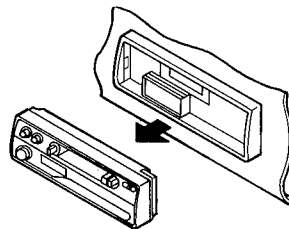
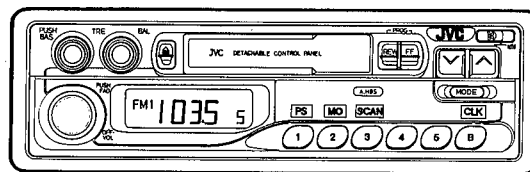


# JVC

## SERVICE MANUAL

### CASSETTE CAR RECEIVER

## KS-RT45 B/E/G/GE/GI



#### Area suffix

|          |  |
|----------|--|
| B .....  | U.K.                                       |
| E .....  | Continental Europe                         |
| G .....  | Germany                                    |
| GE ..... | Austria, Switzerland and<br>Eastern Europe |
| GI ..... | Italy                                      |

## Contents

|                                   | Page |  | Page |
|-----------------------------------|------|--|------|
| ■ Instructions (Extraction) ..... | 2    | [6] Standard Schematic Diagram                         |      |
| [1] Location of Main Parts .....  | 11   | ■ AM Tuner, SK/DK Circuit .....                        | 27   |
| [2] Removal of Main Parts         |      | ■ Amplifier Circuit (B/E/G version) .....              | 28   |
| ■ Enclosure Section .....         | 13   | ■ Amplifier Circuit (G/GE version) .....               | 30   |
| ■ Mechanism Section .....         | 15   | [7] Location of P.C. Board Parts and Parts List .....  | 32   |
| [3] Main Adjustment .....         | 16   | [8] Exploded View of Enclosure Component               |      |
| ■ Tape Section .....              | 17   | Parts and Parts List .....                             | 38   |
| ■ Tuner Section .....             | 18   | [9] Exploded View of Mechanism Component               |      |
| [4] Wiring Connections .....      | 20   | Parts and Parts List .....                             | 40   |
| [5] Block Diagram                 |      | [10] Packing Illustration and Packing Parts List ..... | 42   |
| ■ Integrated Circuit .....        | 21   |  |      |
| ■ Circuit Book Diagram .....      | 25   |  |      |

# Instructions (Extract)

## CONTENTS

|                                       |    |
|---------------------------------------|----|
| Features.....                         | 2  |
| Important information.....            | 2  |
| Installation (In-dash mounting) ..... | 3  |
| Electrical connections .....          | 5  |
| Location of controls.....             | 10 |
| Tape operation .....                  | 15 |
| Radio operation .....                 | 17 |
| Digital clock display .....           | 23 |
| Maintenance .....                     | 24 |
| Tape care hints .....                 | 25 |
| Specifications.....                   | 26 |

### Note:

For security reasons, a numbered ID card is provided with this unit, and the same ID No. is imprinted on the unit's chassis. Keep the card in a safe place, as it will help the authorities to identify your unit if stolen.

## SPECIFICATIONS

### AUDIO AMPLIFIER SECTION

#### (KS-RT35)

Maximum Power Output: 8 W per channel (2-channel),  
5W per channel (4-channel)  
Continuous Power Output (RMS): 3 W per channel into  
4  $\Omega$ , 100 to 20,000 Hz at no more than 0.8% total  
harmonic distortion (2-channel).

#### (KS-RT45)

Maximum Power Output: (Front) 22 W per channel,  
(Rear) 22 W per channel  
Continuous Power Output (RMS): (Front) 8 W per  
channel into 4  $\Omega$ , 40 to 20,000 Hz at no more than  
0.8% total harmonic distortion. (Rear) 8 W per  
channel into 4  $\Omega$ , 40 to 20,000 Hz at no more than  
0.8% total harmonic distortion.

Load Impedance: 4  $\Omega$  (4 to 8  $\Omega$  allowance)

Tone Control Range

Bass:  $\pm 10$  dB at 100 Hz

Treble:  $\pm 10$  dB at 10 kHz

Frequency Response: 40 to 20,000 Hz

Signal-to-Noise Ratio: 60 dB

### RADIO SECTION

Frequency Range

FM: 87.5 to 108.0 MHz

AM: (MW) 522 to 1,620 kHz

(LW) 144 to 281 kHz (Manual)

(LW) 144 to 279 kHz (Auto)

[FM Tuner]

Usable Sensitivity: 15.3 dBf ( 1.6  $\mu$ V/75  $\Omega$ )

50 dB Quieting Sensitivity: 18.8 dBf (2.4  $\mu$ V/75  $\Omega$ )

Alternate Channel Selectivity: (400 kHz): 65 dB

Frequency Response: 40 to 15,000 Hz

Stereo Separation: 30 dB

Capture Ratio: 1.5 dB

## FEATURES

- Detachable Control Panel
- AM/FM Stereo PLL Synthesizer Tuner
- 20-Station Preset Tuning (FM-15, AM [MW/LW]-5)
- Preset Scan/Scan/Seek/Manual Tuning
- SK/DK Traffic Information Reception (G/GE)
- U-Turn Auto-Reverse Mechanism
- Maximum Power Output of 8 watts per channel (2-channel) (KS-RT35)
- 4-Channel Amplifier System  
Maximum Power Output of 22 watts per channel (Front)/22 watts per channel (Rear) (KS-RT45)
- Active Hyper-Bass Sound
- Fader Control
- Digital Clock Display
- Mono Button

[MW Tuner]

Sensitivity: 20  $\mu$ V

Selectivity: 35 dB

[LW Tuner]

Sensitivity: 50  $\mu$ V

### CASSETTE DECK SECTION

Wow & Flutter: 0.11% (WRMS)

Fast-Wind Time: 100 sec. (C-60)

Frequency Response: 50 to 14,000 Hz ( $\pm 3$  dB)

Signal-to-Noise Ratio: 52 dB

Stereo Separation: 40 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 18 mm (7-1/2" x 2-5/16" x 3/4")

Gross Weight: 1.8 kg (4.0 lbs)

*Design and specifications subject to change without notice.*

**IMPORTANT INFORMATION**

1. This unit is designed to operate with 12 volts DC, **NEGATIVE** ground electrical systems only.
2. Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC "IN-CAR ENTERTAINMENT" dealer.
3. Do not touch the highly-polished head with any metallic or magnetic tools.
4. If noise is a problem...  
This unit incorporates a noise filter in the power circuit. However, with some vehicles, clicking or other unwanted noise may occur. If this happens, connect the unit's rear ground terminal to the car's chassis using shorter and thicker cords, such as copper braiding or gauge wire. If noise still persists, consult your JVC "IN-CAR ENTERTAINMENT" dealer.
5. Never play dirty or dusty tapes since they will greatly degrade the sound and performance of your unit. Always keep your tapes clean. (See page 25.)

**Antenna Noise**

If you can hear static noise when listening to either AM (MW/LW) or FM, check for loose antenna connections.

**INSTALLATION (IN-DASH MOUNTING)**

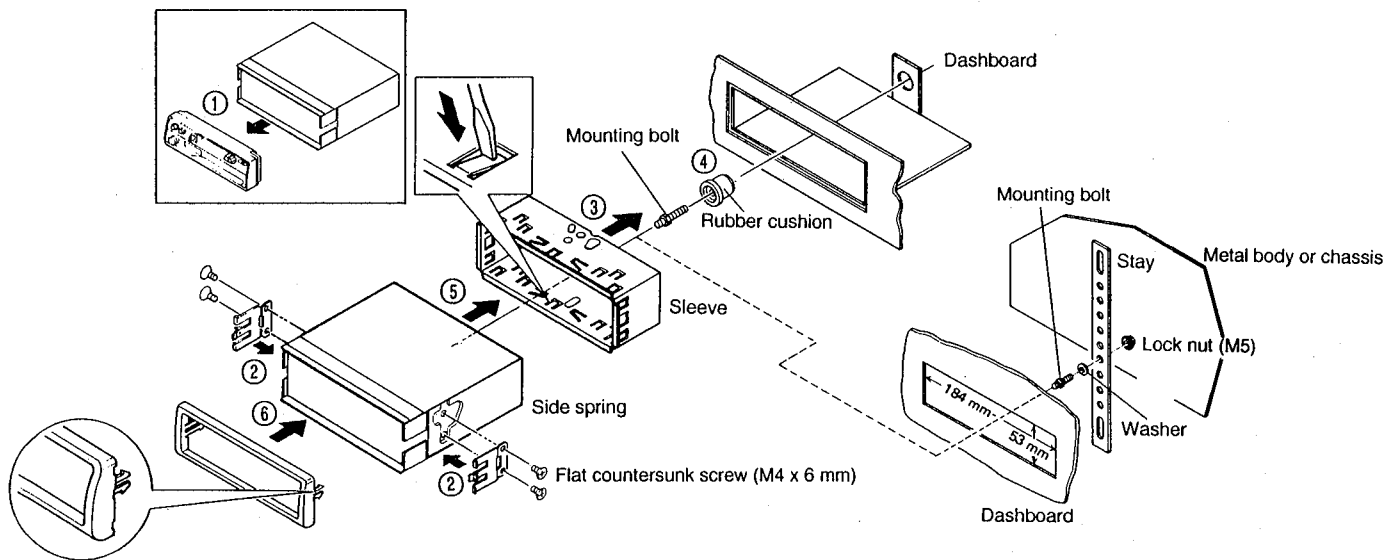
**IMPORTANT**

- Before using this unit for the first time, press the Eject button fully, to reset the mechanism.

• 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 "IN-CAR ENTERTAINMENT" dealer.

- ① Slide the Control Panel Release (▲) switch to the right and remove the control panel.
- ② Attach the 2 side springs.
- ③ 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.
- ④ Fix the mounting bolt to the rear of the unit's body and place the rubber cushion over the end of the bolt.
- ⑤ Slide the unit into the sleeve until they are locked together.
- ⑥ Attach the trim plate.

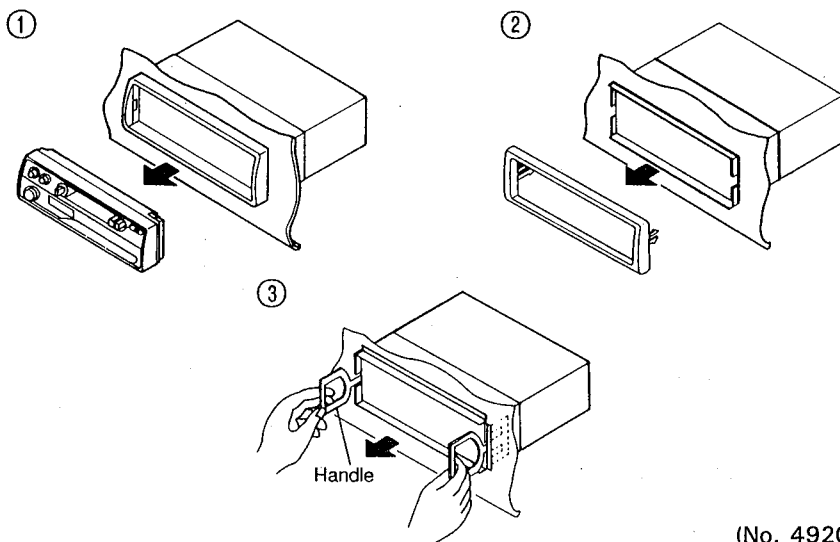
• Follow the numbers for mounting.



**Removing the unit**

• Before removing the unit, release the rear section.

- ① Remove the control panel.
- ② Remove the trim plate.
- ③ 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.



## 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 "IN-CAR ENTERTAINMENT" dealers.

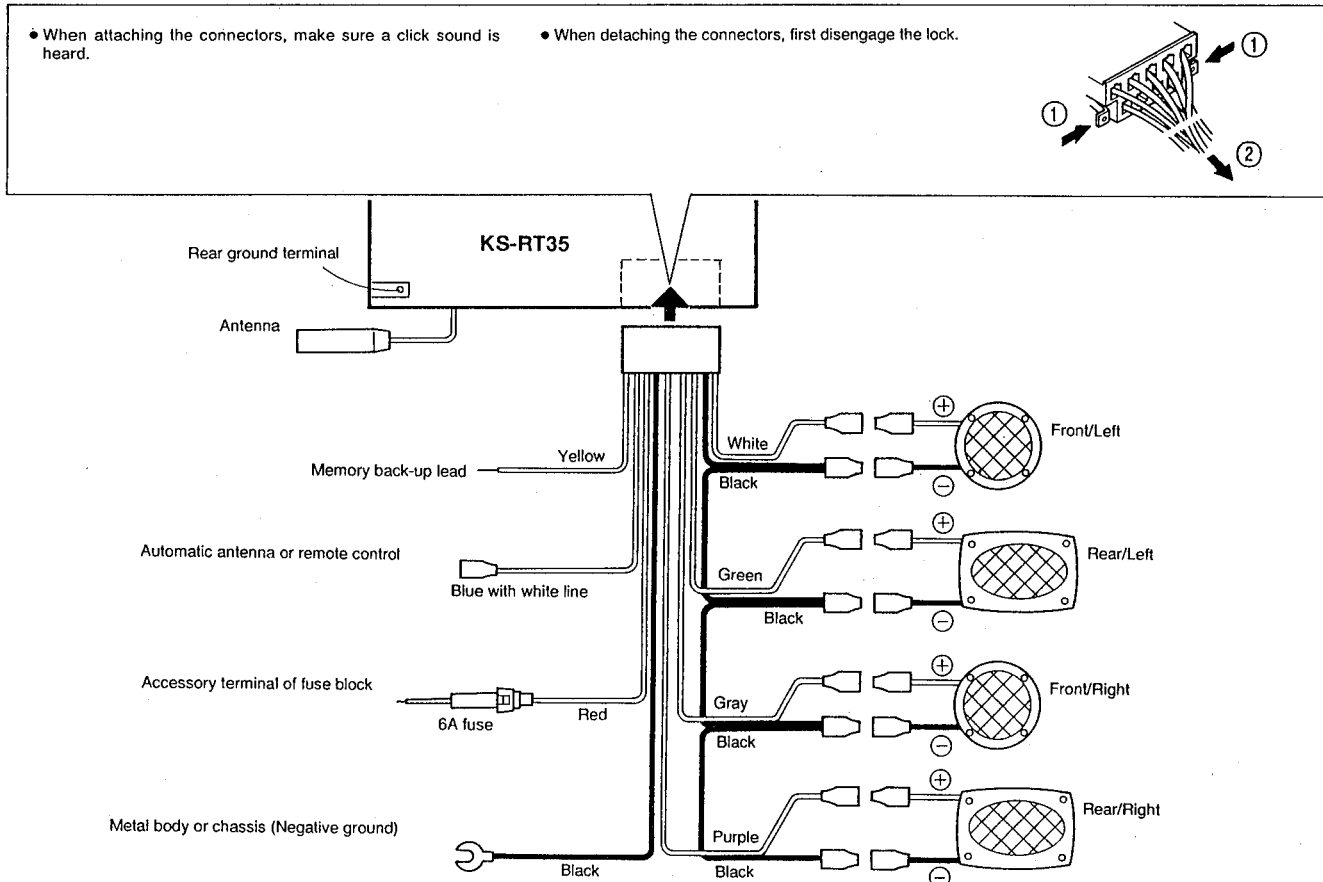
- Maximum input of the speakers should be more than 8 watts, with an impedance of 4 to 8 ohms. (KS-RT35)
- Maximum input of the speakers should be more than 22 watts at the rear and 22 watts at the front, with an impedance of 4 to 8 ohms. (KS-RT45)

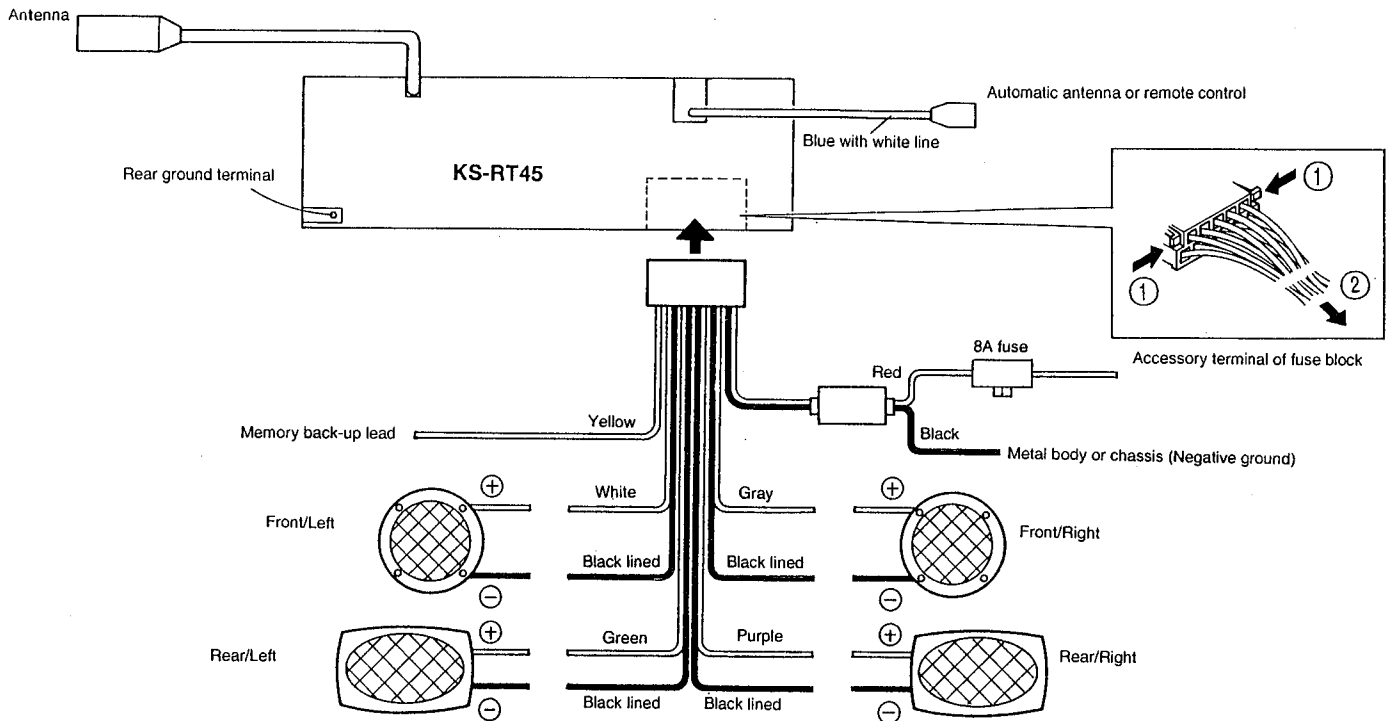
**CAUTIONS:**

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. 2-Speaker Connections**

Two speakers can be connected to either the front or rear pair of speaker output terminals. Cover the unused terminals with insulating tape to prevent short-circuits.

**C. Power Aerial (Automatic Antenna) Connections**

This unit can perform automatic extension/retraction of a power aerial when the power is turned ON/OFF. The remote lead connection (blue with white lines) from the audio unit is via a separate relay to the aerial motor unit.

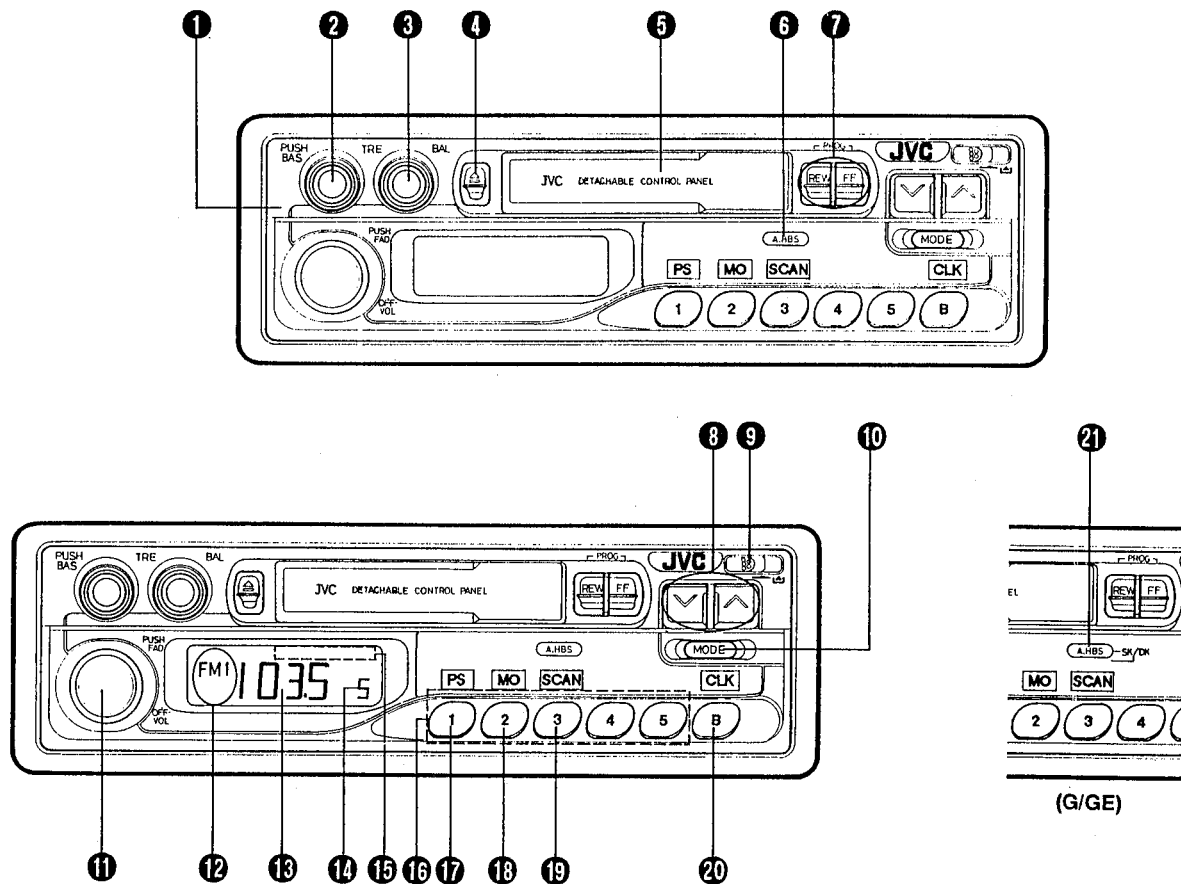
**D. Memory Back-Up Lead**

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

**E. Fader Control**

- When used in a 4-speaker system  
When the PUSH FAD control is turned counterclockwise, the sound will be heard from the front speakers, and when turned clockwise, from the rear speakers.
- When used in a 2-speaker system  
Set this control to the center position.

