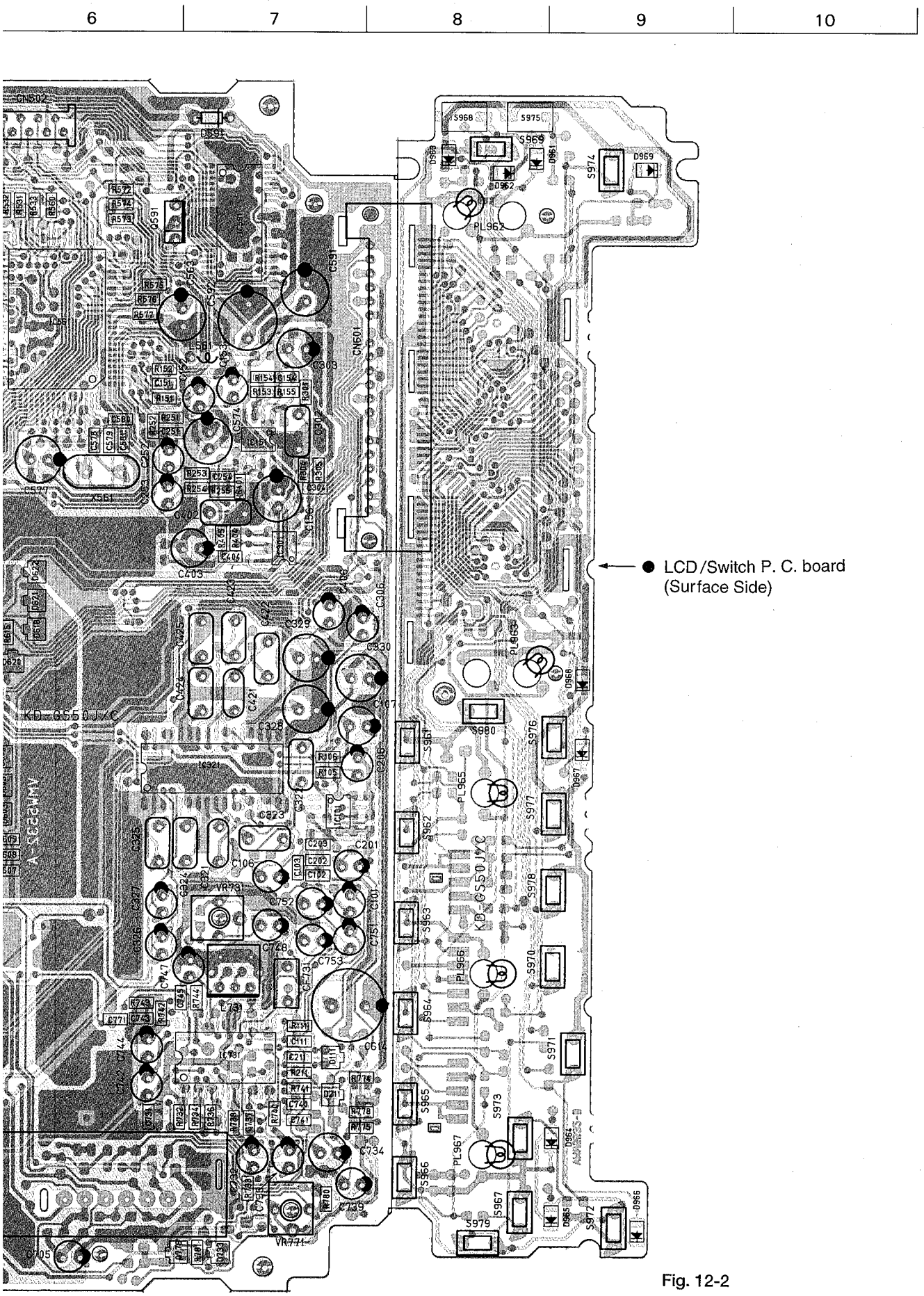


Fig. 12-2

■ Main amplifier P.C.board

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 101	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 102	NCB21HK-123AY	C CAPACITOR	.012MF 10% 50V	
	C 103	NCB21HK-272AY	C CAPACITOR	2700PF 10% 50V	
	C 104	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 105	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 106	QEK41HM-474	E.CAPACITOR	.47MF 20% 50V	
	C 107	QEK40JM-476	E.CAPACITOR	47MF 20% 6.3V	
	C 111	NCB21EK-393AY	C CAPACITOR	.039MF 10% 25V	
	C 151	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 152	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 153	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 154	NCS21HJ-221AY	C CAPACITOR	220PF 5% 50V	
	C 155	NCS21HJ-221AY	C CAPACITOR	220PF 5% 50V	
	C 156	QEKF1CM-107ZN	E.CAPACITOR	100MF 20% 16V	
	C 201	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 202	NCB21HK-123AY	C CAPACITOR	.012MF 10% 50V	
	C 203	NCB21HK-272AY	C CAPACITOR	2700PF 10% 50V	
	C 204	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 205	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 206	QEK41HM-474	E.CAPACITOR	.47MF 20% 50V	
	C 211	NCB21EK-393AY	C CAPACITOR	.039MF 10% 25V	
	C 251	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 252	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 253	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 254	NCS21HJ-221AY	C CAPACITOR	220PF 5% 50V	
	C 255	NCS21HJ-221AY	C CAPACITOR	220PF 5% 50V	
	C 301	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 302	QFLA1HJ-332ZM	M.CAPACITOR	3300PF 5% 50V	
	C 303	QEK40JM-476	E.CAPACITOR	47MF 20% 6.3V	
	C 304	NCS21HJ-151AY	C CAPACITOR	150PF 5% 50V	
	C 305	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 306	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 321	QFV41HJ-224	FILM CAPACITOR	.22MF 5% 50V	
	C 322	QFLA1HJ-822ZM	M.CAPACITOR	8200PF 5% 50V	
	C 323	QFV41HJ-224	FILM CAPACITOR	.22MF 5% 50V	
	C 324	QFV41HJ-333	FILM CAPACITOR	.033MF 5% 50V	
	C 325	QFLA1HJ-562ZM	M.CAPACITOR	5600PF 5% 50V	
	C 326	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 327	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 328	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	C 329	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 330	QEKF1CM-107ZN	E.CAPACITOR	100MF 20% 16V	
	C 331	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 362	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 364	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 365	QFV41HJ-104	FILM CAPACITOR	.10MF 5% 50V	
	C 366	QFV41HJ-104	FILM CAPACITOR	.10MF 5% 50V	
	C 367	QFV41HJ-104	FILM CAPACITOR	.10MF 5% 50V	
	C 368	QFV41HJ-104	FILM CAPACITOR	.10MF 5% 50V	
	C 369	QETC1CM-477ZN	E.CAPACITOR	470MF 20% 16V	
	C 370	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 371	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 372	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 373	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 374	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 381	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 382	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 391	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 392	QEKF1CM-107ZN	E.CAPACITOR	100MF 20% 16V	
	C 393	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 394	QEKF1CM-107ZN	E.CAPACITOR	100MF 20% 16V	
	C 401	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 402	QFLA1HJ-332ZM	M.CAPACITOR	3300PF 5% 50V	
	C 403	QEK40JM-476	E.CAPACITOR	47MF 20% 6.3V	
	C 404	NCS21HJ-151AY	C CAPACITOR	150PF 5% 50V	
	C 405	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 406	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 421	QFV41HJ-224	FILM CAPACITOR	.22MF 5% 50V	
	C 422	QFLA1HJ-822ZM	M.CAPACITOR	8200PF 5% 50V	
	C 423	QFV41HJ-224	FILM CAPACITOR	.22MF 5% 50V	
	C 424	QFV41HJ-333	FILM CAPACITOR	.033MF 5% 50V	
	C 425	QFLA1HJ-562ZM	M.CAPACITOR	5600PF 5% 50V	
	C 426	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 427	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 462	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 464	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 465	QFV41HJ-104	FILM CAPACITOR	.10MF 5% 50V	
	C 466	QFV41HJ-104	FILM CAPACITOR	.10MF 5% 50V	
	C 467	QFV41HJ-104	FILM CAPACITOR	.10MF 5% 50V	
	C 468	QFV41HJ-104	FILM CAPACITOR	.10MF 5% 50V	