LOCATION OF CONTROLS

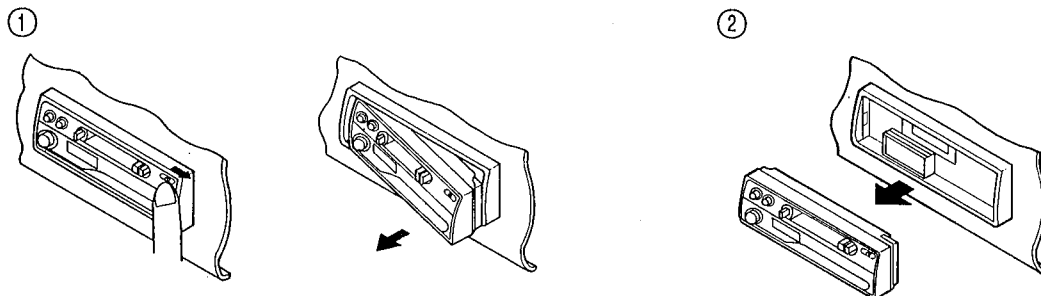


- 1 Control panel
- 2 Treble (TRE)/Push bass (PUSH BAS) Control
- 3 Balance (BAL) Control
- 4 Eject (▲) button
- 5 Cassette loading slot
- 6 Active Hyper-Bass Sound (A.HBS) button (B/E/GI)
- 7 Program (PROG)/REW, FF buttons
- 8 Tuning/Hour/Minute Adjustment button  
Down (∨) frequency/Hour adjustment  
Up (∧) frequency/Minute adjustment
- 9 Control Panel Release (▲) switch
- 10 MODE button
- 11 Power ON-OFF/Volume (VOL)/Push fader (PUSH FAD) controls
- 12 Band indicator (AM-FM1-FM2-FM3)
- 13 Radio Frequency/Time display
- 14 Preset Station display

- 15 Indicators  
SK/DK (G/GE)  
Mono (MO)  
ST (FM stereo)  
Tape direction (◀▶)
  - 16 Preset Station buttons (No.1 to No.5)
  - 20 Band (B) button
  - 21 Active Hyper-Bass Sound (A.HBS) button SK/DK button (G/GE)
- Press the following buttons (17 to 20) after the MODE button has been pressed and its red indicator is lit. Five seconds after completing the operation, the MODE button's red indicator goes out.
- 17 Preset Scan (PS) button
  - 18 MONO (MO) button
  - 19 Scan (SCAN) button
  - 20 Clock (CLK) button

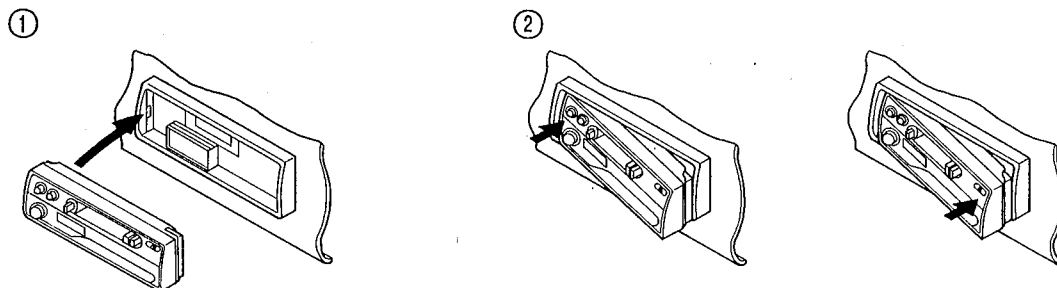
### How To Detach The Control Panel

- ① Slide the Control Panel Release (▲) switch in the direction of the arrow to detach the control panel.
- ② Pull the control panel out of the main unit, as shown below.
  - Put the control panel in the provided case for protection.



### How To Attach The Control Panel

- ① Align the left side of the control panel with the left side of the holder.
- ② Press the left side of the control panel first, then the right side to set it correctly.



#### Note:

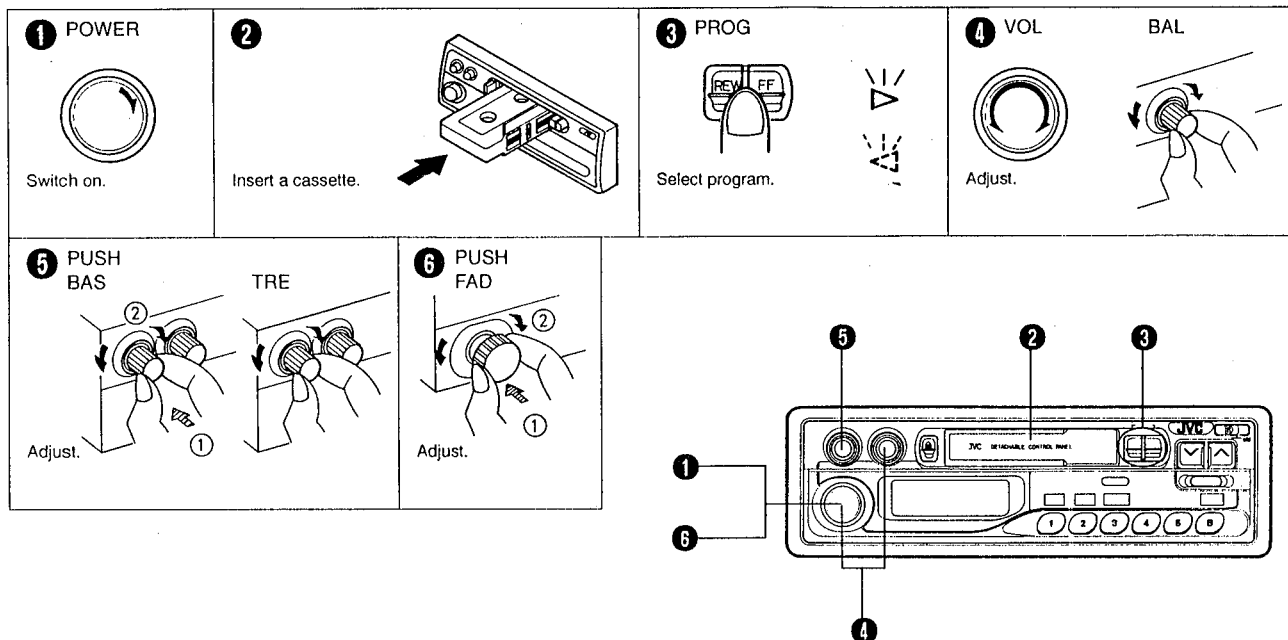
- Be careful not to damage the connector terminals when attaching/detaching the control panel or while the control panel is removed.

### Active Hyper-Bass Sound Button

Press the A.HBS button to listen to hyper-bass sound. (The A.HBS button lights red.)

## TAPE OPERATION

Operate in the order shown.



### How To Fast-Forward And Rewind Tapes

Press the FF button to fast-forward the side being played; when the tape end is detected, the tape is reversed and playback starts from the beginning of the other side.

Press the REW button to rewind the tape to its beginning, where playback restarts.

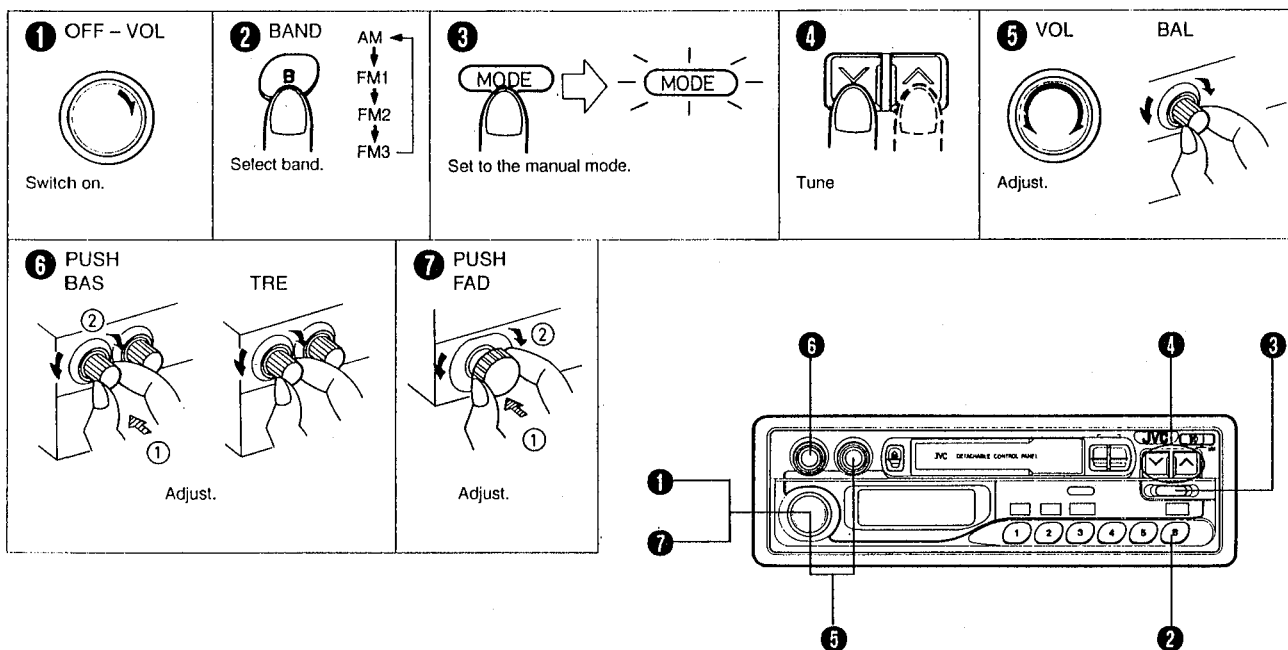
Lightly press the PROG button to start playback from the current position during fast-forward or rewind.

### Auto-Reverse Mechanism

When the tape reaches its end, this mechanism automatically switches over to play back the other side. To listen to the other side of the tape during playback, press the PROG button. The change in direction can be checked in the Tape Direction indicator.

## RADIO OPERATION

Operate in the order shown.





### Manual Tuning

Set Manual mode using the MODE button. When the MODE button's red indicator is lit, 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 50 kHz units  
 MW — in 9 kHz units.  
 LW — in 1 kHz unit.

In AM operation, the frequency continuously moves from the MW (522 to 1,620 kHz) to LW (144 to 281 kHz) band and vice versa.

- When approx. 5 seconds have elapsed after completing manual tuning, the unit switches back to Seek mode and the MODE button's red indicator goes out.



### Seek Tuning

The unit is in Seek mode when the MODE button's red indicator goes out. Then, by pressing the ^ or v button the unit tunes to the adjacent station with a higher or lower frequency. In AM operation, the frequency continuously moves from the MW to LW band and vice versa.

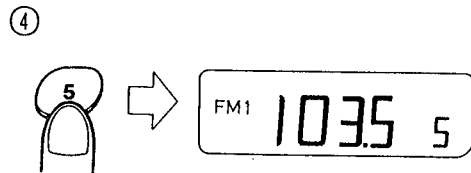
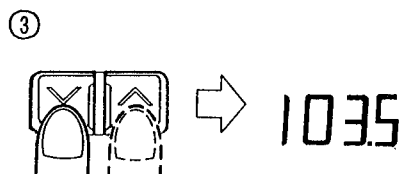
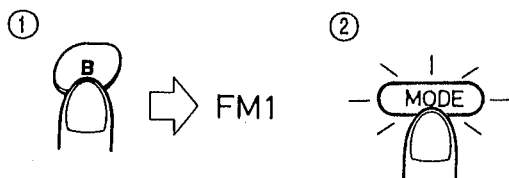
### Scan Button Tuning

Use the SCAN button for automatic scanning of the FM and AM (MW/LW) frequency bands. Press this button after the MODE button has been pressed and the MODE button's indicator is lit, each station is monitored for approx. 5 seconds (the frequency blinks during this time). After 5 seconds have elapsed, the frequency advances to the next station which in turn is monitored for 5 seconds. To stop scanning, press the SCAN button again.

### Preset Button Tuning

5 stations in each band (FM1, FM2, FM3 and AM [MW/LW]) can be preset as follows:

- **Example (when presetting Preset Station button "5" of the FM1 band to an FM station at 103.5 MHz)**



- ① Select the FM1 band using the B button.
- ② Set Manual mode.
- ③ Tune to the desired station.
- ④ Press Preset Station button "5" for more than 2 seconds. (When "5" blinks in the Preset Station display, the station is preset.)

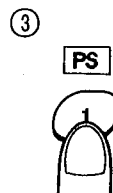
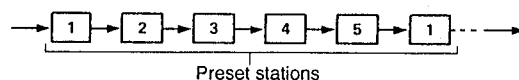
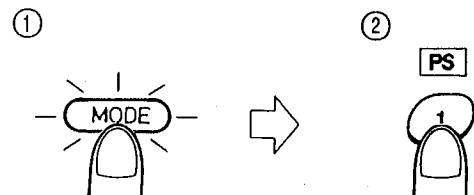
- Repeat the above procedure for the other 4 Preset Station buttons and other bands (FM2, FM3 and AM [MW/LW]).

#### 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 Scan Button Tuning

This function makes it possible to automatically scan preset FM and AM (MW/LW) stations.



- ① Press the MODE button (its red indicator lights).
- ② Press the PS button.
  - Scanning is performed in the order of the preset stations in each frequency band (FM1, FM2, FM3 and AM [MW/LW]). Each preset station is heard for approx. 5 seconds.
- ③ When the required station is heard, press the PS button again.

### Receiving Traffic Information Broadcasts (G/GE version only)

1. Press the SK/DK button for more than 1 second before operation. The SK/DK indicator lights.
2. Perform Seek Tuning to search for a station broadcasting traffic information. When such a station is received, the [SK/DK] indicator will light and the broadcast can be heard.
3. As long as the tuner is set to receive traffic information stations, even if you are listening to a cassette tape, when traffic information is broadcast, it is automatically heard. When the broadcast is over, cassette playback restarts.

**Note:**

If the tuner is not set to a traffic information station or the reception is poor, after approx. 30 seconds an alarm tone will be heard. In such a case, perform Seek Tuning or press the SK/DK button for more than 1 second.

### Mono Button

When listening to FM, set the MO button to STEREO or MONO after the MODE button has been pressed and its red indicator is lit.

**Note:**

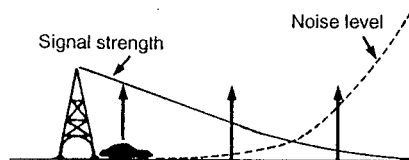
Set to MONO when a stereo FM broadcast is too noisy and cannot be heard satisfactorily.

### 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)

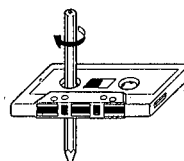
This unit incorporates an automatic FM noise suppression circuit to ensure satisfactory reception of FM broadcasts when a vehicle is moving and signal strengths are continuously fluctuating.



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

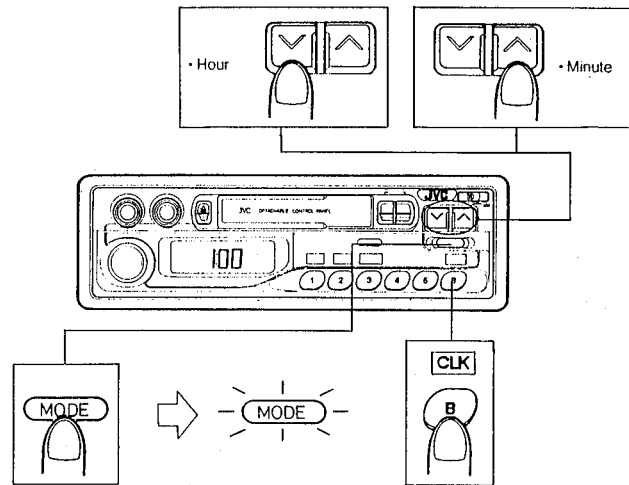
### DIGITAL CLOCK DISPLAY

Each time the CLK button is pressed after the MODE button has been pressed and its indicator is lit red, Time mode or Tuner mode is engaged. When the radio is operated in Time mode, the displayed time switches to the frequency, and returns to Time mode after a few seconds.



### How To Adjust The Time

Make sure the display is in Time mode with the MODE button lit in red. Then, while pressing the CLK button, press the Hour Adjustment button (∨) to adjust the "hours", and press the Minute Adjustment button (∧) to adjust the "minutes".



### MAINTENANCE

• **Cleaning The Head**

After several hours of use, the playback sound may become muffled or wow and flutter may be noticeable. This is usually due to a deposit of oxide on the tape head, capstan and pinch roller. The easiest way to overcome this problem is to use a head-cleaning tape, which can be purchased from your JVC "IN-CAR ENTERTAINMENT" dealer.

• **Cleaning The Connector**

If the control panel is frequently detached, a poor connection may occur with the control panel holder. To minimize this possibility, periodically wipe the connector with a cotton swab or cloth moistened with alcohol, being careful not to damage the connector terminals.

Your unit requires very little attention, but you will be assured of top performance only if you follow the above notes.

### TAPE CARE HINTS

It is very important to keep your tapes clean. Always return them to their storage boxes after playback. Never store tapes in direct sunlight, high humidity or extremely hot temperatures. Never play dirty or dusty tapes — they can damage the head. Slack tape in a cassette can cause trouble by becoming entangled with the capstan or pinch roller. This may also cause the auto-reverse mechanism to malfunction. Avoid this by tightening the tape, as shown.

**Note:**

Always remove cassettes from the loading slot when not listening to them, as the tape may become slack.

# 1 Location of Main Parts

■ B/E/GI version

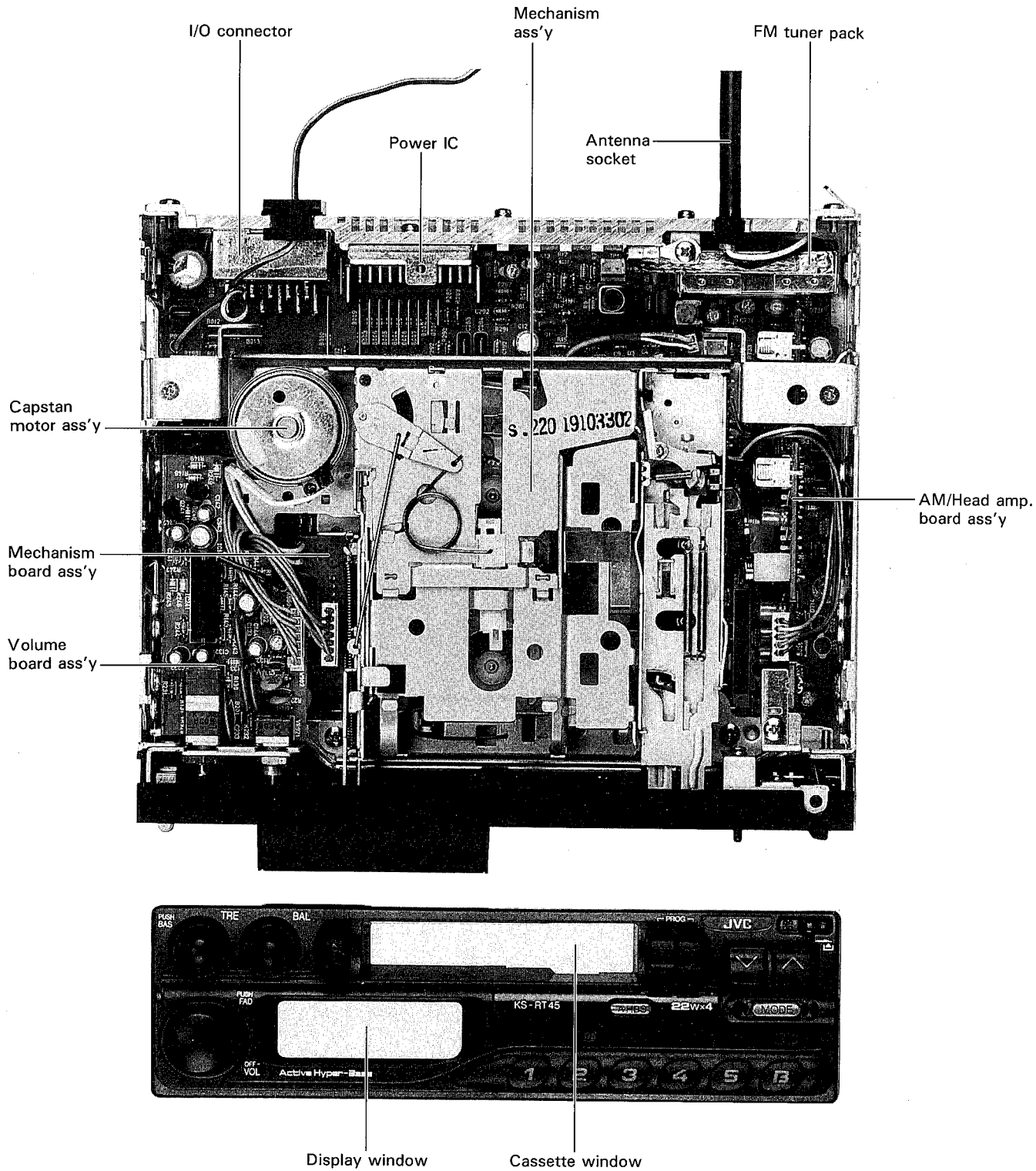


Fig. 1-1

■ G/GE version

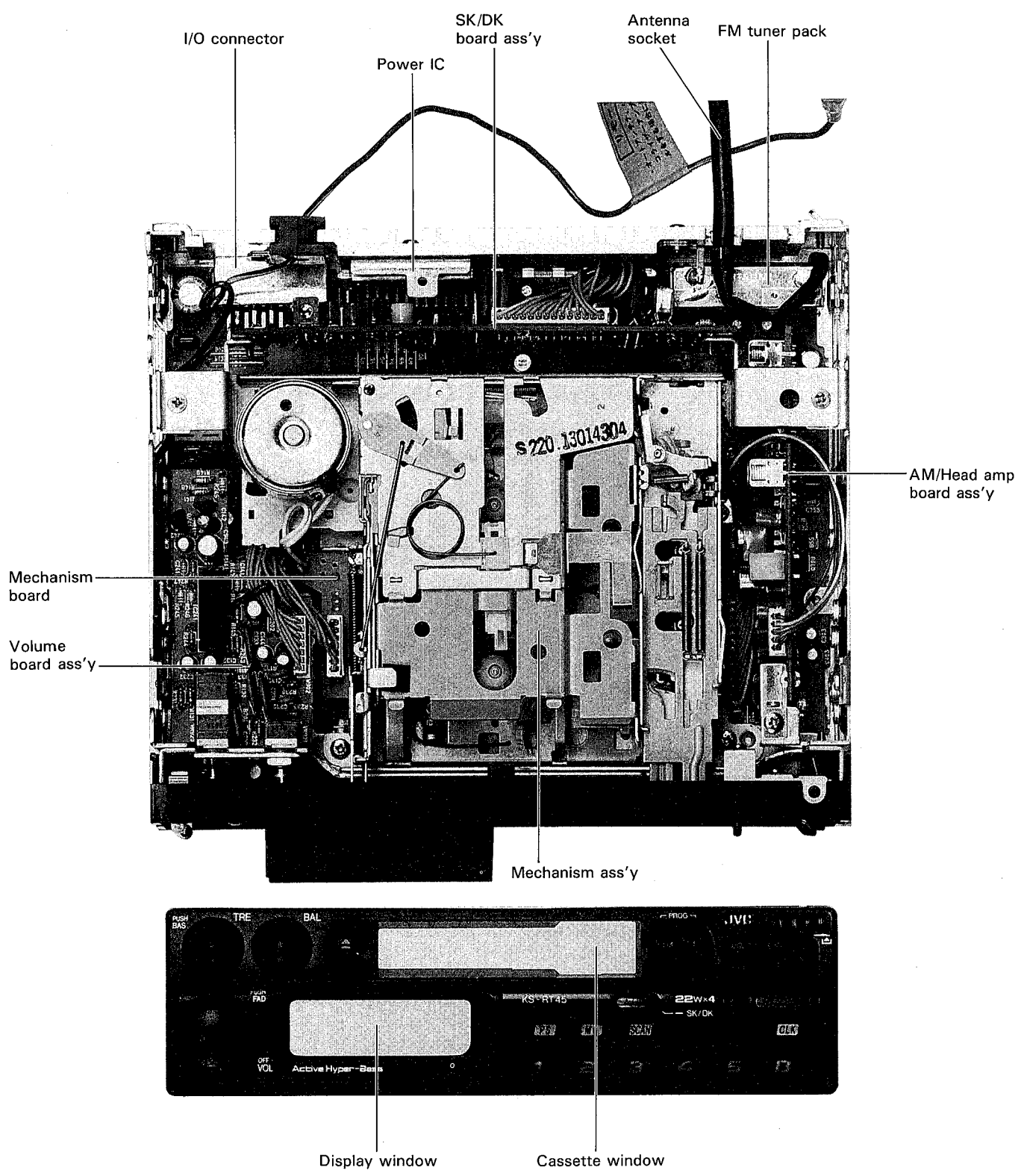


Fig. 1-2

## 2 Removal of Main Parts

### ■ Enclosure section

#### ◆ Top and bottom cover (See Fig.2 - 1)

1. Remove the two screws ④ retaining the top cover from rear side.
2. Remove the four claws (A~B) on the right, and left sides retaining the top cover.
3. Remove the two screws ⑤ retaining the bottom cover from rear side.
4. Remove the four claws (G~H) on the right, and left sides retaining the bottom cover.

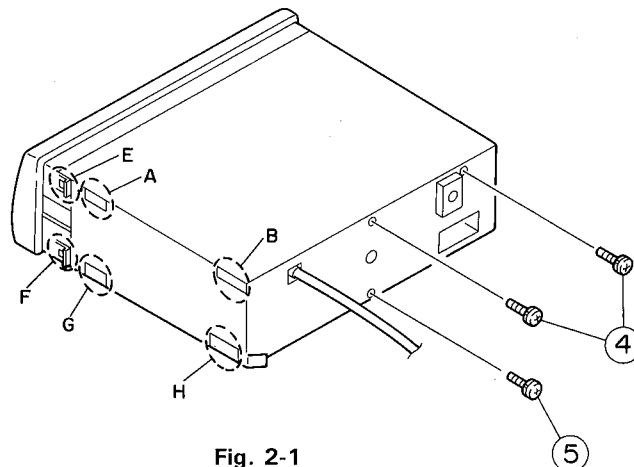


Fig. 2-1

#### ◆ Control unit (See Fig. 2 - 2)

1. Remove the eject knob by sliding it to the right side.

#### ◆ Nose piece ass'y (See Fig.2 - 1~2 - 2)

1. Remove the four claws (E and F) on the right and left side.
2. The nose piece ass'y is connected to the main p. c. board by a connector under the 『PROG』 button on the right side of the mechanism. Dismount the nose piece ass'y by pulling it in straight direction.

- ★ At the time of assembly align the ass'y so that the lamp enters the lamp hood.

#### ◆ Mechanism ass'y (See Fig.2 - 3)

1. Remove the four screws ① and ② retaining the mechanism ass'y.
2. Disconnect two connectors, namely, the head wire connector from the AM p. c. board ass'y and the control connector from the mechanism p. c. board ass'y.

#### ◆ AM board ass'y (See Fig.2 - 3)

1. Remove the one screw ⑥ retaining the AM board ass'y.
2. Pull out the AM board ass'y.

#### ◆ BASS/TRE. volume ass'y (See Fig.2 - 4)

1. Remove the two shaft knob (knob joint).
2. Remove the two nuts retaining the volume and pull it backward.

- ★ Under these condition, it will be possible to change the parts on the main p. c. board ass'y.

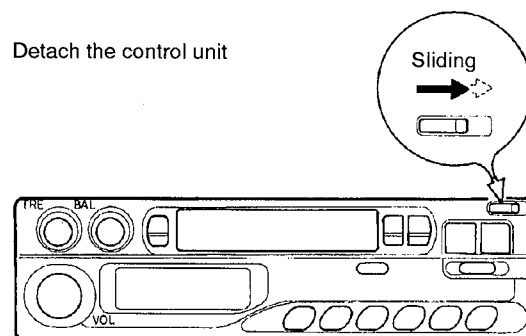


Fig. 2-2

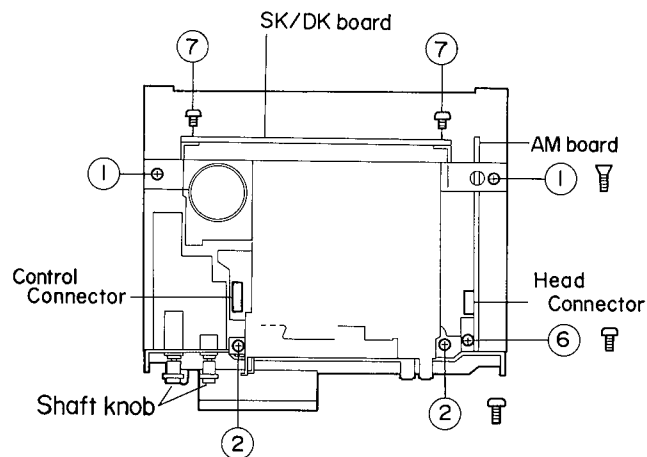


Fig. 2-3

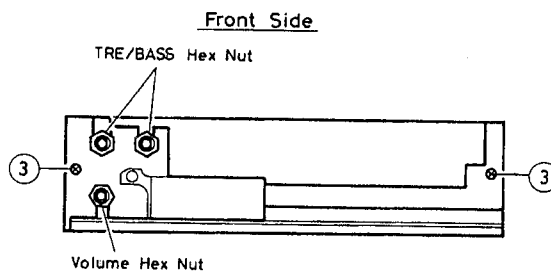


Fig. 2-4

◆ **Main volume** (See Fig.2 – 5)

1. Remove the shaft knob(knob joint).
2. Remove the two screws ③ retaining the front bracket.
3. Remove the nut retaining the volume.

◆ **Control unit**

1. When the screws retaining the case are removed, the retaining spring will be separated. Then, slowly disconnect the case.

◆ **SK/DK board ass'y** (G/GE only)(See Fig.2 – 6)

1. Remove the two screws ⑦ retaining the SK/DK board from backward of mechanism assembly.

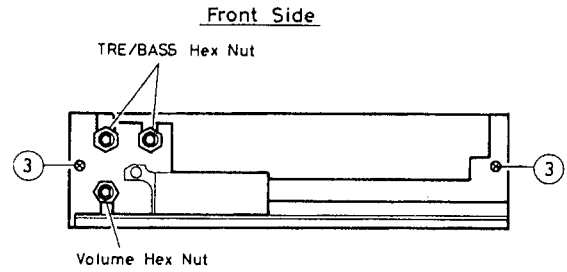


Fig. 2-5

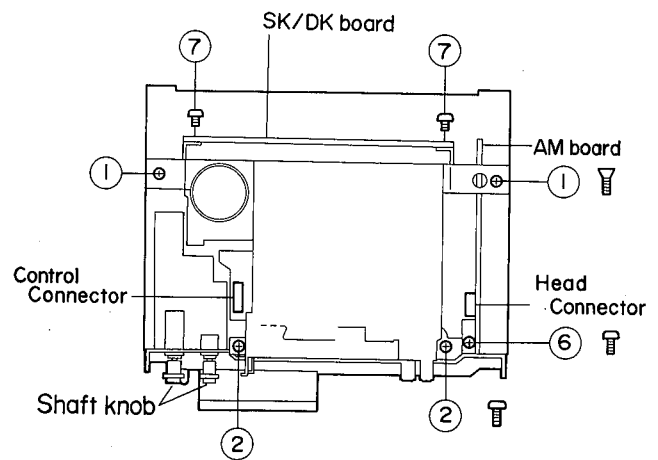


Fig. 2-6

## ■ Mechanism Section

### ◆ Head Removal

1. Remove screw ① retaining the FR bracket.
2. Left the FR lever assembly up in the direction of the arrow and remove the FR lever assembly from the chassis slots.
3. Remove the screw ② retaining the head plate.
4. Remove two screws ③ retaining the head.
5. When replacing the head make sure to adjust screws(A~D) and perform head angle and height adjustment.

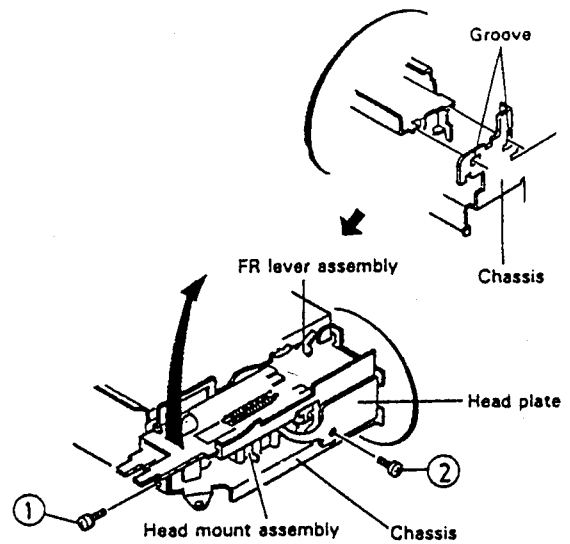


Fig. 2-7

### ◆ Pinch roller assembly

1. Remove the nylon washers retaining the left and right pinch rollers.
2. Pull out the pinch roller.

### ◆ Motor Assembly

Remove two screws(5)retaining the motor.

- ※ This operation is facilitated by leaving the belt hooked on to one of the chassis protrusions.

### ◆ Belt

Thread the belt as indicated in the figure when replacing the belt.

- ※ Take care to avoid contact with grease or oil when replacing the belt.

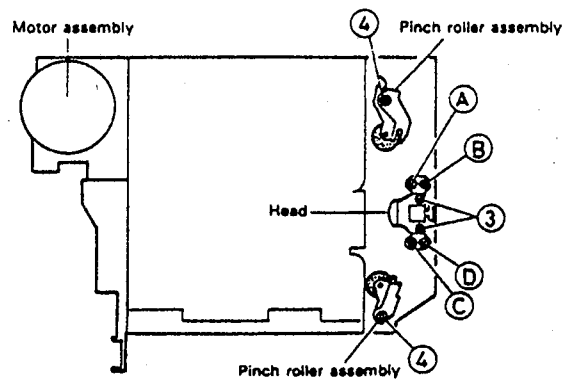


Fig. 2-8

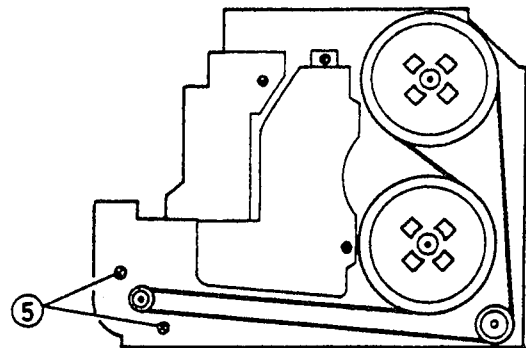


Fig. 2-9

### 3 Main Adjustment

#### ■ Equipment and measuring instruments used for adjustment

- Electronic voltmeter
- Audio frequency oscillator  
(range:50~20kHz and output 0 dB with impedance of 600 Ω )
- Attenuator(impedance;600 Ω )
- Frequency counter
- AM Standard signal generator
- FM Standard signal generator
- Wow flutter meter
- Torque testing cassette gauge  
CTG – N (mechanical adjusting)  
TW – 2111A (FWD play)  
TW – 2121A (REV play)
- Standard tape  
VTT703(head azimuth adj.)  
VTT712(tape speed,wow&flutter adj.)  
VTT724(reference level )  
VTT736(playback frequency response )  
VTT721(output level)

#### ■ Condition for measurement

- Power Supply ..... DC14.4V  
(Reduced Voltage:10.5V)
- Load ..... 4 Ω  
(Tow speaker connection)
- BASS/TRE, FADER BALANCE ..... Center
- A – HBS ..... OFF
- Main volume ..... Position with an output level of 2.0V during VTT724 playback

#### ■ Tuner section

- **FM**;400Hz, 22.5kHz deviation
- **FM** STEREO ;1kHz, 67.5kHz deviation,  
pilot signal 7.5kHz deviation.
- **AM**;400Hz, 30% modulation
- Output impedance ;50 Ω (Level, 0dB=1 μ V/50 Ω )

#### ■ Dummy antenna

#### ● Preset memory Initialization

| Band    | Preset Memory |      |      |       |       |
|---------|---------------|------|------|-------|-------|
|         | M1            | M2   | M3   | M4    | M5    |
| FM(MHz) | 87.5          | 89.9 | 97.9 | 105.9 | 107.9 |
| AM(kHz) | 144           | 153  | 522  | 603   | 1404  |

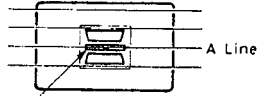

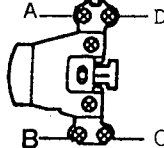
#### ● Manual Tuning Up/Down Frequency

- FM** ;50kHz Step
- MW** ;9kHz Step
- LW** ;1kHz Step





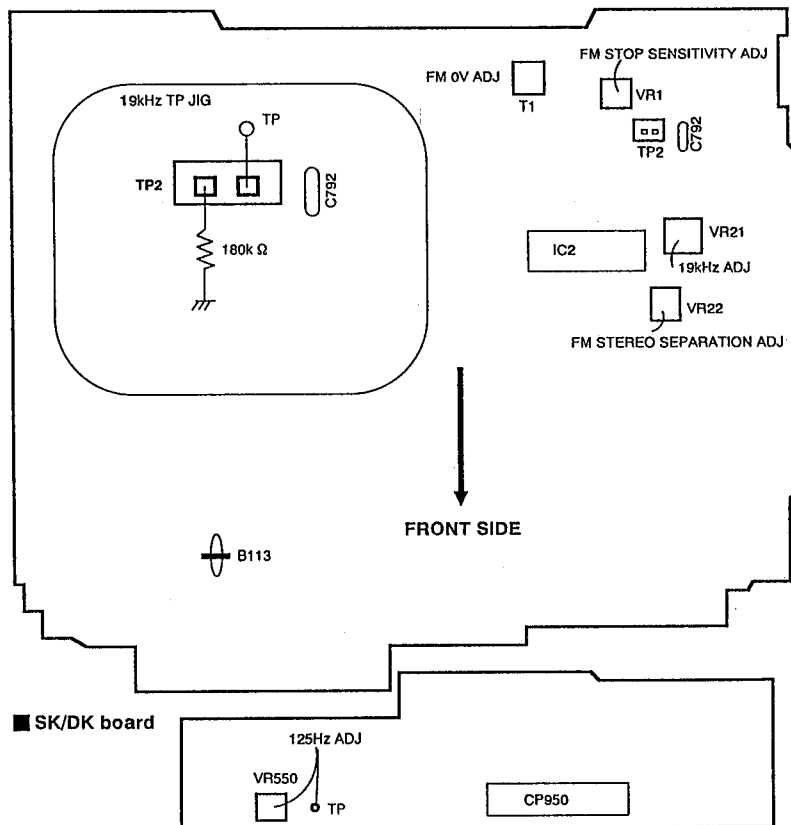
## ■ Tape section adjustment

| Item   | Conditions  | Adjustment and Confirmation methods   | S.Values  | Adjust   |
|--|---|---|---|--|
| <p>1. Head Azimuth Adjustment</p>                  | <p>Test tape:<br/>SCC – 1659<br/>VTT703(10kHz)</p>                  | <p>★ In case the head and its height have been changed, it will be necessary to adjust the height of the head.</p> <p>1. Adjustment of the height of head</p> <p>1)When the mirror tape SCC – 1659(2line tape) is travelling in the FWD. direction ,adjust the screws A and B so that the line A is located at the center of the shield plate between the head channels.</p> <p>2)When the mirror tape SCC – 1659(2line tape) is travelling in the REV.direction, adjust the screws C and D so that the line B is located at the center of the shield plate between the head channels.</p> <p>2. Head azimuth</p> <p>1)Adjust the screw B so that the output level becomes maximum and the phase difference becomes minimum when VTT703 is travelling in the FWD. direction.</p> <p>2)Adjust the screw C so that the output level become maximum the phase difarence become minimum when VTT703 is travelling in the REV. direction.</p> <p>3)By repeating the avove adjustments steps 1) and 2),make sure that the output level and phase difference as specifed respectively .</p> <p>4)There is no need to preform bonding after adjustment.</p> | <p>S.Values</p>   | <p>Adjust</p> <div style="text-align: center;">  <p>A Line</p> <p>Head shield<br/>The head is at low position during FWD.</p>  <p>B Line</p> <p>Head shield<br/>The head is at high position during REV.</p> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%;"> <p>Output level:<br/>Maximum</p> </div> <div style="width: 45%;"> <p>screw – D</p>  </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%;"> <p>Output level:<br/>Maximum</p> </div> <div style="width: 45%;"> <p>screw – C</p> </div> </div> |
| <p>2. Tape speed and wow flutter confirmantion</p> | <p>Test tape:VTT712<br/>(3kHz)</p>                                  | <p>1.Check to see if the reading of the F.counter /wow flutter meter is within 3015~3045 (FWD/REV), and less than 0.35%(JIS RMS) .</p> <p>2. In case of out of specefication,adjust the motor with a built – in volume resistor.</p>  | <p>Tape speed:<br/>3015<br/>~3045Hz<br/>Wow flutter:less than0.35%</p>    | <p>Built – in volume resistor</p>  |
| <p>3.Playback frequency response confirmation</p>  | <p>Test tape:VTT724<br/>(1kHz)<br/>VTT736<br/>(125Hz/1kHz/8kHz)</p> | <p>1. Play test tape VTT724, the set the volume position at 2V</p> <p>2. Play test tape VTT736 confirm<br/>1kHz/8kHz:0 ± 3dB<br/>1kHz/125Hz:0 ± 3dB</p> <p>3. When 8 kHz is out of specification, it will be necessary to read just the azimuth</p>   | <p>Speaker out<br/>1kHz/125Hz<br/>:0 ± 3dB<br/>1kHz/8kHz<br/>:0 ± 3dB</p> |  |

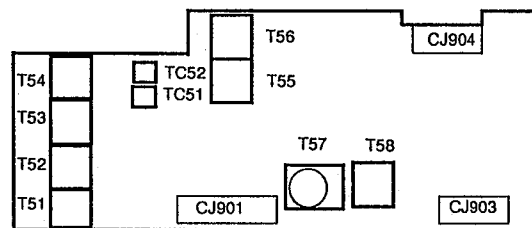
| Item                                | Conditions   | Adjustment and Confirmation methods  | S.Values   | Adjust |
|-------------------------------------|--|--|--|--------|
| 4.Maximum output power confirmation | Test tape :VTT721<br>(1kHz)<br>volume:maximum<br>BASS/TRE:center                   | 1. Confirm both the front and rear output be more than 8.3 V (17W).<br>2. Confirm that consumption current at above condition to be less than 5A.<br>3. Sound leakage should not occur at volume minimum.<br>4. Oscillation should not occur at BASS/TRE at minimum. | Output level:more than 8.3 V(17W)<br>Consumption current :less than 5A                     |        |
| 5.Playback noise                    | Empty tape   | 1. Noise level to be less than 2 mV at volume minimum.<br>2. Current consumption to be less 1A at above condition.   | Less than 2 mV<br>Less than 1A   |        |
| 6.BASS/TREBLE checking              | FM 97.9 MHz, 66 dB $\mu$ , 22.5kHz dev. with center click, preemphasis 75 $\mu$ s. | Confirm that both BASS/TRE are within a variable range from $\pm 7$ dB to 13 dB.   | 100 Hz :<br>$\pm 7$ dB<br>~13 dB (variable)<br>10 kHz :<br>$\pm 7$ dB<br>~13 dB (variable) |        |

■ Tuner Section

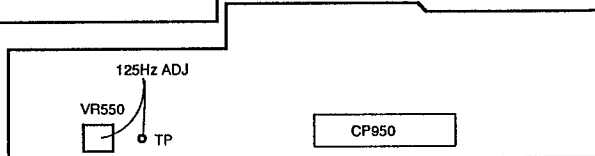
MAIN board



■ AM board



■ SK/DK board



■ Tuner Section Adjustment

| Item                         | Conditions  | Adjustment and Confirmation methods   | S.Values                              | Adjust   |
|------------------------------|---|---|---------------------------------------|--|
| 1. MW voltage adjustment     | Test point: CJ901 7 pin<br>Measuring:<br>MW 522 kHz<br>MW 1404kHz | 1. Adjust T55 so that the CJ901 7 pin DC voltage level becomes 1.2 V when 522 kHz is indicated.<br>2. Adjust TC51 so that the CJ901 7 pin DC voltage level becomes 6.6 V when 1404 kHz is indicated.<br>3. Repeat the Steps 1 and 2 until the voltage levels becomes as specified above.  | 1.2 ± 0.02 V<br>6.6 ± 0.1 V           | T55<br>TC51  |
| 2. MW Sensitivity adjustment | MW 603 kHz weak signal<br><br>MW 1404 kHz weak signal             | 1. Adjust (the output with) T52, T54 and T58 so that the output becomes maximum under the 603 kHz receiving conditions.<br>2. Adjust (the output with) TC51 so that the output becomes maximum under the 1404 kHz receiving conditions.<br>3. Repeat the Steps 1 and 2.<br>4. Confirm the MW voltage. After the voltage has been confirmed, make sure that the CJ901 7 pin output at 1620 kHz is 8.2 V or less. | Output maximum<br><br>Less than 8.2 V | In sequence T52, T54 and T58 repeatedly until O/P is maximum<br>TC51 |

| Item                              | Conditions  | Adjustment and Confirmation methods  | S.Values                                      | Adjust   |
|-----------------------------------|---|--|---|--|
| 3. LW voltage adjustment          | Test point: CJ901<br>7 pin<br>Measuring:<br>LW 144 kHz<br>LW 281kHz | <ol style="list-style-type: none"> <li>Adjust T56 so that the CJ901 7 pin DC voltage level becomes 1.2 V when 144 kHz is indicated.</li> <li>Adjust TC52 so that the CJ901 7 pin DC voltage level becomes 5 V when 281 kHz is indicated.</li> <li>Repeat the Steps 1 and 2 until the voltage levels becomes as specified above.</li> </ol>   | 1.2 ±<br>0.02 V<br><br>5.0 ±<br>0.1 V         | T56<br><br>TC52  |
| 4. LW Sensitivity adjustment (I)  | LW 153 kHz weak signal<br><br>LW 281 kHz weak signal                | <ol style="list-style-type: none"> <li>Adjust (the output with) T51 and T53 so that the output becomes maximum under the 153 kHz receiving conditions.</li> <li>Adjust (the output with) TC52 so that the output becomes maximum under the 281 kHz receiving conditions.</li> <li>Repeat the Steps 1 and 2.</li> </ol>   | Output maximum                                | In sequence T51 and T53 repeatedly until O/P is maximum TC52 |
| LW Sensitivity adjustment (II)    | LW 153 kHz weak signal<br><br>LW 281 kHz weak signal                | <ol style="list-style-type: none"> <li>Adjust (the output with) T56 so that the output becomes maximum under the 153 kHz receiving conditions.</li> <li>Adjust (the output with) TC52 so that the output becomes maximum under the 281 kHz receiving conditions.</li> <li>Repeat the Steps 1 and 2.</li> <li>Confirm the AM voltages. After the voltage has been confirmed, make sure that the CJ901 7 pin output 281 kHz is 8.0 V or less.</li> </ol> | Output maximum<br><br><br><br>Less than 8.0 V | In sequence T56 repeatedly until O/P is maximum TC51         |
| 5. Radio/Tape level difference    | AM 999 kHz,<br>1 kHz, 30% modulation,<br>74 dB $\mu$                | Against VTT724, the output difference level to be within -3 ±3 dB  | Within -3 ±3 dB                               |  |
| 6. FM 0 V adjustment              | Test point: TP3<br>FM 97.9 MHz, 66 dB non modulation                | Adjust T1 so that the TP3 DC voltage level becomes 0 V when 97.9 MHz is indicated.   | 0 ± 0.01 V                                    | T1   |
| 7. Adjustment of Stop Sensitivity | 97.9 MHz, 400 Hz modulation<br>28 dB $\mu$ V<br>TP: SD(B113)        | Under receiving conditions, adjust the SD (B113) output with VR1 to a point where the output changes from 0 V to 5 V (by using an oscilloscope).   | Changing point from 0 V to 5 V                | VR1  |
| 8. Adjust of 19 kHz Free Run      | FM 97.9 MHz<br>Non modulation<br>66 dB $\mu$ V<br>TP2 (C792 side)   | <ol style="list-style-type: none"> <li>Connect 180 k<math>\Omega</math> between the test point TP2 and earth as indicated in the diagram.</li> <li>After connecting the high impedance frequency counter to the test point terminal TP2, adjust the frequency with VR21 so that the counter reads 19 kHz ±50 Hz</li> </ol>   | 19 ±0.05 kHz                                  | VR21   |



| Item                           | Conditions   | Adjustment and Confirmation methods   | S.Values             | Adjust |
|--------------------------------|--|---|----------------------|--------|
| 9. FM stereo separation        | 97.9MHz, 1 kHz,<br>67.5 kHz dev,<br>Pilot 7.5 kHz,<br>66 dB $\mu$ V          | <ol style="list-style-type: none"> <li>1. While applying a modulation output to a single channel, adjust VR22 so that the leak of speaker output to another channel is minimized.</li> <li>2. Separation to be more than 22 dB.</li> <li>3. The left/right difference to be within 3 dB.</li> </ol>         | more than 22 dB      | VR22   |
| 10. FM S/N ratio               | 97.9 MHz, 66 dB $\mu$  | Output difference level between modulation ON/OFF to be more than 53 dB.  | More than 53 dB      |        |
| 11. Clock frequency check      | Test point: 9 pin of IC701<br>MW 1620 kHz<br>F Counter                       | <p>When MW 1620 kHz is indicated, confirm that the 9 pin terminal frequency of IC701 is with <math>2070 \pm 0.060</math> kHz.</p> <ol style="list-style-type: none"> <li>1. Clock adjustment to be done after aligning tuner (To get higher accuracy).</li> <li>2. High impedance can to be use.</li> </ol> | $2070 \pm 0.060$ kHz |        |
| 12. Adjust-ment of DK Free Run | FM 97.9 MHz<br>Non modulation<br>66 dB $\mu$ V<br>TP: TP mark on SK/DK board | Under the SK/DK signal receiving conditions, adjust the test point frequency to 125 Hz with VR550.  | $125 \pm 1$ Hz       | VR550  |