	C 471	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 472	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 473	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 474	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 501	NCT21CH-471AY	C CAPACITOR	470PF +50:-10%	
	C 502	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 503	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 504	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 505	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 506	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 507	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 509	QEE41VM-335B	TS.E.CAPACITOR	3.3MF 20% 35V	
	C 510	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 511	NCT21CH-5R0AY	C CAPACITOR	5.0PF +50:-10%	
	C 512	NCT21CH-470AY	C CAPACITOR	47PF +50:-10% 1	
	C 513	NCB21HK-104	C CAPACITOR	.10MF 10% 25V	
	C 514	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 515	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 516	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 517	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 522	QFV81HJ-223	FILM CAPACITOR	.022MF 5% 50V	
	C 523	QFV41HJ-104	FILM CAPACITOR	.10MF 5% 50V	
	C 524	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 525	QEKF1AM-336ZN	E.CAPACITOR	33MF 20% 10V	
	C 526	NCS21HJ-681AY	C CAPACITOR	680PF 5% 50V	
	C 531	QFLA1HJ-822ZM	M.CAPACITOR	8200PF 5% 50V	
	C 541	NCS21HJ-181AY	C CAPACITOR	180PF 5% 50V	
	C 542	QFV71HJ-103	FILM CAPACITOR	.010MF 5% 50V	
	C 543	QFV81HJ-473	FILM CAPACITOR	.047MF 5% 50V	
	C 544	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 545	QEPJ1HM-105ZM	NP.E.CAPACITOR	1.0MF 20% 50V	
	C 546	QEK40JM-476	E.CAPACITOR	47MF 20% 6.3V	
	C 547	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 561	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 563	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 564	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 565	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 566	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 567	QFV71HJ-103	FILM CAPACITOR	.010MF 5% 50V	
	C 568	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 569	QFV71HJ-103	FILM CAPACITOR	.010MF 5% 50V	
	C 570	QFLA1HJ-332ZM	M.CAPACITOR	3300PF 5% 50V	
	C 571	QFLA1HJ-332ZM	M.CAPACITOR	3300PF 5% 50V	
	C 572	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 573	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 574	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 575	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 576	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 577	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 578	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 579	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 580	NCT21CH-100AY	C CAPACITOR	10PF +50:-10% 1	
	C 581	NCT21CH-100AY	C CAPACITOR	10PF +50:-10% 1	
	C 591	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 592	QETC1AM-477ZN	E.CAPACITOR	470MF 20% 10V	
	C 593	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 601	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 602	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 603	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 604	NCT21CH-220AY	C CAPACITOR	22PF +50:-10% 1	
	C 605	NCT21CH-330AY	C CAPACITOR	33PF +50:-10% 1	
	C 606	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 607	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 608	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 609	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 614	QETBOJM-108	E.CAPACITOR	1000MF 20% 6.3V	
	C 615	NCS21HJ-102AY	C CAPACITOR	1000PF 5% 50V	
	C 701	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 702	QEK41HM-104	E.CAPACITOR	.10MF 20% 50V	
	C 703	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 704	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 705	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 706	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 707	NCB21HK-104	C CAPACITOR	.10MF 10% 25V	
	C 711	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 712	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 721	QEK41HM-225	E.CAPACITOR	2.2MF 20% 50V	
	C 722	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
	C 723	QETA1CM-227	E.CAPACITOR	220MF 20% 16V	
	C 731	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 732	QEK41HM-224	E.CAPACITOR	.22MF 20% 50V	
	C 733	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 734	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
	C 735	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 736	NCS21HJ-681AY	C CAPACITOR	680PF 5% 50V	