# 4 Wiring Connections

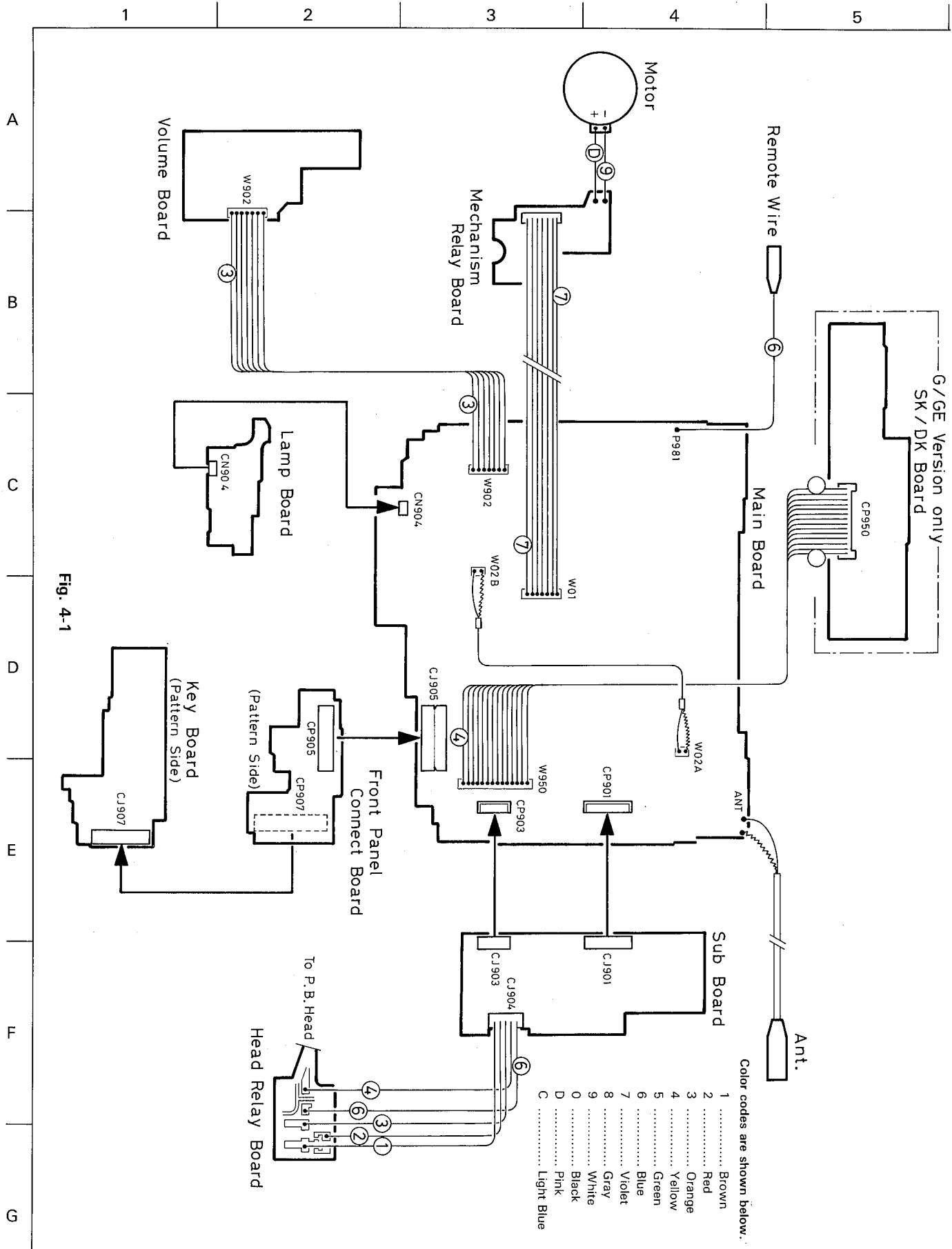


Fig. 4-1



# 5 Block Diagram

■ ICs

◆ IC2 AN7465K NOISE C. & MPX

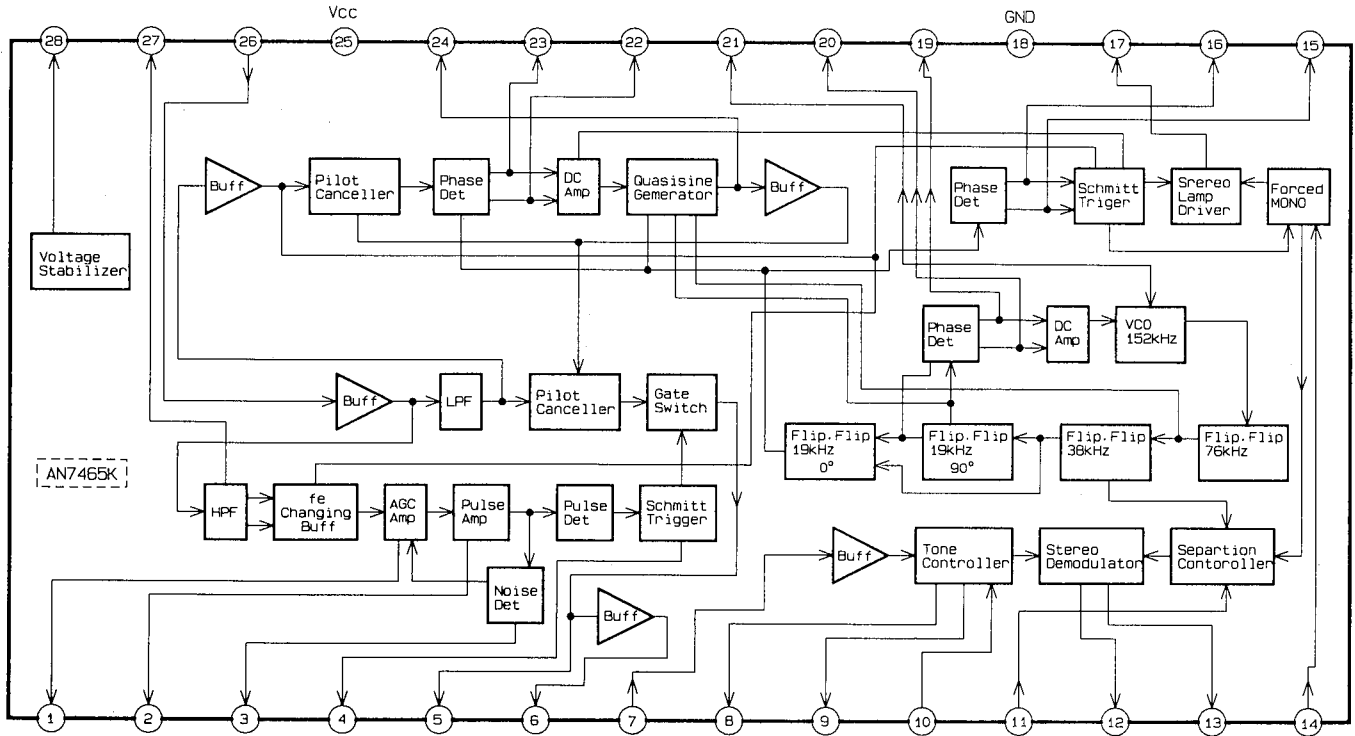


Fig. 5-1

◆ IC961 HA1351 POWER AMP.

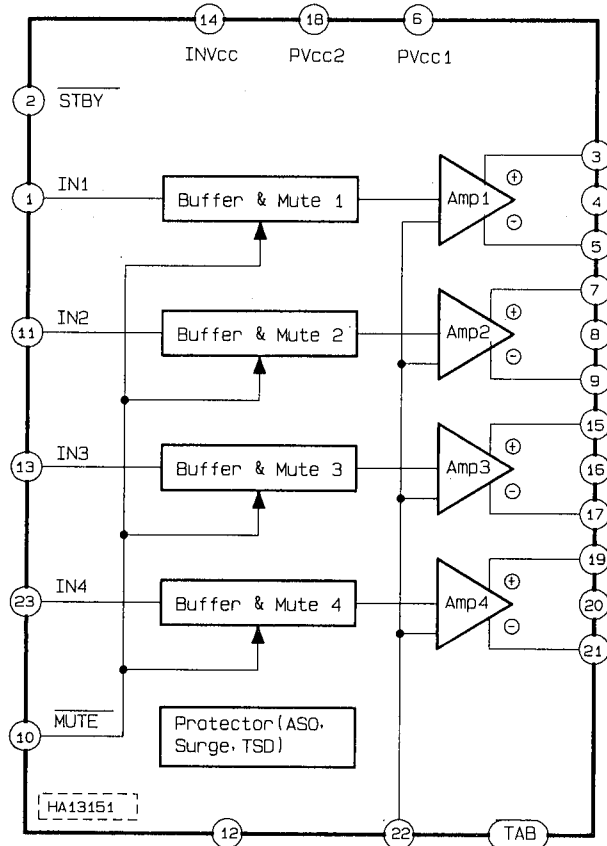


Fig. 5-2

◆ IC910, 911 VC4580L BUFFER AMP.

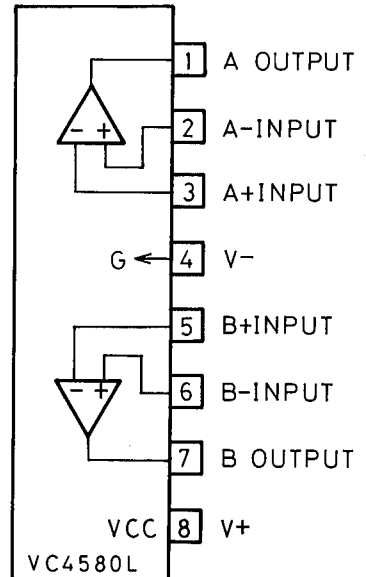


Fig. 5-3

◆ IC510 LA2220 SK (G/GE only)

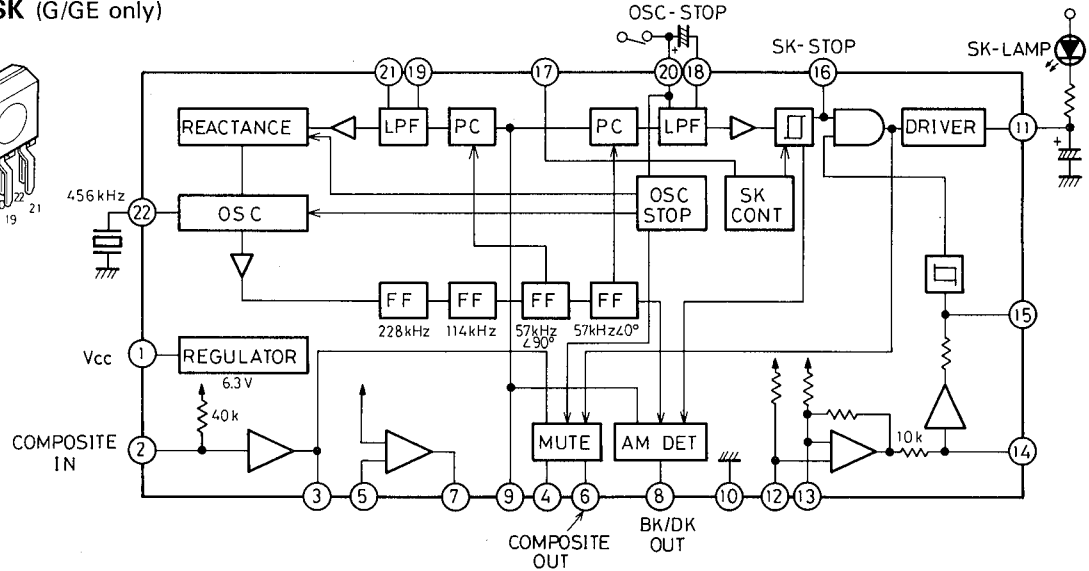
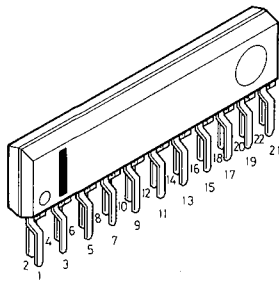


Fig. 5-4

◆ IC550 LA2211 DK (G/GE only)

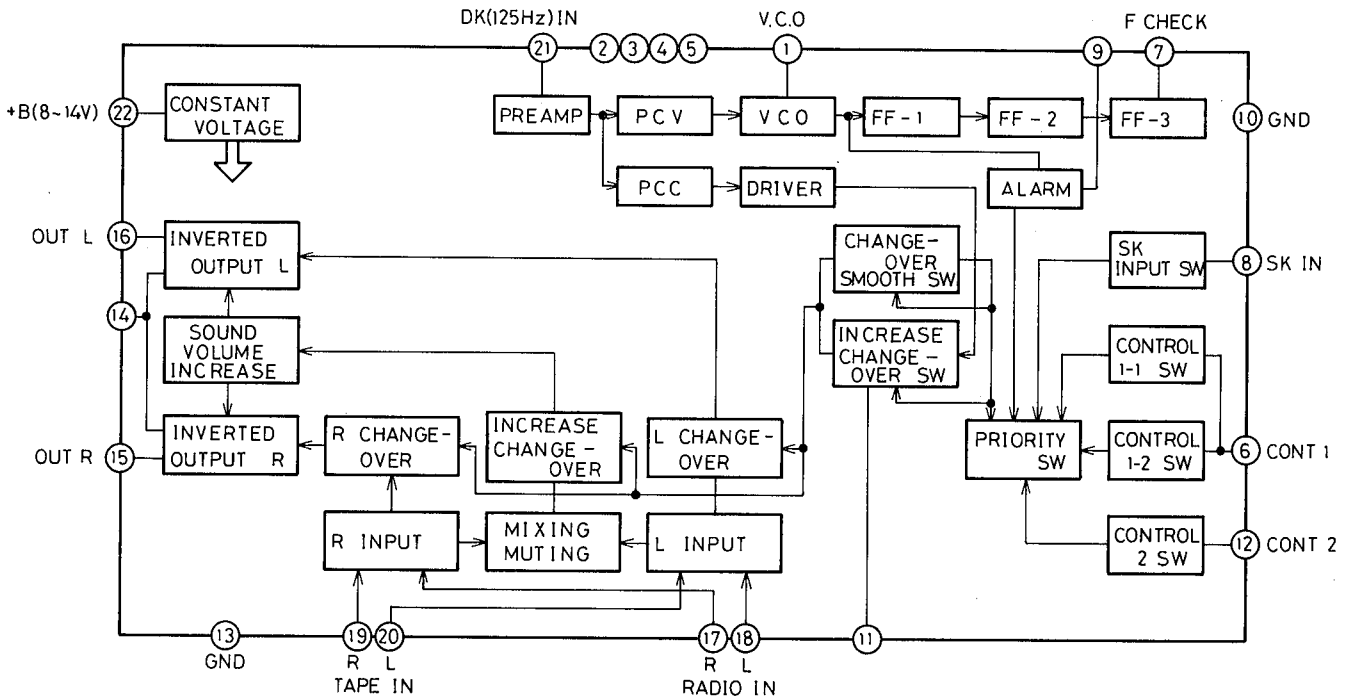
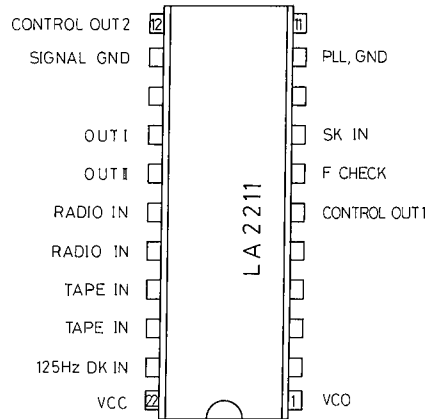


Fig. 5-5

◆ IC1 FM IF LA1140

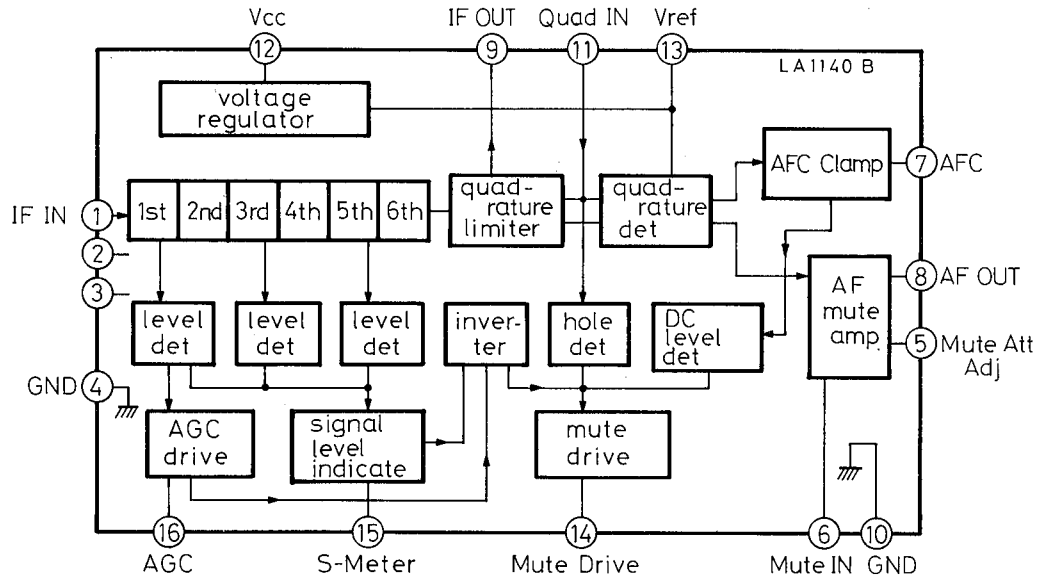


Fig. 5-6

◆ IC51 LA1135



AM TUNER

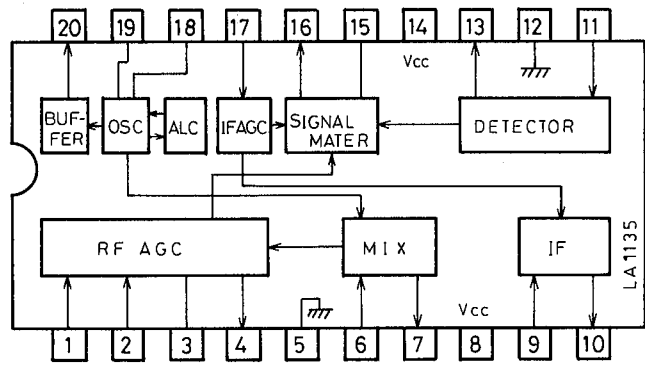


Fig. 5-7

◆ IC141, 241, BA15218N BASS BOOST AMP.

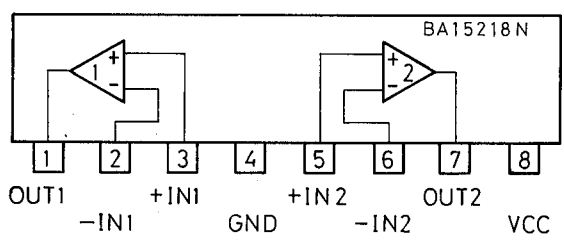
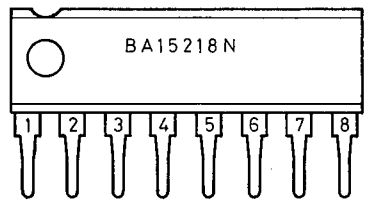


Fig. 5-8

◆ IC901 UPC1228HA

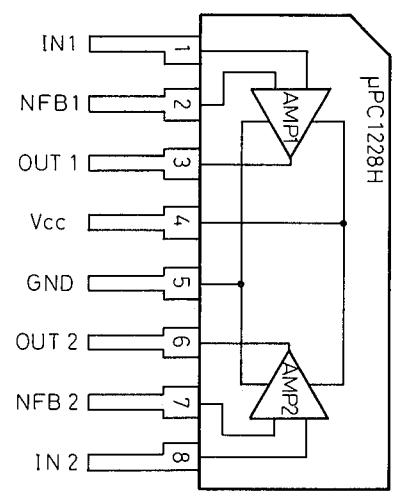


Fig. 5-9



■ Circuit Block Diagram (B/E/GI version)

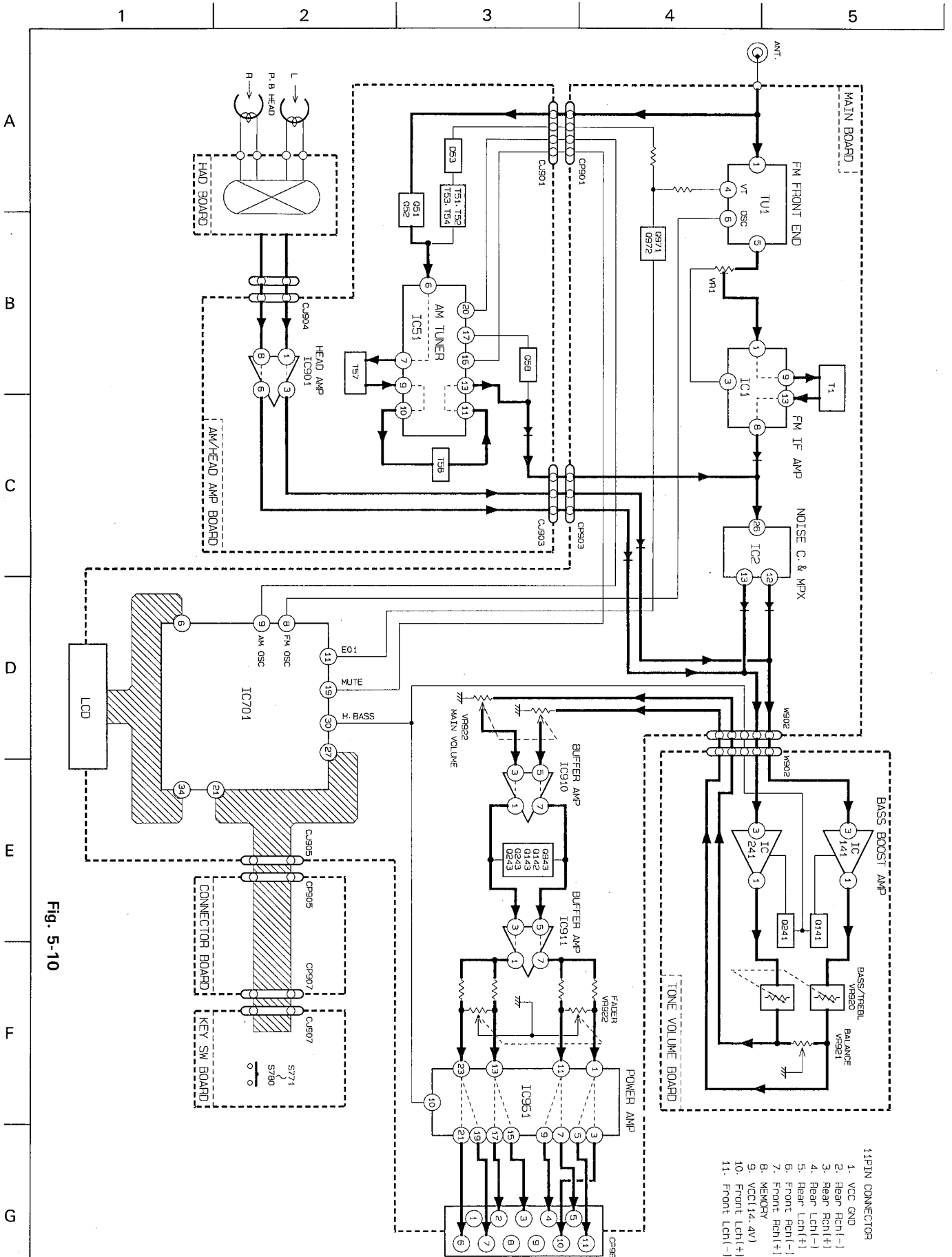


Fig. 5-10









■ SK/DK Circuit (G/GE version)

NOTES  
 1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.  
 CONDITION --- FM MODE  
 2. UNLESS OTHERWISE SPECIFIED,  
 ALL RESISTORS ARE 1/5W 5% CARBON RESISTOR.  
 ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.  
 ALL RESISTANCE VALUES ARE IN OHM(Ω).  
 ALL CAPACITANCE VALUES ARE INμF(μF).  
 ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE / RATED VOLTAGE (V).  
 ALL DIODES ARE 1SS133T  
 (Ⓢ) --- MLAR CAPACITOR

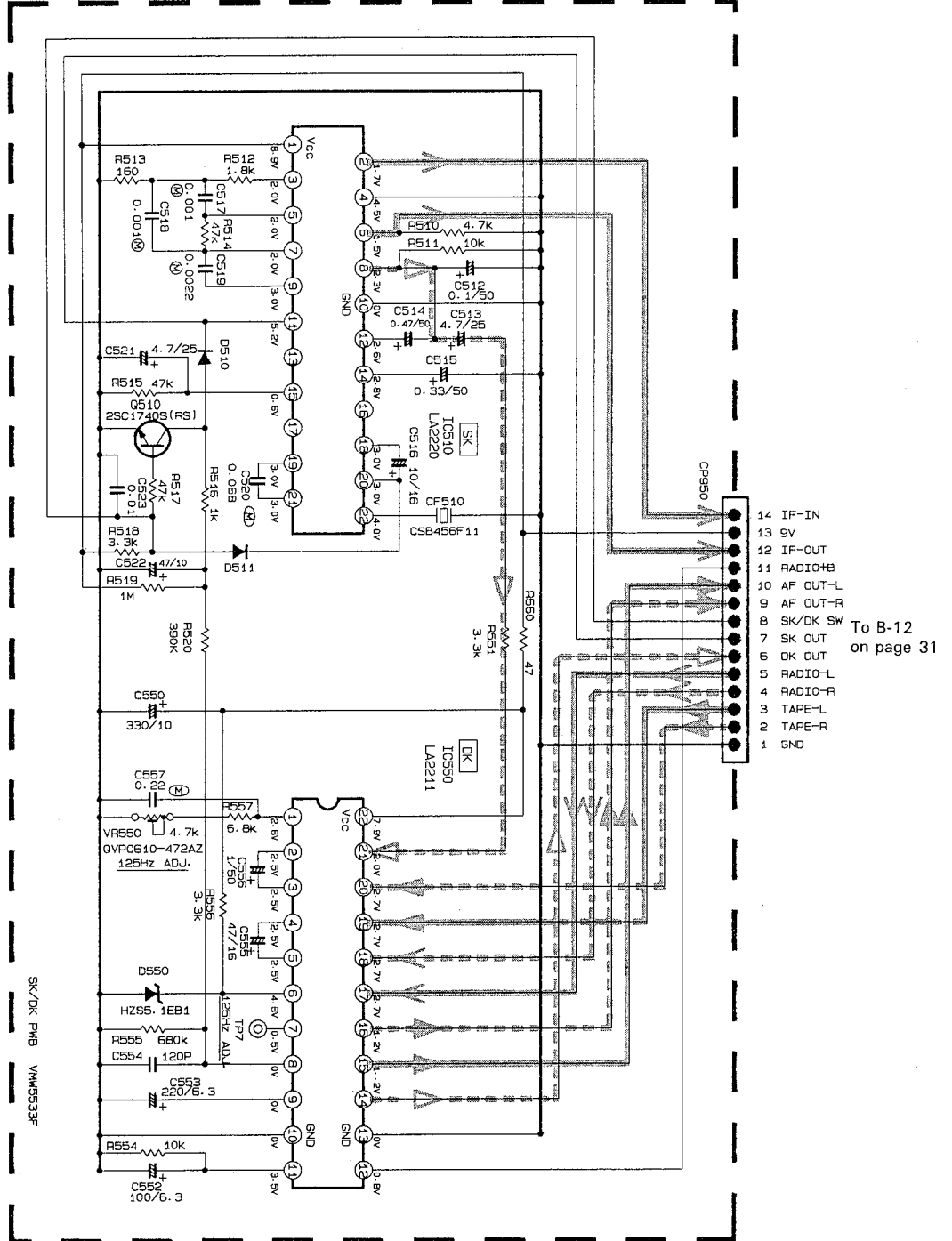
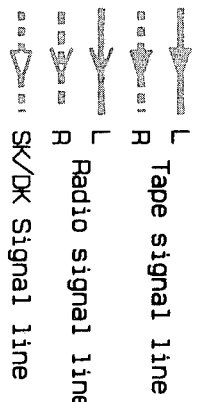
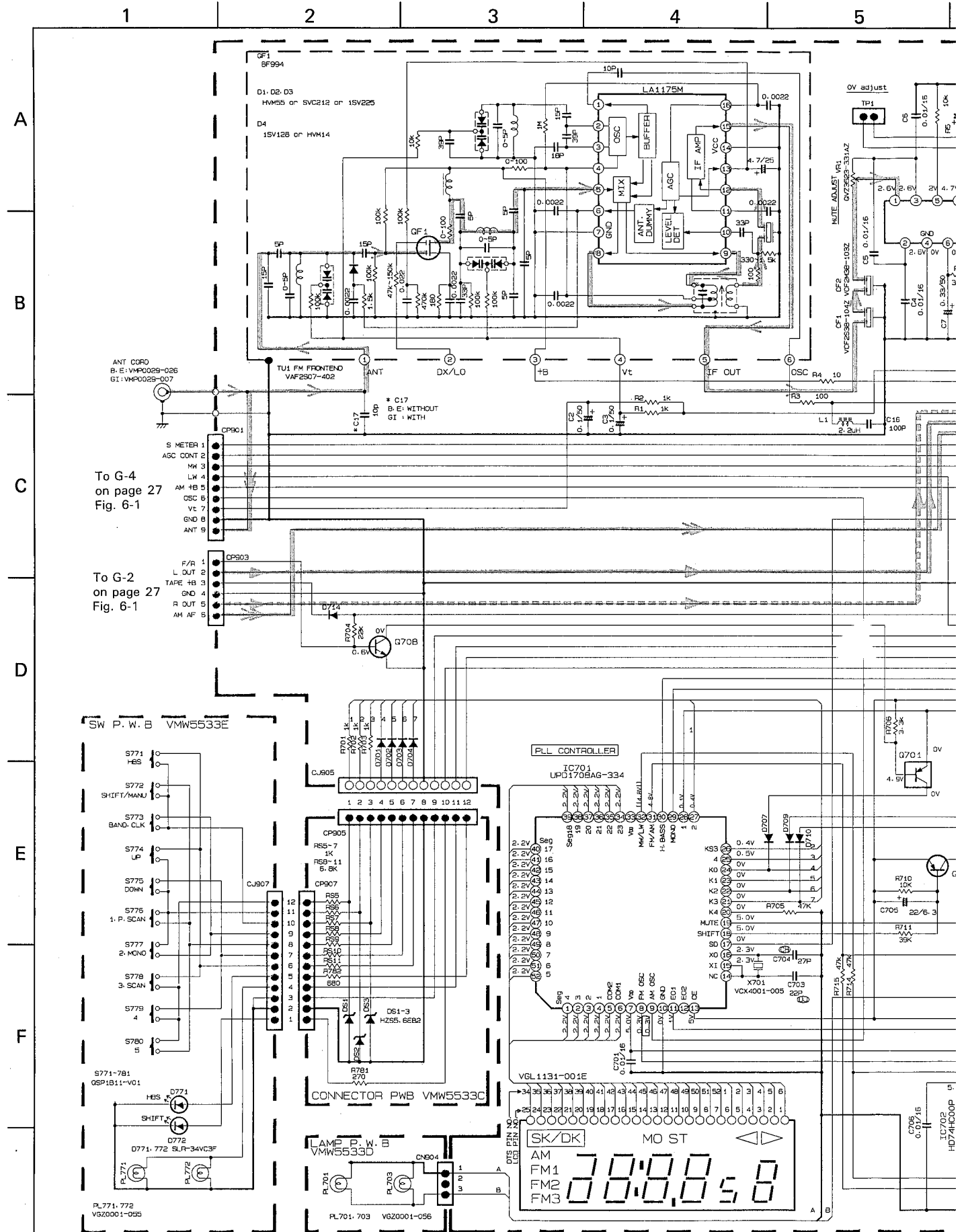


Fig. 6-2



Note  
 VDH3494-003TX

Amplifier Circuit (1/2) (B/E/GI version)



Note  
VDH3494-002RV

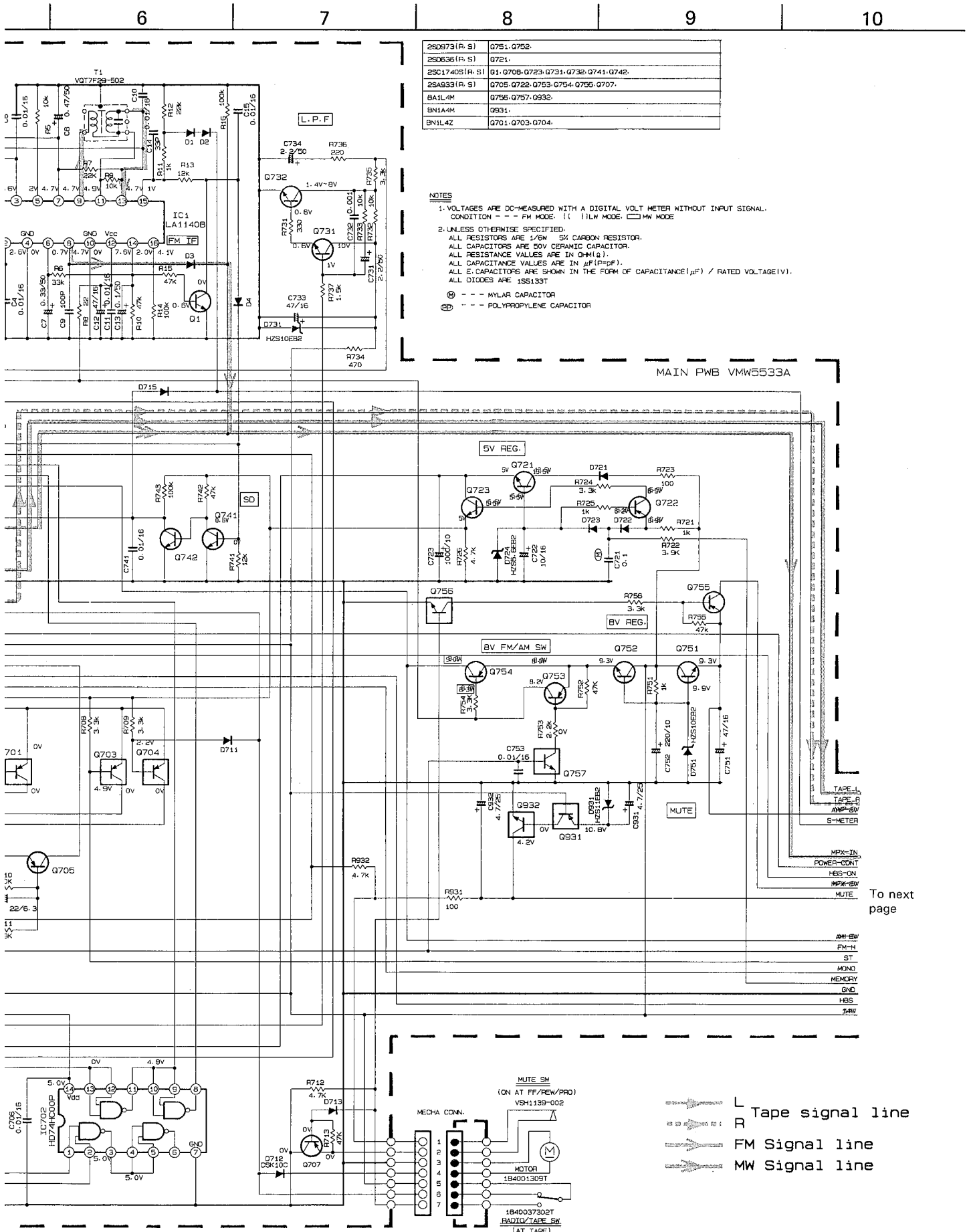


Fig. 6-3

■ Amplifier Circuit (2/2) (B/E/GI version)

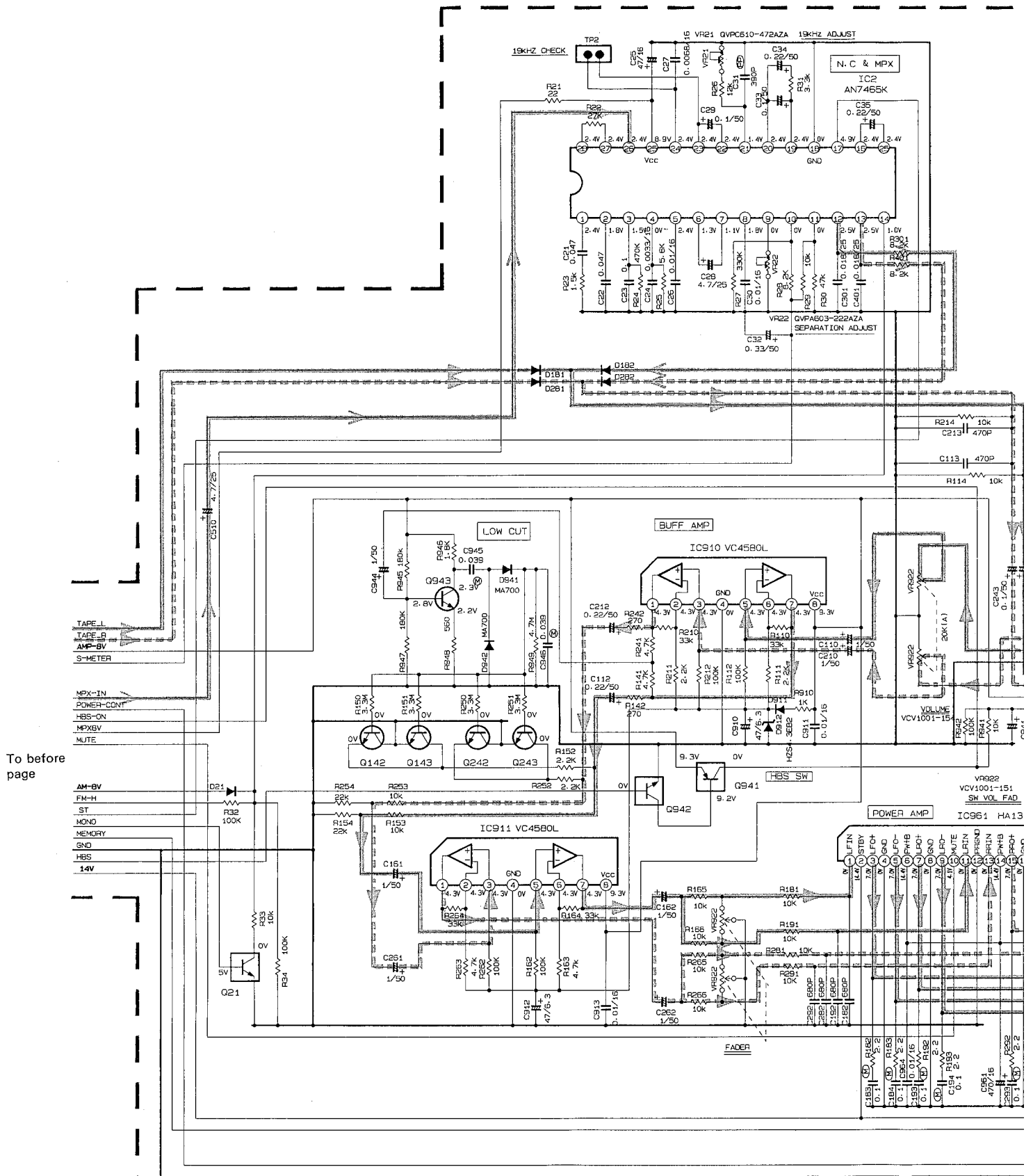
11

12

13

14

15

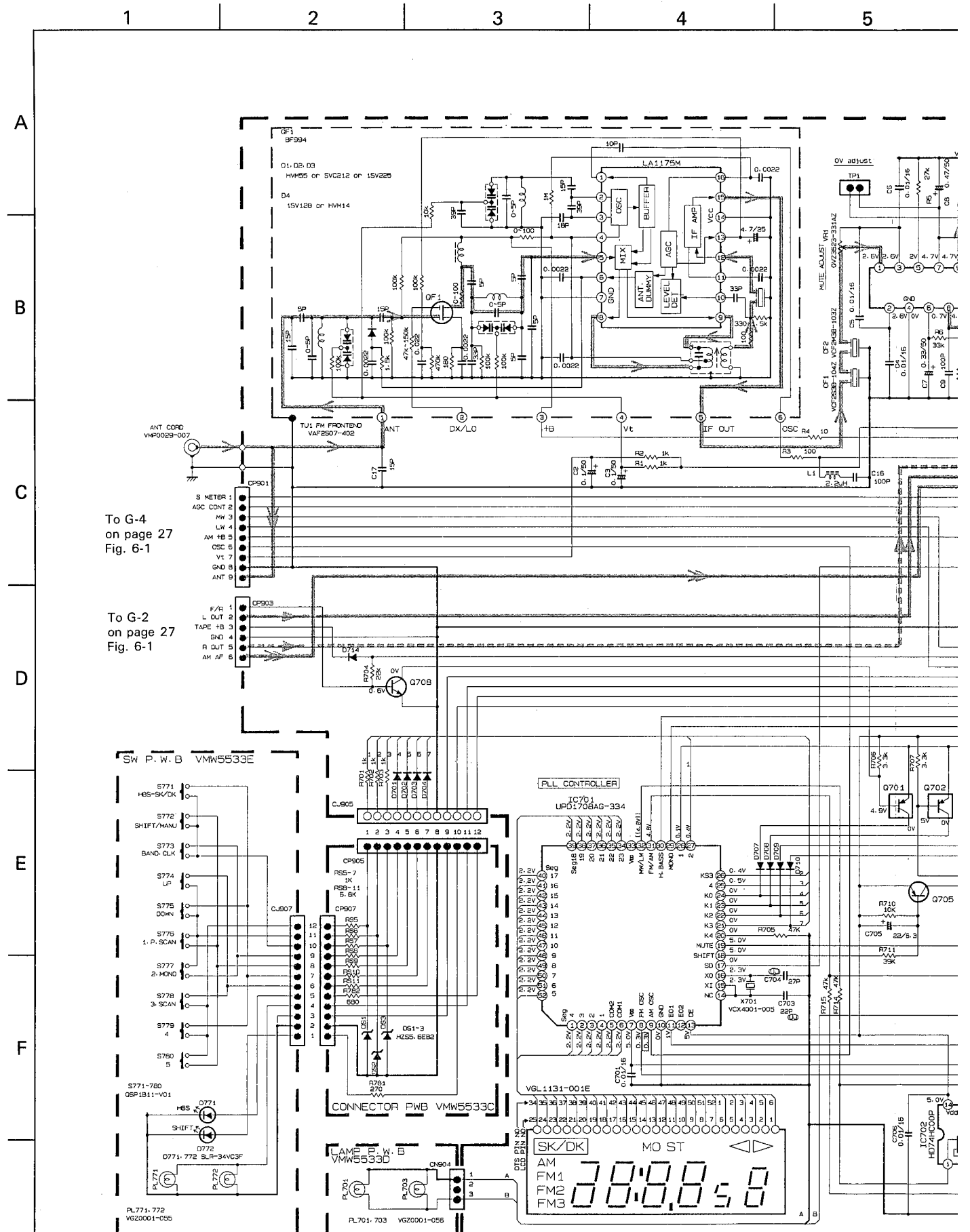


Note VDH3494-002AV

Fig. 6-4



Amplifier Circuit (1/2) (G/GE version)