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 737	NCB21HK-682AY	C CAPACITOR	6800PF 10% 50V	
	C 738	NCB21HK-152AY	C CAPACITOR	1500PF 10% 50V	
	C 739	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 740	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 741	NCB21HK-223AY	C CAPACITOR	.022MF 10% 25V	
	C 742	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 743	NCB21HK-223AY	C CAPACITOR	.022MF 10% 25V	
	C 744	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 745	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
	C 746	NCT21CH-100AY	C CAPACITOR	10PF +50:-10% 1	
	C 747	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 748	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 749	NCB21HK-222AY	C CAPACITOR	2200PF 10% 50V	
	C 750	NCB21HK-223AY	C CAPACITOR	.022MF 10% 25V	
	C 751	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 752	QEK41HM-224	E.CAPACITOR	.22MF 20% 50V	
	C 753	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 771	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 772	NCB21HK-223AY	C CAPACITOR	.022MF 10% 25V	
	C 901	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 902	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 903	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 904	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 905	QEKF1CM-107ZN	E.CAPACITOR	100MF 20% 16V	
	C 906	QEKF1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 911	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 912	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 921	QETC1AM-477ZN	E.CAPACITOR	470MF 20% 10V	
	C 922	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 923	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 924	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
	C 925	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 926	QETC1CM-107ZN	E.CAPACITOR	100MF 20% 16V	
	C 931	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	C 932	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
	CF711	VCF2M3B-103	CERAMIC FILTER		
	CF712	VCF2M3B-103	CERAMIC FILTER		
	CF731	CSB456F23	CERA LOCK		
	CN501	VMC0314-S16	CONNECTOR		
	CN502	VMC0314-S10	CONNECTOR		
	CN601	VMC0232-S12	CONNECTOR		
	CN901	VGZ0007-035	FEED THROUGH		
	D 111	HSM2838C	DIODE		
	D 211	HSM2838C	DIODE		
	D 381	HSM2838C	DIODE		
	D 391	MA3100(M)	ZENER DIODE		
	D 392	HSM2836C	DIODE		
	D 591	DSK10C-E	DIODE		
	D 592	HSM2838C	DIODE		
	D 601	HSM2838C	DIODE		
	D 602	HSM2836C	DIODE		
	D 701	HSM2838C	DIODE		
	D 702	MA3056	ZENER DIODE		
	D 703	HSM2838C	DIODE		
	D 731	HSM2836C	DIODE		