To G-4 on page 27 Fig. 6-1

To G-2 on page 27 Fig. 6-1

Note VDH3494-003RV

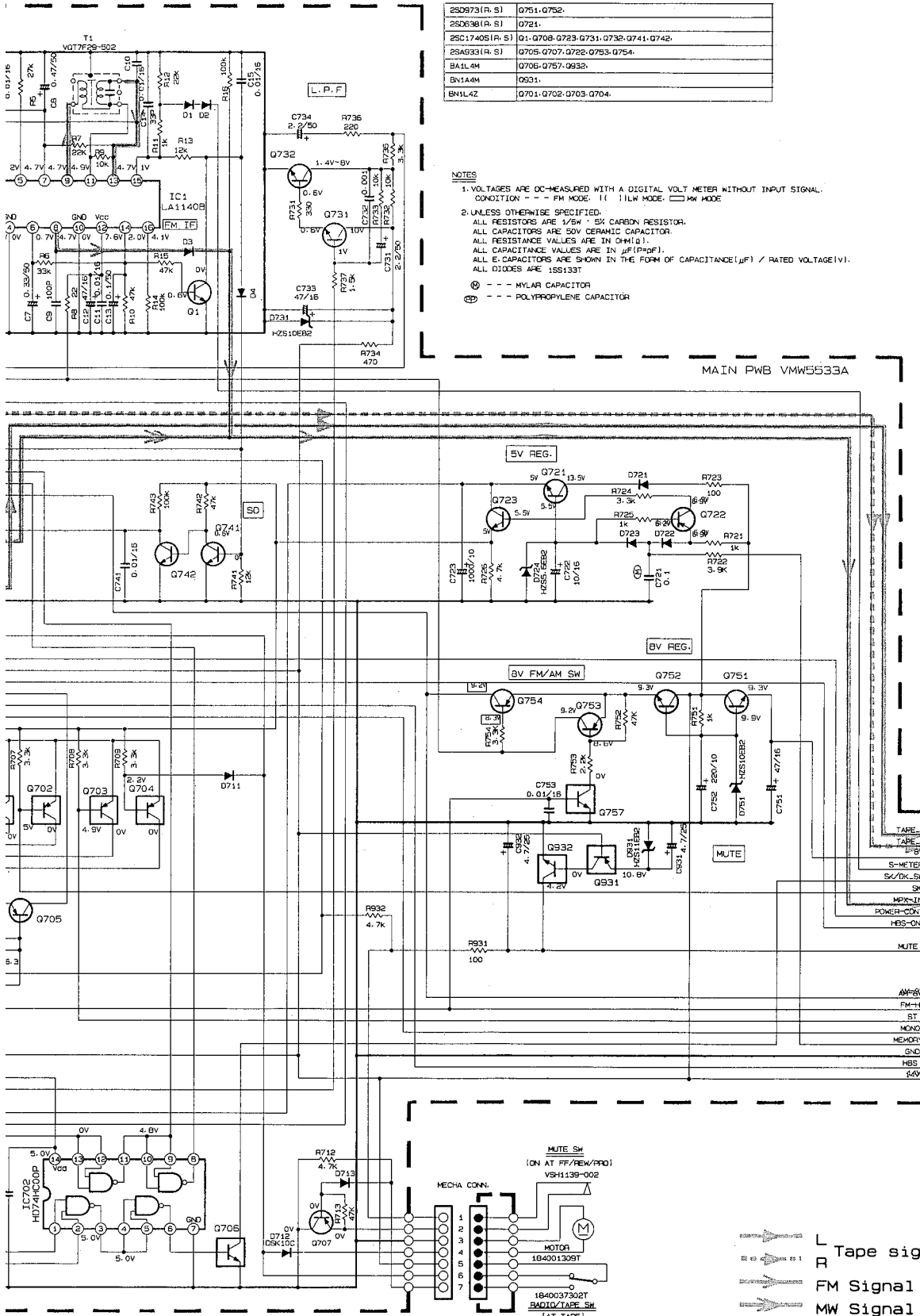


Fig. 6-5

■ Amplifier Circuit (2/2) (G/GE version)

11

12

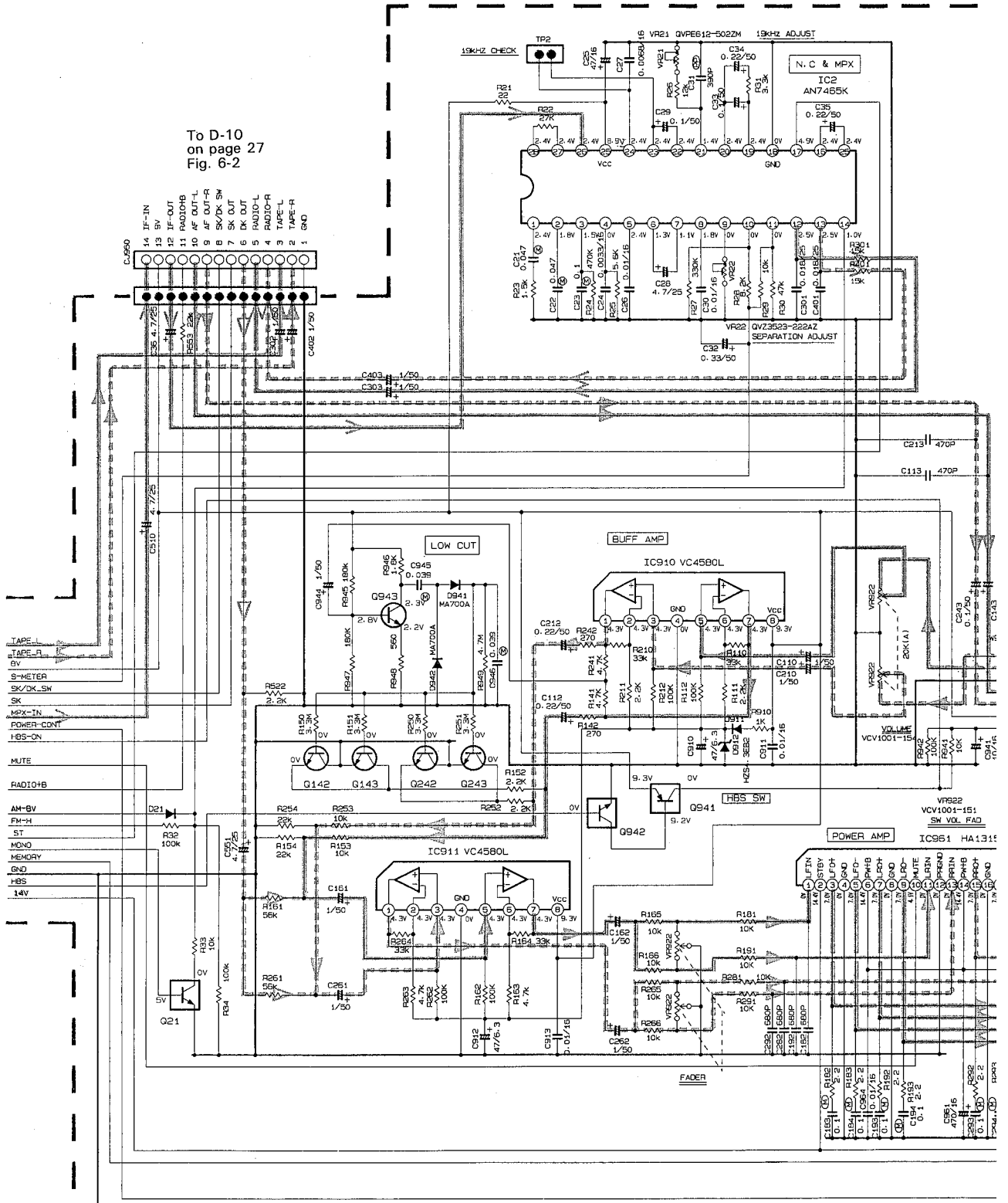
13

14

15

To D-10  
on page 27  
Fig. 6-2

To before  
page



Note  
VDHN3494-003AV

Fig. 6-6

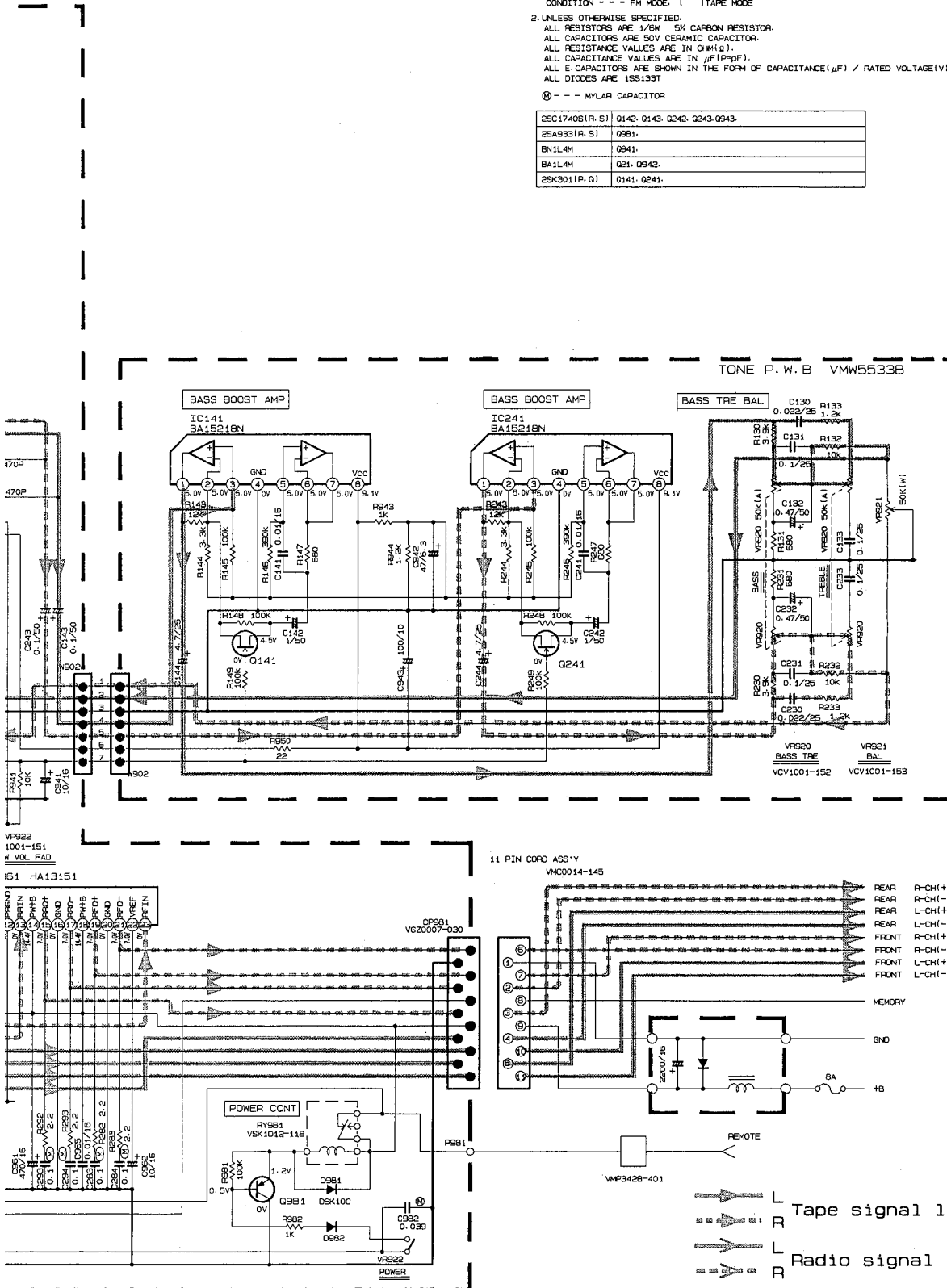


**NOTES**

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.  
CONDITION - - - FM MODE. ( ) TARE MODE
2. UNLESS OTHERWISE SPECIFIED:  
ALL RESISTORS ARE 1/8W 5% CARBON RESISTOR.  
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHMS( $\Omega$ ).  
ALL CAPACITANCE VALUES ARE IN  $\mu$ F( $\mu$ F).  
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE( $\mu$ F) / RATED VOLTAGE(V).  
ALL DIODES ARE 1SS133T

Ⓞ - - - MYLAR CAPACITOR

|                |                               |
|----------------|-------------------------------|
| 2SC1740S(R. S) | Q142, Q143, Q242, Q243, Q243. |
| 2SA933(R. S)   | Q9B1.                         |
| BN1L4M         | Q9A1.                         |
| BA1L4M         | Q21, Q9A2.                    |
| 2SK3011(P. Q)  | Q141, Q241.                   |



A

B

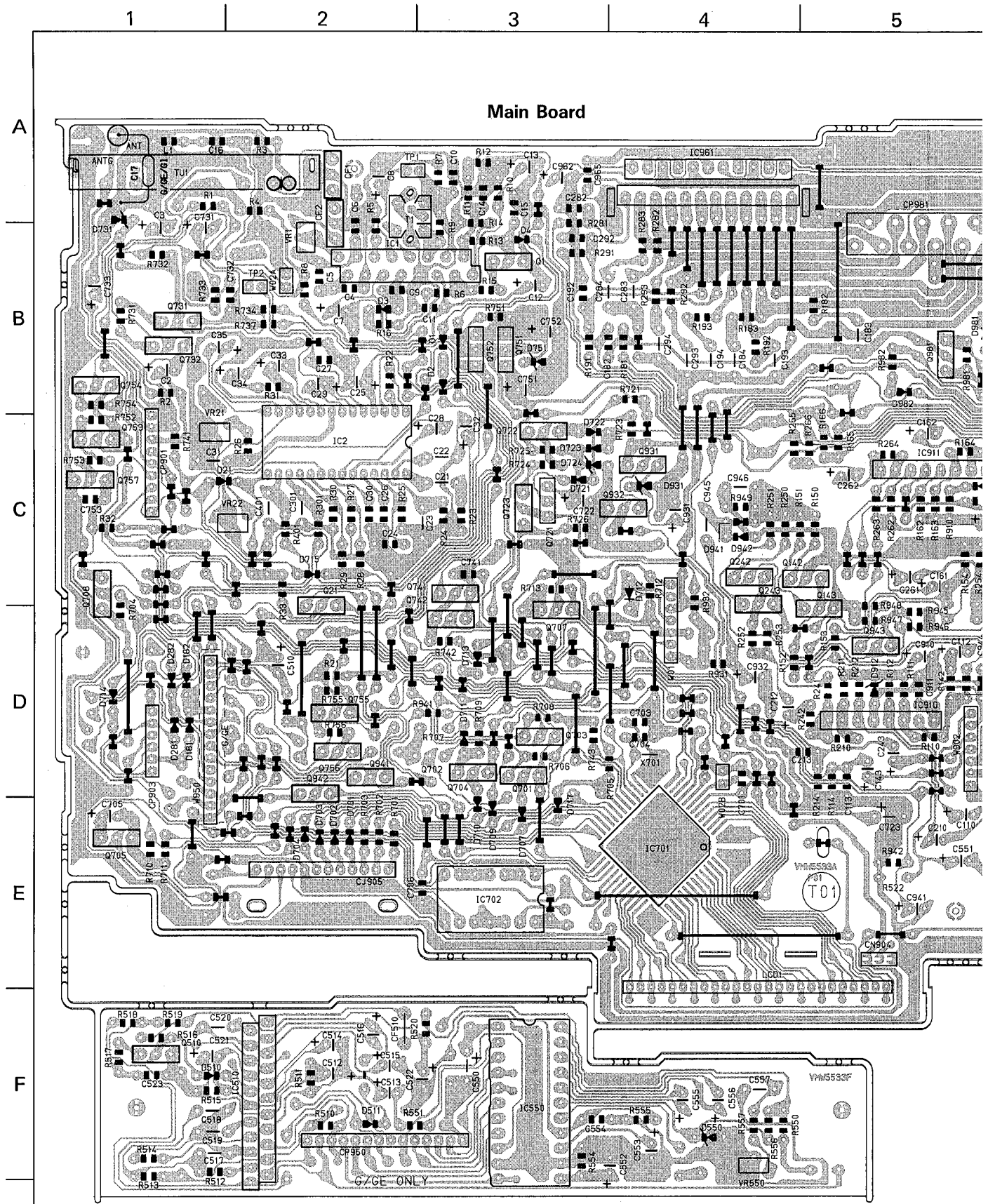
C

D

E

F

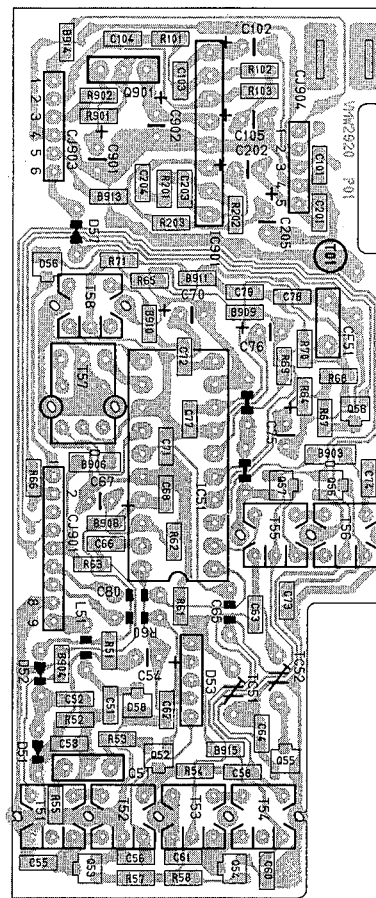
# 7 Location of P.C. Board Parts and Parts List



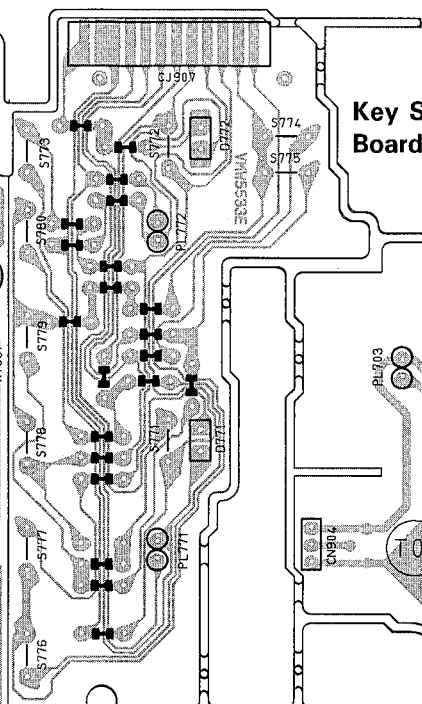
SK/DK Board (G/GE version only)