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	D 732	HSM2836C	DIODE		
	D 733	HSM2836C	DIODE		
	D 791	HSM2838C	DIODE		
	D 901	HSM2838C	DIODE		
	D 902	HSM2838C	DIODE		
	D 903	MA3062(M)	ZENER DIODE		
	D 904	HSM2836C	DIODE		
	D 905	HSM2838C	DIODE		
	D 911	HSM2838C	DIODE		
	D 921	MA3091(M)	ZENER DIODE		
	D 931	MA3110(M)	ZENER DIODE		
	D 932	HSM2838C	DIODE		
	D 933	HSM2836C	DIODE		
	D 934	HSM2838C	DIODE		
	IC101	NJM4565M	IC		
	IC151	NJM4565M	IC		
	IC301	NJM4565M	IC		
	IC321	TEA6320T	IC		
	IC361	HA13152	IC		
	IC501	TA8191F	IC		
	IC561	TC9284AF	IC		
	IC591	BA6395FP-T1	IC		
	IC601	UPD17005GF-E25	IC		
	IC731	LA1862M	IC		
	L 501	VQP0015-4R7Z	INDUCTOR		
	L 561	VQP0015-4R7Z	INDUCTOR		
	L 601	VQP0015-4R7Z	INDUCTOR		
	L 701	VQP0015-4R7Z	INDUCTOR		
	L 731	VQT7F07-504	IFT	OV ADJ.	
	Q 381	UN2211	TRANSISTOR		
	Q 391	2SD1994(R,S)	TRANSISTOR		
	Q 501	2SA1037K(R)	TRANSISTOR		
	Q 561	2SA1037K(R)	TRANSISTOR		
	Q 591	2SB1322(RS)	TRANSISTOR		
	Q 601	2SC2412KK1	TRANSISTOR		
	Q 701	UN2211	TRANSISTOR		
	Q 711	2SC2814(F4F5)HL	TRANSISTOR		
	Q 721	2SC2412KK1	TRANSISTOR		
	Q 722	2SC2412KK1	TRANSISTOR		
	Q 771	UN2111	TRANSISTOR		
	Q 772	2SC2412KK1	TRANSISTOR		
	Q 773	UN2211	TRANSISTOR		
	Q 774	2SC2412KK1	TRANSISTOR		
	Q 776	2SC2412KK1	TRANSISTOR		
	Q 791	2SA1362GR	TRANSISTOR		
	Q 792	2SA1037K(R)	TRANSISTOR		
	Q 793	UN2211	TRANSISTOR		
	Q 901	2SD1994(R,S)	TRANSISTOR		
	Q 902	2SA1037K(R)	TRANSISTOR		
	Q 903	2SA1037K(R)	TRANSISTOR		
	Q 911	UN2111	TRANSISTOR		
	Q 912	2SC2412KK1	TRANSISTOR		
	Q 921	2SB1274(R,S)	TRANSISTOR		
	Q 922	2SD1994(R,S)	TRANSISTOR		
	Q 923	2SB1322(RS)	TRANSISTOR		

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	Q 924	UN2211	TRANSISTOR		
	Q 931	UN2111	TRANSISTOR		
	Q 932	UN2111	TRANSISTOR		
	R 101	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 102	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 103	NRSA02J-822NY	MG RESISTOR	8.2K 5% 1/10W	
	R 104	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 105	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 106	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 111	NRSA02J-0RONY	MG RESISTOR	5% 1/10W	
	R 151	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 152	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 153	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 154	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 155	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 156	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 201	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 202	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 203	NRSA02J-822NY	MG RESISTOR	8.2K 5% 1/10W	
	R 204	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 211	NRSA02J-0RONY	MG RESISTOR	5% 1/10W	
	R 251	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 252	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 253	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 254	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 255	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 256	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 301	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	
	R 302	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 303	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 304	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 305	NRSA02J-822NY	MG RESISTOR	8.2K 5% 1/10W	
	R 321	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	
	R 322	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 361	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 362	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 363	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 364	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 365	NRSA02J-2R2NYM	MG RESISTOR	2.2 5% 1/10W	
	R 366	NRSA02J-2R2NYM	MG RESISTOR	2.2 5% 1/10W	
	R 367	NRSA02J-2R2NYM	MG RESISTOR	2.2 5% 1/10W	
	R 368	NRSA02J-2R2NYM	MG RESISTOR	2.2 5% 1/10W	
	R 381	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 382	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 383	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 391	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 401	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	
	R 402	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 403	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 404	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 405	NRSA02J-822NY	MG RESISTOR	8.2K 5% 1/10W	
	R 421	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	
	R 422	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 461	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 462	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	

BLOCK NO. 01

△	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 463	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 464	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 465	NRSA02J-2R2NYM	MG RESISTOR	2.2 5% 1/10W	
	R 466	NRSA02J-2R2NYM	MG RESISTOR	2.2 5% 1/10W	
	R 467	NRSA02J-2R2NYM	MG RESISTOR	2.2 5% 1/10W	
	R 468	NRSA02J-2R2NYM	MG RESISTOR	2.2 5% 1/10W	
	R 501	NRSA02J-154NY	MG RESISTOR	150K 5% 1/10W	
	R 502	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 503	NRSA02J-470NY	MG RESISTOR	47 5% 1/10W	
	R 504	NRSA02J-470NY	MG RESISTOR	47 5% 1/10W	
	R 505	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 511	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 512	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
	R 513	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
	R 514	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 515	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 516	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 517	NRSA02J-202NY	CARBON RESISTOR	2.0K 5% 1/10W	
	R 521	NRSA02J-683NY	MG RESISTOR	68K 5% 1/10W	
	R 522	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 523	NRSA02J-181NY	MG RESISTOR	180 5% 1/10W	
	R 524	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 525	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 526	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 531	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 532	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 533	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 534	NRSA02J-683NY	MG RESISTOR	68K 5% 1/10W	
	R 541	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 542	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 543	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 544	NRSA02J-512NY	MG RESISTOR	5.1K 5% 1/10W	
	R 546	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 547	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 548	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 549	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
	R 550	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 551	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 552	NRSA02J-822NY	MG RESISTOR	8.2K 5% 1/10W	
	R 553	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
	R 555	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 556	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 557	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 558	NRSA02J-823NY	MG RESISTOR	82K 5% 1/10W	
	R 559	NRSA02J-0R0NY	MG RESISTOR	5% 1/10W	
	R 560	NRSA02J-684NY	MG RESISTOR	680K 5% 1/10W	
	R 561	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 562	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 563	NRSA02J-154NY	MG RESISTOR	150K 5% 1/10W	
	R 564	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 565	NRSA02J-225NY	MG RESISTOR	2.2M 5% 1/10W	
	R 566	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
	R 571	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 572	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 573	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	

BLOCK NO. 01

△	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 574	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 575	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 576	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 577	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 578	NRSA02J-100NY	MG RESISTOR	10 5% 1/10W	
	R 579	NRSA02J-100NY	MG RESISTOR	10 5% 1/10W	
	R 591	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 592	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 593	NRSA02J-683NY	MG RESISTOR	68K 5% 1/10W	
	R 594	NRSA02J-0R0NY	MG RESISTOR	5% 1/10W	
	R 601	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 602	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 603	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 604	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 605	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 606	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 607	NRSA02J-0R0NY	MG RESISTOR	5% 1/10W	
	R 609	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 610	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 611	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 612	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
	R 613	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
	R 614	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
	R 615	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 616	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 617	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 618	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 619	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 620	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 621	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 622	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 623	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 624	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 625	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 626	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 627	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 628	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 629	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 630	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 701	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 702	NRSA02J-181NY	MG RESISTOR	180 5% 1/10W	
	R 703	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 704	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 705	NRSA02J-272NY	MG RESISTOR	2.7K 5% 1/10W	
	R 706	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 707	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 708	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 711	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
	R 712	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 713	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 714	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
	R 715	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 721	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
	R 722	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 723	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	

BLOCK NO. 01[ ][ ][ ][ ]

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 724	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 732	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	
	R 733	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 734	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	
	R 735	NRSA02J-683NY	MG RESISTOR	68K 5% 1/10W	
	R 736	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 737	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 738	NRSA02J-752NY	MG RESISTOR	7.5K 5% 1/10W	
	R 739	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
	R 740	NRSA02J-683NY	MG RESISTOR	68K 5% 1/10W	
	R 741	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 742	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 743	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
	R 744	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
	R 745	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 746	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	
	R 771	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 772	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 773	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
	R 775	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 778	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 779	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 780	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 781	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 782	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
	R 783	NRSA02J-0R0NY	MG RESISTOR	5% 1/10W	
	R 791	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 792	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 793	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 794	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 901	QRD14DJ-472X	CARBON RESISTOR	4.7K 5% 1/4W	
	R 902	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 903	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 904	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	
	R 905	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 906	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 907	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 911	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 912	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 921	QRX019J-R47A	M.F.RESISTOR	5% 1/1W	
	R 922	NRSA02J-100NY	MG RESISTOR	10 5% 1/10W	
	R 923	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 924	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 925	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	RY911	VSK1D12-118	RELAY		
	TU701	VAF6S04-001	FM/AM TUNER PAC		
	VR501	QVZ3523-104	V.RESISTOR	TR.OFFSET ADJ.	
	VR731	QVPA601-333	V.RESISTOR	SEPARATION ADJ.	
	VR771	QVZ3523-223	V.RESISTOR	SD ADJ.	
	X 561	VCX5016-934Z	CRYSTAL		
	X 601	VCX5026-001Z	CRYSTAL		

■ Operation Key Switch P.C. Board

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 951	NCS21HJ-681AY	C CAPACITOR	680PF 5% 50V	
	C 952	NEF20JM-475RY	TS.E.CAPACITOR	4.7MF 20% 6.3V	
	C 953	NEF20JM-475RY	TS.E.CAPACITOR	4.7MF 20% 6.3V	
	CJ601	VMC0232-P12	CONNECTOR		
	D 951	HSM2838C	DIODE		
	D 952	HSM2838C	DIODE		
	D 953	HSM2836C	DIODE		
	D 954	HSM2836C	DIODE		
	D 955	HSM2838C	DIODE		
	D 961	SML-010MTT87	LED		
	D 962	SML-010MTT87	LED		
	D 963	SML-010MTT87	LED		
	D 964	SML-010MTT87	LED		
	D 965	SML-010MTT87	LED		
	D 966	SML-010MTT87	LED		
	D 967	SML-010MTT87	LED		
	D 968	SML-010MTT87	LED		
	D 969	SML-010MTT87	LED		
	IC951	LC7582E	IC		
	PL962	VGZ0001-056	LAMP		
	PL963	VGZ0001-056	LAMP		
	PL965	VGZ0001-055	LAMP		
	PL966	VGZ0001-055	LAMP		
	PL967	VGZ0001-055	LAMP		
	R 951	NRSA02J-513NY	MG RESISTOR	51K 5% 1/10W	
	R 952	NRSA02J-221NY	MG RESISTOR	220 5% 1/10W	
	R 953	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 954	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 955	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 956	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 961	NRSA02J-681NY	MG RESISTOR	680 5% 1/10W	
	R 962	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
	R 963	NRSA02J-122NY	MG RESISTOR	1.2K 5% 1/10W	
	R 964	NRSA02J-202NY	CARBON RESISTOR	2.0K 5% 1/10W	
	R 965	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 966	NRSA02J-622NY	MG RESISTOR	6.2K 5% 1/10W	
	R 967	NRSA02J-681NY	MG RESISTOR	680 5% 1/10W	
	R 968	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
	R 969	NRSA02J-122NY	MG RESISTOR	1.2K 5% 1/10W	
	R 970	NRSA02J-202NY	CARBON RESISTOR	2.0K 5% 1/10W	
	R 971	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 972	NRSA02J-622NY	MG RESISTOR	6.2K 5% 1/10W	
	R 973	NRSA02J-681NY	MG RESISTOR	680 5% 1/10W	
	R 974	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
	R 975	NRSA02J-122NY	MG RESISTOR	1.2K 5% 1/10W	
	R 976	NRSA02J-202NY	CARBON RESISTOR	2.0K 5% 1/10W	
	R 977	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 981	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 982	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 983	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 984	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 985	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 986	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	S 961	QSQ1B11-V01Z	TACT SWITCH		
	S 962	QSQ1B11-V01Z	TACT SWITCH		

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	S 963	QSQ1B11-V01Z	TACT SWITCH		
	S 964	QSQ1B11-V01Z	TACT SWITCH		
	S 965	QSQ1B11-V01Z	TACT SWITCH		
	S 966	QSQ1B11-V01Z	TACT SWITCH		
	S 967	QSQ1B11-V01Z	TACT SWITCH		
	S 968	QSQ1B11-V01Z	TACT SWITCH		
	S 969	QSQ1B11-V01Z	TACT SWITCH		
	S 970	QSP1A11-V15	TACT SWITCH		
	S 971	QSP1A11-V15	TACT SWITCH		
	S 972	QSQ1B11-V01Z	TACT SWITCH		
	S 973	QSQ1B11-V01Z	TACT SWITCH		
	S 974	QSQ1B11-V01Z	TACT SWITCH		
	S 975	QSQ1B11-V01Z	TACT SWITCH		
	S 976	QSP1A11-V15	TACT SWITCH		
	S 977	QSP1A11-V15	TACT SWITCH		
	S 978	QSP1A11-V15	TACT SWITCH		
	S 979	QSP1A11-V15	TACT SWITCH		
	S 980	QSQ1B11-V01Z	TACT SWITCH		

— MEMO —

14. Illustration of Packing and Parts List

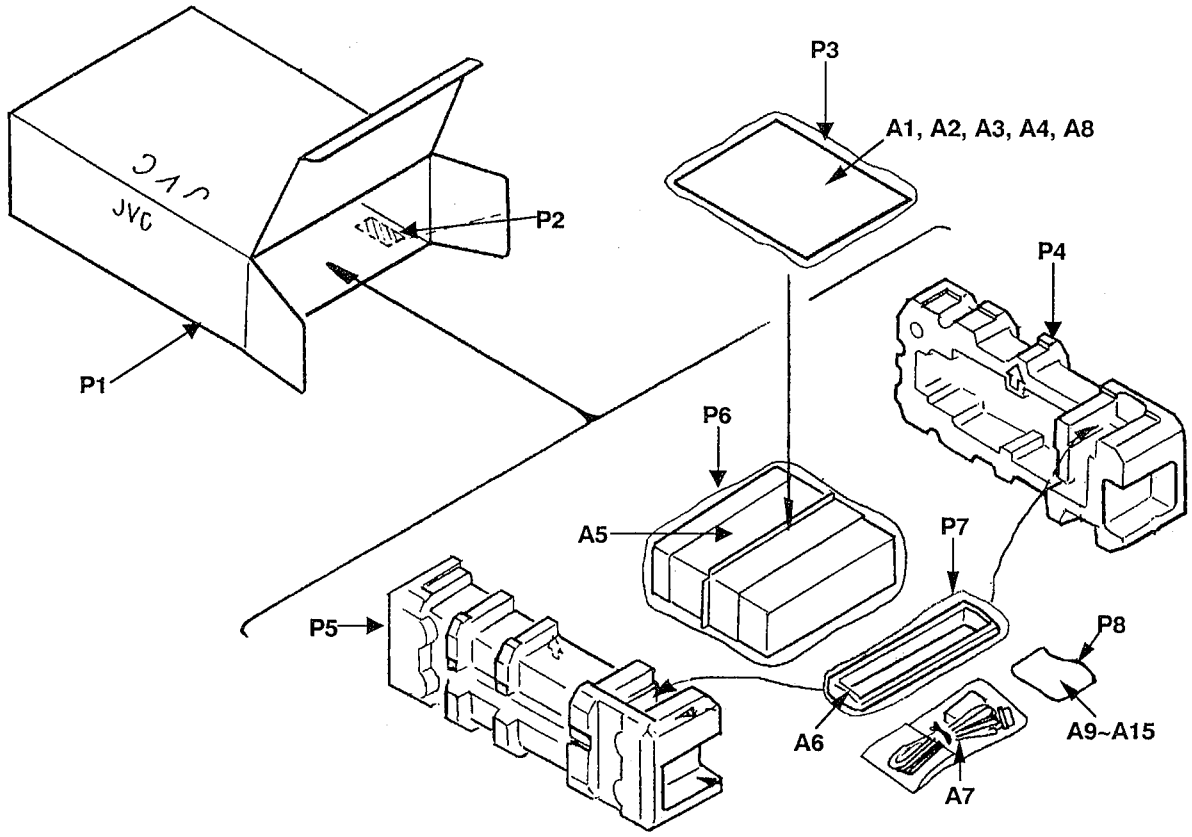


Fig. 14-1

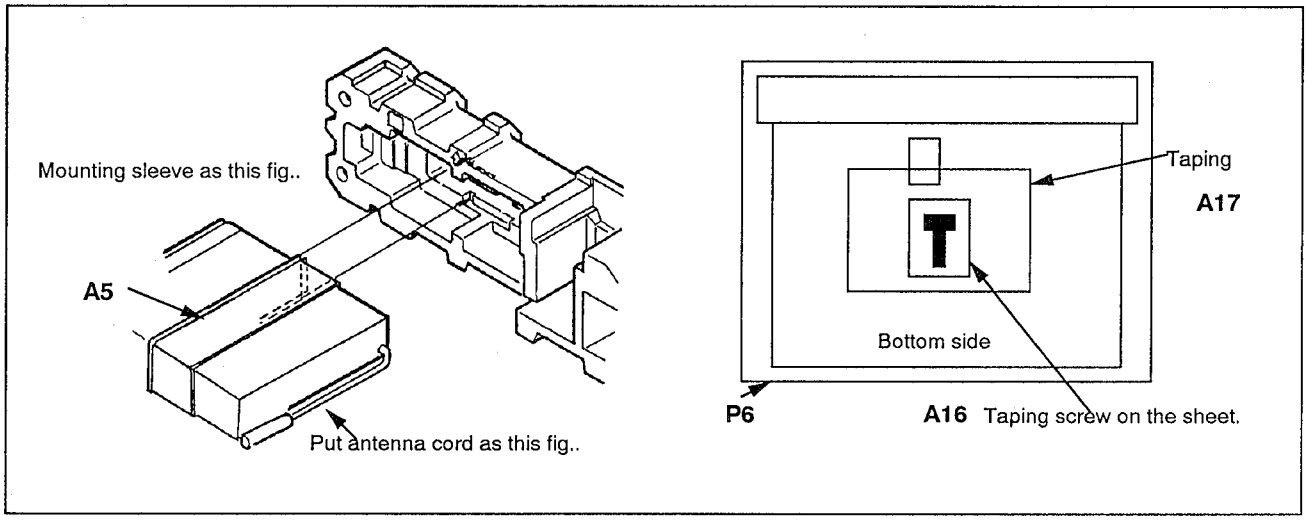


Fig. 14-2

■ Packing parts list

BLOCK NO. M3MM□□□

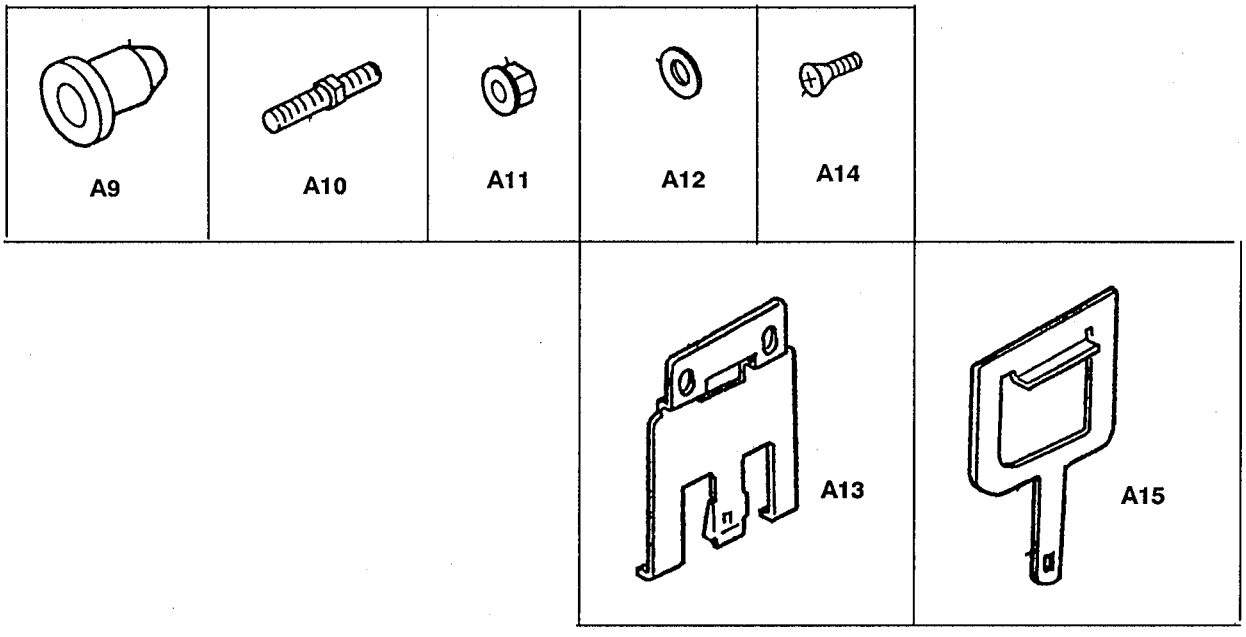
⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	P 1	VPC3491-S001	CARTON		1		
	P 2	VND3044-006	NUMBER LABEL		1	C	
		VND3044-002	NUMBER LABEL		1	J	
	P 3	QPGA017-02505	POLY BAG	INSTRUCTIONS	1		
	P 4	VPH1652-001	CUSHION(L)		1		
	P 5	VPH1652-002	CUSHION(R)		1		
	P 6	VPE3020-046	POLY BAG	FOR SET	1		
	P 7	QPGA010-03003	POLY.BAG	TRIM PLATE	1		
	P 8	QPGA008-01205	POLY BAG	FOR SCREW KIT	1		

■ Accessories

BLOCK NO. M4MM□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A 1	VNN3491-631S	INSTRUCTIONS		1	C,J	
	A 2	VNC2400-090	CAUTION SHEET		1		
	A 3	BT-20059D	WARRANTY CARD		1	J	
		BT-20025L	WARRANTY CARD		1	C	
	A 4	BT-20137	SERVICE NETWORK		1	J	
		BT-20071B	SERVICE NETWORK		1	C	
	A 5	VKL3732-018SS	MOUNTING SLEEVE		1		
	A 6	VJC3263-001	TRIM PLATE		1		
	A 7	VMC0014-140	13P CORD ASS'Y		1		
	A 8	VNC2400-098	CAUTION SHEET		1		
	A 9	VKZ4027-202	PLUG NUT		1		
	A 10	VKH4871-001	MOUNT BOLT		1		
	A 11	VKZ4328-001	LOCK NUT	FOR M5	1		
	A 12	WNS5000Z	WASHER		1		
	A 13	VKY4462-004SS	SIDE SPRING		2		
	A 14	SSSP4006Z	SCREW	FOR SIDE SPRING	4		
	A 15	VJH4089-001SS	HANDLE		2		
	A 16	SPSJ1725M	SCREW		1		
	A 17	VND4619-005	CAUTION SHEET		1		
	KIT 1	KDGS40K-SCREW1	SCREW KIT	A9-A15,P8	1		

■ Breakdown of screw kit (KIT 1)



JVC

VICTOR COMPANY OF JAPAN, LIMITED.
AUDIO PRODUCTS DIVISON 10-1, 1-chome, Ohwatari-cho, Maebashi-city 371, Japan

Printed in Japan
-H0604-S-