Fig. 7-1

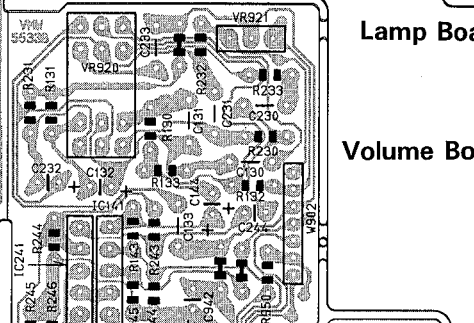
AM Board



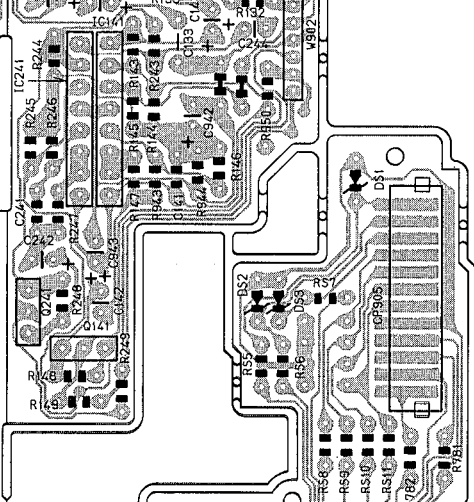
Key Switch Board



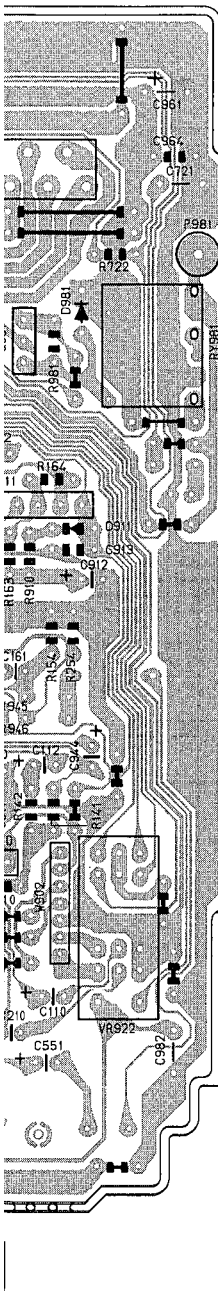
Lamp Board



Volume Board



Connector Board





• Main P.C. Board Parts List

BLOCK NO. 01111111

| REF.  | PARTS NO.     | PARTS NAME     | REMARKS        | SUFFIX |
|-------|---------------|----------------|----------------|--------|
| C 213 | QCB11HK-471Y  | C.CAPACITOR    | 470PF 10% 50V  |        |
| C 230 | QCC11EM-223V  | C.CAPACITOR    | .022MF 20% 25V |        |
| C 231 | QCC11EM-104V  | C.CAPACITOR    | .10MF 20% 25V  |        |
| C 232 | QEK41HM-474   | E.CAPACITOR    | .47MF 20% 50V  |        |
| C 233 | QCC11EM-104V  | C.CAPACITOR    | .10MF 20% 25V  |        |
| C 241 | QCVB1CM-103Y  | C.CAPACITOR    | .010MF 20% 16V |        |
| C 242 | QEK41HM-105   | E.CAPACITOR    | 1.0MF 20% 50V  |        |
| C 243 | QER41HM-104M  | E.CAPACITOR    | .10MF 20% 50V  |        |
| C 244 | QEK41EM-475   | E.CAPACITOR    | 4.7MF 20% 25V  |        |
| C 261 | QEK41HM-105   | E.CAPACITOR    | 1.0MF 20% 50V  |        |
| C 262 | QER41HM-105VM | E.CAPACITOR    | 1.0MF 20% 50V  |        |
| C 283 | QCB11HK-681Y  | C.CAPACITOR    | 680PF 10% 50V  |        |
| C 283 | QFV41HJ-104   | FILM CAPACITOR | .10MF 5% 50V   |        |
| C 284 | QFV41HJ-104   | FILM CAPACITOR | .10MF 5% 50V   |        |
| C 293 | QFV41HJ-104   | FILM CAPACITOR | 680PF 10% 50V  |        |
| C 293 | QFV41HJ-104   | FILM CAPACITOR | .10MF 5% 50V   |        |
| C 294 | QFV41HJ-104   | FILM CAPACITOR | .10MF 5% 50V   |        |
| C 301 | QCC11EK-183ZV | E.CAPACITOR    | .018MF 10% 25V |        |
| C 302 | QEK41HM-105   | E.CAPACITOR    | 1.0MF 20% 50V  |        |
| C 303 | QEK41HM-105   | E.CAPACITOR    | 1.0MF 20% 50V  |        |
| C 401 | QCC11EK-183ZV | E.CAPACITOR    | .018MF 10% 25V |        |
| C 402 | QEK41HM-105   | E.CAPACITOR    | 1.0MF 20% 50V  |        |
| C 403 | QEK41HM-105   | E.CAPACITOR    | 1.0MF 20% 50V  |        |
| C 510 | QER41EM-475VM | E.CAPACITOR    | 4.7MF 20% 25V  |        |
| C 512 | QEK41HM-104   | E.CAPACITOR    | .10MF 20% 50V  |        |
| C 513 | QEK41EM-475   | E.CAPACITOR    | 4.7MF 20% 25V  |        |
| C 514 | QEK41HM-474   | E.CAPACITOR    | .47MF 20% 50V  |        |
| C 515 | QEK41HM-334   | E.CAPACITOR    | .33MF 20% 50V  |        |
| C 516 | QEK41CM-106   | E.CAPACITOR    | 1000PF 5% 50V  |        |
| C 517 | QFN41HJ-102   | M.CAPACITOR    | 1000PF 5% 50V  |        |
| C 518 | QFN41HJ-102   | M.CAPACITOR    | 1000PF 5% 50V  |        |
| C 519 | QFN41HJ-222   | M.CAPACITOR    | 2200PF 5% 50V  |        |
| C 520 | QFV71HJ-683ZM | FILM CAPACITOR | .088MF 5% 50V  |        |
| C 521 | QER41EM-475VM | E.CAPACITOR    | 4.7MF 20% 25V  |        |
| C 522 | QERF1AM-476ZN | E.CAPACITOR    | 47MF 20% 10V   |        |
| C 523 | QCVB1CM-103Y  | C.CAPACITOR    | .010MF 20% 16V |        |
| C 550 | QETC1AM-337ZN | E.CAPACITOR    | 330MF 20% 10V  |        |
| C 551 | QER41EM-475VM | E.CAPACITOR    | 4.7MF 20% 25V  |        |
| C 552 | QERF0JM-107ZN | E.CAPACITOR    | 100MF 20% 6.3V |        |
| C 553 | QEK40JM-227   | E.CAPACITOR    | 220MF 20% 6.3V |        |
| C 554 | QCB11HK-121Y  | C.CAPACITOR    | 120PF 10% 50V  |        |
| C 555 | QEK41CM-476   | E.CAPACITOR    | 47MF 20% 16V   |        |
| C 556 | QEK41HM-105   | E.CAPACITOR    | 1.0MF 20% 50V  |        |
| C 557 | QFV41HJ-224   | FILM CAPACITOR | .22MF 5% 50V   |        |
| C 701 | QCVB1CM-103Y  | C.CAPACITOR    | .010MF 20% 16V |        |
| C 703 | QCT30UJ-220Y  | C.CAPACITOR    | 22PF 5% 50V    |        |
| C 704 | QCT30UJ-270Y  | C.CAPACITOR    | 27PF 5% 50V    |        |
| C 705 | QER40JM-226   | E.CAPACITOR    | 22MF 20% 6.3V  |        |
| C 706 | QCVB1CM-103Y  | C.CAPACITOR    | .010MF 20% 16V |        |
| C 721 | QFV41HJ-104   | FILM CAPACITOR | .10MF 5% 50V   |        |
| C 722 | QER41CM-106   | E.CAPACITOR    | 10MF 20% 16V   |        |
| C 723 | QETC1AM-108ZN | E.CAPACITOR    | 1000MF 20% 10V |        |
| C 731 | QEK41HM-225   | E.CAPACITOR    | 2.2MF 20% 50V  |        |
| C 732 | QCB11HK-103Y  | C.CAPACITOR    | 1000PF 10% 50V |        |
| C 733 | QEK41CM-476   | E.CAPACITOR    | 47MF 20% 16V   |        |

BLOCK NO. 01111111

| REF.  | PARTS NO.     | PARTS NAME      | REMARKS        | SUFFIX  |
|-------|---------------|-----------------|----------------|---------|
| ANT 1 | VMP0029-026   | ANT SOCKET ASSY |                | B,E     |
| ANT 1 | VMP0029-007   | ANT SOCKET ASSY |                | G,GI,GE |
| C 2   | QER41HM-104M  | E.CAPACITOR     | .10MF 20% 50V  |         |
| C 3   | QEK41HM-104   | E.CAPACITOR     | .10MF 20% 50V  |         |
| C 4   | QCVB1CM-103Y  | C.CAPACITOR     | .010MF 20% 16V |         |
| C 5   | QCVB1CM-103Y  | C.CAPACITOR     | .010MF 20% 16V |         |
| C 6   | QCVB1CM-103Y  | C.CAPACITOR     | .010MF 20% 16V |         |
| C 7   | QER41HM-334VM | E.CAPACITOR     | .33MF 20% 50V  |         |
| C 8   | QEK41HM-474   | E.CAPACITOR     | 4.7MF 20% 50V  |         |
| C 9   | QCB11HK-101Y  | C.CAPACITOR     | 100PF 10% 50V  |         |
| C 10  | QCVB1CM-103Y  | C.CAPACITOR     | .010MF 20% 16V |         |
| C 11  | QCVB1CM-103Y  | C.CAPACITOR     | .010MF 20% 16V |         |
| C 12  | QER41CM-476M  | E.CAPACITOR     | 47MF 20% 16V   |         |
| C 13  | QEK41HM-104   | E.CAPACITOR     | .10MF 20% 50V  |         |
| C 14  | QCS11HJ-330   | C.CAPACITOR     | 33PF 5% 50V    |         |
| C 15  | QCVB1CM-103Y  | C.CAPACITOR     | .010MF 20% 16V |         |
| C 16  | QCB11HK-101Y  | C.CAPACITOR     | 100PF 10% 50V  |         |
| C 17  | QCS11HJ-150   | C.CAPACITOR     | 15PF 5% 50V    |         |
| C 21  | QFV81HJ-473   | FILM CAPACITOR  | .047MF 5% 50V  | G,GE,GI |
| C 22  | QFV81HJ-473   | FILM CAPACITOR  | .047MF 5% 50V  |         |
| C 23  | QFV41HJ-104   | FILM CAPACITOR  | .10MF 5% 50V   |         |
| C 24  | QCVB1CM-332Y  | C.CAPACITOR     | 3300PF 20% 16V |         |
| C 25  | QER41CM-476M  | E.CAPACITOR     | 47MF 20% 16V   |         |
| C 26  | QCVB1CM-103Y  | C.CAPACITOR     | .010MF 20% 16V |         |
| C 27  | QCVB1CM-682Y  | C.CAPACITOR     | 6800PF 20% 16V |         |
| C 28  | QER41EM-475VM | E.CAPACITOR     | 4.7MF 20% 25V  |         |
| C 29  | QER41HM-104M  | E.CAPACITOR     | .10MF 20% 50V  |         |
| C 30  | QCVB1CM-103Y  | C.CAPACITOR     | .010MF 20% 16V |         |
| C 31  | QFP31HJ-391ZM | PP.CAPACITOR    | 390PF 5% 50V   |         |
| C 32  | QER41HM-334VM | E.CAPACITOR     | .33MF 20% 50V  |         |
| C 33  | QER41HM-104M  | E.CAPACITOR     | .10MF 20% 50V  |         |
| C 34  | QER41HM-224VS | E.CAPACITOR     | .22MF 20% 50V  |         |
| C 35  | QER41HM-224VS | E.CAPACITOR     | .22MF 20% 50V  |         |
| C 36  | QER41EM-475VM | E.CAPACITOR     | 4.7MF 20% 25V  |         |
| C 110 | QEK41HM-105   | E.CAPACITOR     | 1.0MF 20% 50V  |         |
| C 112 | QER41HM-224VS | E.CAPACITOR     | .22MF 20% 50V  |         |
| C 113 | QCB11HK-471Y  | C.CAPACITOR     | 470PF 10% 50V  |         |
| C 130 | QCC11EM-223V  | C.CAPACITOR     | .022MF 20% 25V |         |
| C 131 | QCC11EM-104V  | C.CAPACITOR     | .10MF 20% 25V  |         |
| C 132 | QEK41HM-474   | E.CAPACITOR     | .47MF 20% 50V  |         |
| C 133 | QCC11EM-104V  | C.CAPACITOR     | .010MF 20% 25V |         |
| C 141 | QCVB1CM-103Y  | C.CAPACITOR     | .010MF 20% 16V |         |
| C 142 | QEK41HM-105   | E.CAPACITOR     | 1.0MF 20% 50V  |         |
| C 143 | QER41HM-104M  | E.CAPACITOR     | .10MF 20% 50V  |         |
| C 144 | QEK41EM-475   | E.CAPACITOR     | 4.7MF 20% 25V  |         |
| C 161 | QEK41HM-105   | E.CAPACITOR     | 1.0MF 20% 50V  |         |
| C 162 | QER41HM-105VM | E.CAPACITOR     | 1.0MF 20% 50V  |         |
| C 182 | QCB11HK-681Y  | C.CAPACITOR     | 680PF 10% 50V  |         |
| C 183 | QFV41HJ-104   | FILM CAPACITOR  | .10MF 5% 50V   |         |
| C 184 | QFV41HJ-104   | FILM CAPACITOR  | .10MF 5% 50V   |         |
| C 192 | QCB11HK-681Y  | C.CAPACITOR     | 680PF 10% 50V  |         |
| C 193 | QFV41HJ-104   | FILM CAPACITOR  | .10MF 5% 50V   |         |
| C 194 | QFV41HJ-104   | FILM CAPACITOR  | .10MF 5% 50V   |         |
| C 210 | QEK41HM-105   | E.CAPACITOR     | 1.0MF 20% 50V  |         |
| C 212 | QER41HM-224VS | E.CAPACITOR     | .22MF 20% 50V  |         |

BLOCK NO. 01111111

| REF.  | PARTS NO.     | PARTS NAME      | REMARKS | SUFFIX |
|-------|---------------|-----------------|---------|--------|
| D 712 | DSK10C-E      | DIODE           |         |        |
| D 713 | 1SS133        | SI DIODE        |         |        |
| D 714 | 1SS133        | SI DIODE        |         |        |
| D 721 | 1SS133        | SI DIODE        |         |        |
| D 722 | 1SS133        | SI DIODE        |         |        |
| D 723 | 1SS133        | SI DIODE        |         |        |
| D 724 | HZS5.6EB2     | ZENER DIODE     |         |        |
| D 731 | HZS10EB2      | ZENER DIODE     |         |        |
| D 751 | HZS10EB2      | ZENER DIODE     |         |        |
| D 771 | SLR-34VC3F    | LED             |         |        |
| D 911 | 1SS133        | SI DIODE        |         |        |
| D 912 | HZS4.3EB2-T2  | ZENER DIODE     |         |        |
| D 931 | HZS11EB2      | ZENER DIODE     |         |        |
| D 941 | MA700A        | S-B-DIODE       |         |        |
| D 942 | MA700A        | S-B-DIODE       |         |        |
| D 981 | DSK10C-E      | DIODE           |         |        |
| D 982 | 1SS133        | SI DIODE        |         |        |
| DS 1  | HZS5.6EB2     | ZENER DIODE     |         |        |
| DS 2  | HZS5.6EB2     | ZENER DIODE     |         |        |
| DS 3  | HZS5.6EB2     | ZENER DIODE     |         |        |
| IC 1  | LA1140B       | IC              |         |        |
| IC 2  | AN7465K       | IC              |         |        |
| IC141 | BA15218N      | IC              |         |        |
| IC241 | BA15218N      | IC              |         |        |
| IC510 | LA2220        | IC              |         |        |
| IC550 | LA2211        | IC              |         |        |
| IC701 | UPD1708AG-334 | IC              |         |        |
| IC702 | HD74HCOOP     | IC              |         |        |
| IC910 | VC4580L       | IC              |         |        |
| IC911 | VC4580L       | IC              |         |        |
| IC961 | HAI3151       | IC              |         |        |
| L 1   | VRP0018-2R2   | INDUCTOR        |         |        |
| LCD 1 | VGL1131-001E  | LCD             |         |        |
| P 981 | VMP3428-401   | WIRE ASS'Y      |         |        |
| PL701 | VGZ0001-056   | LAMP            |         |        |
| PL703 | VGZ0001-056   | LAMP            |         |        |
| PL771 | VGZ0001-055   | LAMP            |         |        |
| PL772 | VGZ0001-055   | LAMP            |         |        |
| Q 1   | 2SC1740S(R,S) | TRANSISTOR      |         |        |
| Q 21  | BA1L4M        | TRANSISTOR      |         |        |
| Q 141 | 2SK301(P,Q)   | TRANSISTOR(FET) |         |        |
| Q 142 | 2SC1740S(R,S) | TRANSISTOR      |         |        |
| Q 143 | 2SC1740S(R,S) | TRANSISTOR      |         |        |
| Q 241 | 2SK301(P,Q)   | TRANSISTOR(FET) |         |        |
| Q 242 | 2SC1740S(R,S) | TRANSISTOR      |         |        |
| Q 243 | 2SC1740S(R,S) | TRANSISTOR      |         |        |
| Q 510 | 2SC1740S(R,S) | TRANSISTOR      |         |        |
| Q 701 | BM1L47-T      | TRANSISTOR      |         |        |
| Q 702 | BM1L47-T      | TRANSISTOR      |         |        |
| Q 703 | BM1L47-T      | TRANSISTOR      |         |        |
| Q 704 | BM1L47-T      | TRANSISTOR      |         |        |
| Q 705 | 2SA933S(RS)   | TRANSISTOR      |         |        |
| Q 706 | BA1L4M        | TRANSISTOR      |         |        |
| Q 707 | 2SA933S(RS)   | TRANSISTOR      |         |        |

BLOCK NO. 01111111

| REF.  | PARTS NO.      | PARTS NAME     | REMARKS        | SUFFIX |
|-------|----------------|----------------|----------------|--------|
| C 734 | QEK41HM-225    | E-CAPACITOR    | 2.2MF 20% 50V  |        |
| C 741 | QCVB1CM-103Y   | C-CAPACITOR    | .010MF 20% 16V |        |
| C 751 | QER41CM-476M   | E-CAPACITOR    | 47MF 20% 16V   |        |
| C 752 | QERF1AM-227ZM  | E-CAPACITOR    | 220MF 20% 10V  |        |
| C 753 | QCVB1CM-103Y   | C-CAPACITOR    | .010MF 20% 16V |        |
| C 910 | QEK40JM-476    | E-CAPACITOR    | 47MF 20% 6.3V  |        |
| C 911 | QCVB1CM-103Y   | C-CAPACITOR    | .010MF 20% 16V |        |
| C 912 | QEK40JM-476    | E-CAPACITOR    | 47MF 20% 6.3V  |        |
| C 913 | QCVB1CM-103Y   | C-CAPACITOR    | .010MF 20% 16V |        |
| C 931 | QER41EM-475VM  | E-CAPACITOR    | 4.7MF 20% 25V  |        |
| C 932 | QER41EM-475VM  | E-CAPACITOR    | 4.7MF 20% 25V  |        |
| C 941 | QER41CM-106    | E-CAPACITOR    | 10MF 20% 16V   |        |
| C 942 | QEK40JM-476    | E-CAPACITOR    | 47MF 20% 6.3V  |        |
| C 943 | QEKF1AM-107ZN  | E-CAPACITOR    | 100MF 20% 10V  |        |
| C 944 | QEK41HM-105    | E-CAPACITOR    | 1.0MF 20% 50V  |        |
| C 945 | QEV11HJ-393AZM | FILM CAPACITOR | .039MF 5% 50V  |        |
| C 946 | QEV11HJ-393AZM | FILM CAPACITOR | .039MF 5% 50V  |        |
| C 961 | QETC1CM-477ZN  | E-CAPACITOR    | 470MF 20% 16V  |        |
| C 962 | QEK41CM-106    | E-CAPACITOR    | 10MF 20% 16V   |        |
| C 964 | QCVB1CM-103Y   | C-CAPACITOR    | .010MF 20% 16V |        |
| C 965 | QCVB1CM-103Y   | C-CAPACITOR    | .010MF 20% 16V |        |
| C 982 | QEV11HJ-393AZM | FILM CAPACITOR | .039MF 5% 50V  |        |
| CF 1  | VCF2S3B-104Z   | CERAMIC FILTER |                |        |
| CF 2  | VCF2M3B-103    | CERAMIC FILTER |                |        |
| CF510 | CSB456F11      | CERA LOCK      |                | G-GE   |
| CJ905 | VMC0232-S12    | CONNECTOR      |                |        |
| CJ907 | VMC0259-002    | CONNECTOR      |                |        |
| CN904 | VMC0198-003    | CONNECTOR      |                |        |
| CP901 | VMC0135-009    | CONNECTOR      |                |        |
| CP903 | VMC0135-006    | CONNECTOR      |                |        |
| CP905 | VMC0232-Q12    | CONNECTOR      |                |        |
| CP907 | VMC0278-002    | CONNECTOR      |                |        |
| CP950 | TKLL-014-M     | CONNECTOR      |                | G-GE   |
| CP981 | VGZ0007-030    | FEED THROUGH   |                |        |
| D 1   | 1SS133         | SI DIODE       |                |        |
| D 2   | 1SS133         | SI DIODE       |                |        |
| D 3   | 1SS133         | SI DIODE       |                |        |
| D 4   | 1SS133         | SI DIODE       |                |        |
| D 21  | 1SS133         | SI DIODE       |                |        |
| D 181 | 1SS133         | SI DIODE       |                |        |
| D 182 | 1SS133         | SI DIODE       |                |        |
| D 281 | 1SS133         | SI DIODE       |                |        |
| D 282 | 1SS133         | SI DIODE       |                |        |
| D 510 | 1SS133         | SI DIODE       |                |        |
| D 511 | 1SS133         | SI DIODE       |                |        |
| D 550 | HZS5.1EB1      | ZENER DIODE    |                |        |
| D 701 | 1SS133         | SI DIODE       |                |        |
| D 702 | 1SS133         | SI DIODE       |                |        |
| D 703 | 1SS133         | SI DIODE       |                |        |
| D 704 | 1SS133         | SI DIODE       |                |        |
| D 707 | 1SS133         | SI DIODE       |                |        |
| D 708 | 1SS133         | SI DIODE       |                |        |
| D 709 | 1SS133         | SI DIODE       |                |        |
| D 710 | 1SS133         | SI DIODE       |                |        |
| D 711 | 1SS133         | SI DIODE       |                |        |

BLOCK NO. 01

| REF.  | PARTS NO.     | PARTS NAME      | REMARKS      | SUFFIX |
|-------|---------------|-----------------|--------------|--------|
| R 132 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 133 | QRD161J-122   | CARBON RESISTOR | 1.2K 5% 1/6W |        |
| R 141 | QRD161J-472   | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 142 | QRD161J-271   | CARBON RESISTOR | 270 5% 1/6W  |        |
| R 143 | QRD161J-123   | CARBON RESISTOR | 12K 5% 1/6W  |        |
| R 144 | QRD167J-332   | CARBON RESISTOR | 3.3K 5% 1/6W |        |
| R 145 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 146 | QRD161J-394   | CARBON RESISTOR | 390K 5% 1/6W |        |
| R 147 | QRD161J-681   | CARBON RESISTOR | 680 5% 1/6W  |        |
| R 148 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 149 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 150 | QRD161J-335YT | CARBON RESISTOR | 3.3M 5% 1/6W |        |
| R 151 | QRD161J-335YT | CARBON RESISTOR | 3.3M 5% 1/6W |        |
| R 152 | QRD161J-222   | CARBON RESISTOR | 2.2K 5% 1/6W |        |
| R 153 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 154 | QRD161J-223   | CARBON RESISTOR | 22K 5% 1/6W  |        |
| R 161 | QRD161J-563   | CARBON RESISTOR | 56K 5% 1/6W  |        |
| R 162 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 163 | QRD161J-472   | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 164 | QRD161J-333   | CARBON RESISTOR | 33K 5% 1/6W  |        |
| R 165 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 166 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 181 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 182 | QRD161J-2R2   | CARBON RESISTOR | 2.2 5% 1/6W  |        |
| R 183 | QRD161J-2R2   | CARBON RESISTOR | 2.2 5% 1/6W  |        |
| R 191 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 192 | QRD161J-2R2   | CARBON RESISTOR | 2.2 5% 1/6W  |        |
| R 193 | QRD161J-2R2   | CARBON RESISTOR | 2.2 5% 1/6W  |        |
| R 200 | QRD161J-392   | CARBON RESISTOR | 39K 5% 1/6W  |        |
| R 201 | QRD161J-333   | CARBON RESISTOR | 33K 5% 1/6W  |        |
| R 211 | QRD161J-222   | CARBON RESISTOR | 2.2K 5% 1/6W |        |
| R 212 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 214 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 230 | QRD161J-392   | CARBON RESISTOR | 3.9K 5% 1/6W |        |
| R 231 | QRD161J-681   | CARBON RESISTOR | 680 5% 1/6W  |        |
| R 232 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 253 | QRD161J-122   | CARBON RESISTOR | 1.2K 5% 1/6W |        |
| R 254 | QRD161J-472   | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 255 | QRD161J-271   | CARBON RESISTOR | 270 5% 1/6W  |        |
| R 256 | QRD161J-123   | CARBON RESISTOR | 12K 5% 1/6W  |        |
| R 244 | QRD167J-332   | CARBON RESISTOR | 3.3K 5% 1/6W |        |
| R 245 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 246 | QRD161J-394   | CARBON RESISTOR | 390K 5% 1/6W |        |
| R 247 | QRD161J-681   | CARBON RESISTOR | 680 5% 1/6W  |        |
| R 248 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 249 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 251 | QRD161J-335YT | CARBON RESISTOR | 3.3M 5% 1/6W |        |
| R 252 | QRD161J-222   | CARBON RESISTOR | 2.2K 5% 1/6W |        |
| R 253 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 254 | QRD161J-223   | CARBON RESISTOR | 22K 5% 1/6W  |        |
| R 262 | QRD161J-563   | CARBON RESISTOR | 56K 5% 1/6W  |        |
| R 263 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 264 | QRD161J-472   | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 285 | QRD161J-333   | CARBON RESISTOR | 33K 5% 1/6W  |        |
| R 286 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |

BLOCK NO. 01

| REF.  | PARTS NO.     | PARTS NAME      | REMARKS      | SUFFIX |
|-------|---------------|-----------------|--------------|--------|
| Q 708 | 25C1740S(R,S) | TRANSISTOR      |              |        |
| Q 721 | 25D638(R,S)   | TRANSISTOR      |              |        |
| Q 722 | 25A933S(RS)   | TRANSISTOR      |              |        |
| Q 733 | 25C1740S(R,S) | TRANSISTOR      |              |        |
| Q 731 | 25C1740S(R,S) | TRANSISTOR      |              |        |
| Q 732 | 25C1740S(R,S) | TRANSISTOR      |              |        |
| Q 741 | 25C1740S(R,S) | TRANSISTOR      |              |        |
| Q 742 | 25C1740S(R,S) | TRANSISTOR      |              |        |
| Q 751 | 25D975        | TRANSISTOR      |              |        |
| Q 752 | 25D973        | TRANSISTOR      |              |        |
| Q 753 | 25A933S(RS)   | TRANSISTOR      |              |        |
| Q 754 | 25A933S(RS)   | TRANSISTOR      |              |        |
| Q 757 | B41L4M        | TRANSISTOR      |              |        |
| Q 931 | B41A4M        | TRANSISTOR      |              |        |
| Q 932 | B41L4M        | TRANSISTOR      |              |        |
| Q 941 | B41L4M        | TRANSISTOR      |              |        |
| Q 942 | B41L4M        | TRANSISTOR      |              |        |
| Q 943 | 25C1740S(R,S) | TRANSISTOR      |              |        |
| Q 981 | 25A933S(RS)   | TRANSISTOR      |              |        |
| R 1   | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 2   | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 3   | QRD161J-101   | CARBON RESISTOR | 100 5% 1/6W  |        |
| R 4   | QRD161J-100   | CARBON RESISTOR | 10 5% 1/6W   |        |
| R 5   | QRD161J-273   | CARBON RESISTOR | 27K 5% 1/6W  |        |
| R 6   | QRD161J-333   | CARBON RESISTOR | 33K 5% 1/6W  |        |
| R 7   | QRD161J-223   | CARBON RESISTOR | 22K 5% 1/6W  |        |
| R 8   | QRD161J-220   | CARBON RESISTOR | 22 5% 1/6W   |        |
| R 9   | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 10  | QRD161J-473   | CARBON RESISTOR | 47K 5% 1/6W  |        |
| R 11  | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 12  | QRD161J-223   | CARBON RESISTOR | 22K 5% 1/6W  |        |
| R 13  | QRD161J-123   | CARBON RESISTOR | 12K 5% 1/6W  |        |
| R 14  | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 15  | QRD161J-473   | CARBON RESISTOR | 47K 5% 1/6W  |        |
| R 16  | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 21  | QRD161J-222   | CARBON RESISTOR | 22 5% 1/6W   |        |
| R 22  | QRD161J-273   | CARBON RESISTOR | 27K 5% 1/6W  |        |
| R 23  | QRD161J-152   | CARBON RESISTOR | 1.5K 5% 1/6W |        |
| R 24  | QRD161J-474   | CARBON RESISTOR | 470K 5% 1/6W |        |
| R 25  | QRD167J-562   | CARBON RESISTOR | 5.6K 5% 1/6W |        |
| R 26  | QRD161J-123   | CARBON RESISTOR | 12K 5% 1/6W  |        |
| R 27  | QRD161J-334   | CARBON RESISTOR | 330K 5% 1/6W |        |
| R 28  | QRD161J-822   | CARBON RESISTOR | 8.2K 5% 1/6W |        |
| R 29  | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 30  | QRD161J-473   | CARBON RESISTOR | 47K 5% 1/6W  |        |
| R 31  | QRD167J-332   | CARBON RESISTOR | 3.3K 5% 1/6W |        |
| R 32  | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 33  | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 34  | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 110 | QRD161J-333   | CARBON RESISTOR | 33K 5% 1/6W  |        |
| R 111 | QRD161J-222   | CARBON RESISTOR | 2.2K 5% 1/6W |        |
| R 112 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 114 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 130 | QRD161J-392   | CARBON RESISTOR | 3.9K 5% 1/6W |        |
| R 131 | QRD161J-681   | CARBON RESISTOR | 680 5% 1/6W  |        |

BLOCK NO. 01111111

| REF.  | PARTS NO.   | PARTS NAME      | REMARKS      | SUFFIX |
|-------|-------------|-----------------|--------------|--------|
| R 266 | QRD161J-103 | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 281 | QRD161J-103 | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 282 | QRD161J-2R2 | CARBON RESISTOR | 2.2 5% 1/6W  |        |
| R 283 | QRD161J-2R2 | CARBON RESISTOR | 2.2 5% 1/6W  |        |
| R 291 | QRD161J-103 | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 292 | QRD161J-2R2 | CARBON RESISTOR | 2.2 5% 1/6W  |        |
| R 293 | QRD161J-2R2 | CARBON RESISTOR | 2.2 5% 1/6W  |        |
| R 301 | QRD161J-153 | CARBON RESISTOR | 15K 5% 1/6W  | G.GE   |
| R 301 | QRD161J-822 | CARBON RESISTOR | 8.2K 5% 1/6W | B.E.GI |
| R 401 | QRD161J-822 | CARBON RESISTOR | 8.2K 5% 1/6W | B.E.GI |
| R 401 | QRD161J-153 | CARBON RESISTOR | 15K 5% 1/6W  | G.GE   |
| R 510 | QRD161J-472 | CARBON RESISTOR | 4.7K 5% 1/6W | G.GE   |
| R 511 | QRD161J-103 | CARBON RESISTOR | 10K 5% 1/6W  | G.GE   |
| R 512 | QRD161J-182 | CARBON RESISTOR | 1.8K 5% 1/6W | G.GE   |
| R 513 | QRD161J-161 | CARBON RESISTOR | 1.6K 5% 1/6W | G.GE   |
| R 514 | QRD161J-473 | CARBON RESISTOR | 4.7K 5% 1/6W | G.GE   |
| R 515 | QRD161J-473 | CARBON RESISTOR | 4.7K 5% 1/6W | G.GE   |
| R 516 | QRD161J-102 | CARBON RESISTOR | 1.0K 5% 1/6W | G.GE   |
| R 517 | QRD161J-473 | CARBON RESISTOR | 4.7K 5% 1/6W | G.GE   |
| R 518 | QRD161J-332 | CARBON RESISTOR | 3.3K 5% 1/6W | G.GE   |
| R 519 | QRD161J-105 | CARBON RESISTOR | 1.0M 5% 1/6W | G.GE   |
| R 520 | QRD161J-394 | CARBON RESISTOR | 390K 5% 1/6W | G.GE   |
| R 522 | QRD161J-472 | CARBON RESISTOR | 4.7K 5% 1/6W | G.GE   |
| R 550 | QRD161J-470 | CARBON RESISTOR | 4.7K 5% 1/6W | G.GE   |
| R 551 | QRD161J-332 | CARBON RESISTOR | 3.3K 5% 1/6W | G.GE   |
| R 553 | QRD161J-223 | CARBON RESISTOR | 22K 5% 1/6W  | G.GE   |
| R 554 | QRD161J-103 | CARBON RESISTOR | 10K 5% 1/6W  | G.GE   |
| R 555 | QRD161J-684 | CARBON RESISTOR | 680K 5% 1/6W | G.GE   |
| R 556 | QRD161J-332 | CARBON RESISTOR | 3.3K 5% 1/6W | G.GE   |
| R 557 | QRD161J-682 | CARBON RESISTOR | 6.8K 5% 1/6W | G.GE   |
| R 701 | QRD161J-102 | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 702 | QRD161J-102 | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 703 | QRD161J-102 | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 704 | QRD161J-223 | CARBON RESISTOR | 22K 5% 1/6W  |        |
| R 705 | QRD161J-473 | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 706 | QRD161J-332 | CARBON RESISTOR | 3.3K 5% 1/6W |        |
| R 707 | QRD161J-332 | CARBON RESISTOR | 3.3K 5% 1/6W |        |
| R 708 | QRD161J-332 | CARBON RESISTOR | 3.3K 5% 1/6W |        |
| R 709 | QRD161J-332 | CARBON RESISTOR | 3.3K 5% 1/6W |        |
| R 710 | QRD161J-103 | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 711 | QRD161J-393 | CARBON RESISTOR | 39K 5% 1/6W  |        |
| R 712 | QRD161J-472 | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 713 | QRD161J-473 | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 714 | QRD161J-473 | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 715 | QRD161J-473 | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 721 | QRD161J-102 | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 722 | QRD161J-392 | CARBON RESISTOR | 3.9K 5% 1/6W |        |
| R 723 | QRD161J-101 | CARBON RESISTOR | 100 5% 1/6W  |        |
| R 724 | QRD161J-332 | CARBON RESISTOR | 3.3K 5% 1/6W |        |
| R 725 | QRD161J-102 | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 726 | QRD161J-472 | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 731 | QRD161J-331 | CARBON RESISTOR | 330 5% 1/6W  |        |
| R 732 | QRD161J-103 | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 733 | QRD161J-103 | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 734 | QRD161J-471 | CARBON RESISTOR | 4.7K 5% 1/6W |        |

BLOCK NO. 01111111

| REF.  | PARTS NO.     | PARTS NAME      | REMARKS      | SUFFIX |
|-------|---------------|-----------------|--------------|--------|
| R 735 | QRD161J-332   | CARBON RESISTOR | 3.3K 5% 1/6W |        |
| R 736 | QRD161J-221   | CARBON RESISTOR | 220 5% 1/6W  |        |
| R 737 | QRD161J-152   | CARBON RESISTOR | 1.5K 5% 1/6W |        |
| R 741 | QRD161J-123   | CARBON RESISTOR | 12K 5% 1/6W  |        |
| R 742 | QRD161J-473   | CARBON RESISTOR | 47K 5% 1/6W  |        |
| R 743 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 751 | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 752 | QRD161J-473   | CARBON RESISTOR | 47K 5% 1/6W  |        |
| R 753 | QRD161J-222   | CARBON RESISTOR | 2.2K 5% 1/6W |        |
| R 754 | QRD161J-332   | CARBON RESISTOR | 3.3K 5% 1/6W |        |
| R 781 | QRD161J-271   | CARBON RESISTOR | 270 5% 1/6W  |        |
| R 782 | QRD161J-681   | CARBON RESISTOR | 680 5% 1/6W  |        |
| R 910 | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 931 | QRD161J-101   | CARBON RESISTOR | 100 5% 1/6W  |        |
| R 932 | QRD161J-472   | CARBON RESISTOR | 4.7K 5% 1/6W |        |
| R 941 | QRD161J-103   | CARBON RESISTOR | 10K 5% 1/6W  |        |
| R 942 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 943 | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| R 944 | QRD161J-122   | CARBON RESISTOR | 1.2K 5% 1/6W |        |
| R 945 | QRD161J-184   | CARBON RESISTOR | 180K 5% 1/6W |        |
| R 946 | QRD161J-182   | CARBON RESISTOR | 1.8K 5% 1/6W |        |
| R 947 | QRD161J-184   | CARBON RESISTOR | 180K 5% 1/6W |        |
| R 948 | QRD161J-561   | CARBON RESISTOR | 560 5% 1/6W  |        |
| R 949 | QRD161J-475   | CARBON RESISTOR | 4.7M 5% 1/6W |        |
| R 950 | QRD161J-220   | CARBON RESISTOR | 22 5% 1/6W   |        |
| R 981 | QRD161J-104   | CARBON RESISTOR | 100K 5% 1/6W |        |
| R 982 | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| RS 5  | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| RS 6  | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| RS 7  | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W |        |
| RS 8  | QRD161J-682   | CARBON RESISTOR | 6.8K 5% 1/6W |        |
| RS 9  | QRD161J-682   | CARBON RESISTOR | 6.8K 5% 1/6W |        |
| RS 10 | QRD161J-682   | CARBON RESISTOR | 6.8K 5% 1/6W |        |
| RS 11 | QRD161J-682   | CARBON RESISTOR | 6.8K 5% 1/6W |        |
| RY981 | VSK1D12-118   | RELAY           |              |        |
| S 771 | QSQ1B11-V01Z  | TACT SWITCH     |              |        |
| S 772 | QSQ1B11-V01Z  | TACT SWITCH     |              |        |
| S 773 | QSQ1B11-V01Z  | TACT SWITCH     |              |        |
| S 774 | QSQ1B11-V01Z  | TACT SWITCH     |              |        |
| S 775 | QSQ1B11-V01Z  | TACT SWITCH     |              |        |
| S 776 | QSQ1B11-V01Z  | TACT SWITCH     |              |        |
| S 777 | QSQ1B11-V01Z  | TACT SWITCH     |              |        |
| S 778 | QSQ1B11-V01Z  | TACT SWITCH     |              |        |
| S 779 | QSQ1B11-V01Z  | TACT SWITCH     |              |        |
| S 780 | QSQ1B11-V01Z  | TACT SWITCH     |              |        |
| T 1   | VQ7F29-502    | IFT             |              |        |
| TP 1  | TXLP-002-B    | CONNECTOR       |              |        |
| TP 2  | TXLP-002-B    | CONNECTOR       |              |        |
| TU 1  | VAF2S07-402   | FM FRONT END    |              |        |
| VR 1  | QVZ523-331AZ  | V.RESISTOR      |              |        |
| VR 21 | QVPE612-502ZM | V.RESISTOR      |              |        |
| VR 22 | QVZ523-222AZ  | V.RESISTOR      |              |        |
| VR550 | QVPC610-472   | SEMI.V.RESISTOR |              | G.GE   |
| VR920 | VCV1001-152   | V RESISTOR      |              |        |
| VR921 | VCV1001-153   | V RESISTOR      |              |        |
| VR922 | VCV1001-154   | V RESISTOR      |              |        |
| X 701 | VCX4001-005   | CRYSTAL         |              |        |



• AM Board Parts List

BLOCK NO. 02

| REF.  | PARTS NO.     | PARTS NAME      | REMARKS       | SUFFIX |
|-------|---------------|-----------------|---------------|--------|
| D 53  | SV351CL-MW    | VARI CAP        |               |        |
| D 56  | HS2838C       | DIODE           |               |        |
| D 57  | 1S133         | SI DIODE        |               |        |
| D 58  | DC010         | SI DIODE        |               |        |
| IC 51 | LA1135        | IC              |               |        |
| IC901 | UPC1288HA     | IC              |               |        |
| L 51  | VPO018-470    | INDUCTOR        |               |        |
| Q 51  | 2SK519(EL-FL) | TRANSISTOR(FET) |               |        |
| Q 52  | 2SC1623(6)    | TRANSISTOR      |               |        |
| Q 53  | 2SC1623(6)    | TRANSISTOR      |               |        |
| Q 54  | 2SC1623(6)    | TRANSISTOR      |               |        |
| Q 55  | F1A47X        | TRANSISTOR      |               |        |
| Q 56  | F1A47X        | TRANSISTOR      |               |        |
| Q 57  | F1A47X        | TRANSISTOR      |               |        |
| Q 58  | 2SA812(6)     | TRANSISTOR      |               |        |
| Q 901 | 2SC1740S(R+S) | TRANSISTOR      |               |        |
| R 51  | NRSA02J-102NY | MG RESISTOR     | 1.0K 5% 1/10W |        |
| R 52  | NRSA02J-104NY | MG RESISTOR     | 100K 5% 1/10W |        |
| R 53  | NRSA02J-ORONY | MG RESISTOR     | 5% 1/10W      |        |
| R 54  | NRSA02J-102NY | MG RESISTOR     | 1.0K 5% 1/10W |        |
| R 55  | NRSA02J-330NY | MG RESISTOR     | 33 5% 1/10W   |        |
| R 56  | NRSA02J-332NY | MG RESISTOR     | 3.3K 5% 1/10W |        |
| R 58  | NRSA02J-152NY | MG RESISTOR     | 1.5K 5% 1/10W |        |
| R 60  | QRD161J-102   | CARBON RESISTOR | 1.0K 5% 1/6W  |        |
| R 61  | NRSA02J-104NY | MG RESISTOR     | 100K 5% 1/10W |        |
| R 62  | NRSA02J-103NY | MG RESISTOR     | 10K 5% 1/10W  |        |
| R 63  | NRSA02J-330NY | MG RESISTOR     | 33 5% 1/10W   |        |
| R 64  | NRSA02J-153NY | MG RESISTOR     | 15K 5% 1/10W  |        |
| R 65  | NRSA02J-103NY | MG RESISTOR     | 10K 5% 1/10W  |        |
| R 66  | NRSA02J-103NY | MG RESISTOR     | 10K 5% 1/10W  |        |
| R 67  | NRSA02J-102NY | MG RESISTOR     | 1.0K 5% 1/10W |        |
| R 68  | NRSA02J-223NY | MG RESISTOR     | 22K 5% 1/10W  |        |
| R 69  | NRSA02J-820NY | MG RESISTOR     | 82 5% 1/10W   |        |
| R 70  | NRSA02J-333NY | MG RESISTOR     | 33K 5% 1/10W  |        |
| R 71  | NRSA02J-224NY | MG RESISTOR     | 220K 5% 1/10W |        |
| R 101 | NRSA02J-153NY | MG RESISTOR     | 15K 5% 1/10W  |        |
| R 102 | NRSA02J-151NY | MG RESISTOR     | 150 5% 1/10W  |        |
| R 103 | NRSA02J-334NY | MG RESISTOR     | 330K 5% 1/10W |        |
| R 201 | NRSA02J-153NY | MG RESISTOR     | 15K 5% 1/10W  |        |
| R 202 | NRSA02J-151NY | MG RESISTOR     | 150 5% 1/10W  |        |
| R 203 | NRSA02J-334NY | MG RESISTOR     | 330K 5% 1/10W |        |
| R 901 | NRSA02J-330NY | MG RESISTOR     | 33 5% 1/10W   |        |
| R 902 | NRSA02J-103NY | MG RESISTOR     | 10K 5% 1/10W  |        |
| T 51  | VZ0036-001    | LW RF COIL      |               |        |
| T 52  | VZ0031-001    | MW RF COIL      |               |        |
| T 53  | VZ0036-001    | LW RF COIL      |               |        |
| T 54  | VZ0031-001    | MW RF COIL      |               |        |
| T 55  | V8M7U01-501   | OSC COIL(MW)    |               |        |
| T 56  | V6L7U01-501   | OSC COIL(LW)    |               |        |
| T 57  | V6T7A21-105   | IFT             |               |        |
| T 58  | V6T7A11-206   | IFT             |               |        |
| TC 51 | QAT3722-200ZM | T-CAPACITOR     |               |        |
| TC 52 | QAT3722-600ZM | T-CAPACITOR     |               |        |

BLOCK NO. 02

| REF.  | PARTS NO.     | PARTS NAME     | REMARKS             | SUFFIX |
|-------|---------------|----------------|---------------------|--------|
| B 903 | NRS181J-ORONY | MG RESISTOR    | 5% 1/8W             |        |
| B 904 | NRSA02J-ORONY | MG RESISTOR    | 5% 1/10W            |        |
| B 906 | NRS181J-ORONY | MG RESISTOR    | 5% 1/8W             |        |
| B 908 | NRSA02J-ORONY | MG RESISTOR    | 5% 1/10W            |        |
| B 909 | NRSA02J-ORONY | MG RESISTOR    | 5% 1/10W            |        |
| B 910 | NRSA02J-ORONY | MG RESISTOR    | 5% 1/10W            |        |
| B 911 | NRSA02J-ORONY | MG RESISTOR    | 5% 1/10W            |        |
| B 913 | NRSA02J-ORONY | MG RESISTOR    | 5% 1/10W            |        |
| B 914 | NRSA02J-ORONY | MG RESISTOR    | 5% 1/10W            |        |
| B 915 | NRSA02J-ORONY | MG RESISTOR    | 5% 1/10W            |        |
| C 51  | NCS21HJ-821AY | C CAPACITOR    | 820PF 5% 50V        |        |
| C 52  | NCB21HK-103AY | C CAPACITOR    | .010MF 10% 50V      |        |
| C 53  | NCS21HJ-220AY | C CAPACITOR    | 22PF 5% 50V         |        |
| C 54  | GEK41CM-226   | E-CAPACITOR    | 22MF 20% 16V        |        |
| C 55  | NCS21HJ-120AY | C CAPACITOR    | 12PF 5% 50V         |        |
| C 56  | NCT21CH-8R0AY | C CAPACITOR    | 8.0PF +50% -10% 16V |        |
| C 58  | NCB21HK-103AY | C CAPACITOR    | .010MF 10% 50V      |        |
| C 60  | NCT21CH-100AY | C CAPACITOR    | 10PF +50% -10% 16V  |        |
| C 61  | NCS21HJ-120AY | C CAPACITOR    | 12PF 5% 50V         |        |
| C 62  | NCB21HK-104   | C CAPACITOR    | .10MF 10% 50V       |        |
| C 63  | NCT21CH-431AY | C CAPACITOR    | 430PF +50% -10% 16V |        |
| C 64  | NCB21HK-103AY | C CAPACITOR    | .010MF 10% 50V      |        |
| C 65  | GCVB1CM-103Y  | C CAPACITOR    | .010MF 10% 50V      |        |
| C 66  | NCB21HK-223AY | C CAPACITOR    | .022MF 10% 50V      |        |
| C 67  | GEK41HM-105   | E-CAPACITOR    | 1.0MF 20% 50V       |        |
| C 68  | NCB21HK-103AY | C CAPACITOR    | .010MF 10% 50V      |        |
| C 70  | GEK41CM-476   | E-CAPACITOR    | 47MF 20% 16V        |        |
| C 71  | NCB21HK-273AY | C CAPACITOR    | .027MF 10% 50V      |        |
| C 72  | NCB21HK-103AY | C CAPACITOR    | .010MF 10% 50V      |        |
| C 73  | NCT21CH-271AY | C CAPACITOR    | 270PF +50% -10% 16V |        |
| C 74  | NCB21HK-473AY | C CAPACITOR    | .047MF 10% 50V      |        |
| C 75  | GEK41CM-226   | E-CAPACITOR    | 22MF 20% 16V        |        |
| C 76  | GEK41HM-105   | E-CAPACITOR    | 1.0MF 20% 50V       |        |
| C 77  | NCB21HK-103AY | C CAPACITOR    | .010MF 10% 50V      |        |
| C 78  | NCB21HK-592AY | C CAPACITOR    | 3900PF 10% 50V      |        |
| C 79  | NCB21HK-273AY | C CAPACITOR    | .027MF 10% 50V      |        |
| C 80  | GCVB1CM-103Y  | C CAPACITOR    | .010MF 10% 50V      |        |
| C 101 | NCB21HK-681AY | C CAPACITOR    | 680PF 10% 50V       |        |
| C 102 | GEK41HM-105   | E-CAPACITOR    | 1.0MF 20% 50V       |        |
| C 103 | NCS21HJ-101AY | C CAPACITOR    | 100PF 5% 50V        |        |
| C 104 | NCB21HK-123AY | C CAPACITOR    | .012MF 10% 50V      |        |
| C 105 | GEK41CM-226   | E-CAPACITOR    | 22MF 20% 16V        |        |
| C 201 | NCB21HK-681AY | C CAPACITOR    | 680PF 10% 50V       |        |
| C 202 | GEK41HM-105   | E-CAPACITOR    | 1.0MF 20% 50V       |        |
| C 203 | NCS21HJ-101AY | C CAPACITOR    | 100PF 5% 50V        |        |
| C 204 | NCB21HK-123AY | C CAPACITOR    | .012MF 10% 50V      |        |
| C 901 | GEK41CM-226   | E-CAPACITOR    | 22MF 20% 16V        |        |
| C 905 | GEK41CM-106   | E-CAPACITOR    | 10MF 20% 16V        |        |
| C 902 | GEK41AM-107ZN | E-CAPACITOR    | 100MF 20% 10V       |        |
| CF 51 | BFU450C4N     | CERAMIC FILTER |                     |        |
| CJ901 | VMC0136-009   | CONNECTOR      |                     |        |
| CJ903 | VMC0136-006   | CONNECTOR      |                     |        |
| CJ904 | TXLL-005-M    | CONNECTOR      |                     |        |
| D 51  | 1SV121        | SI DIODE       |                     |        |
| D 52  | 1SV121        | SI DIODE       |                     |        |

# 8 Exploded View of Enclosure Component Parts and Parts List

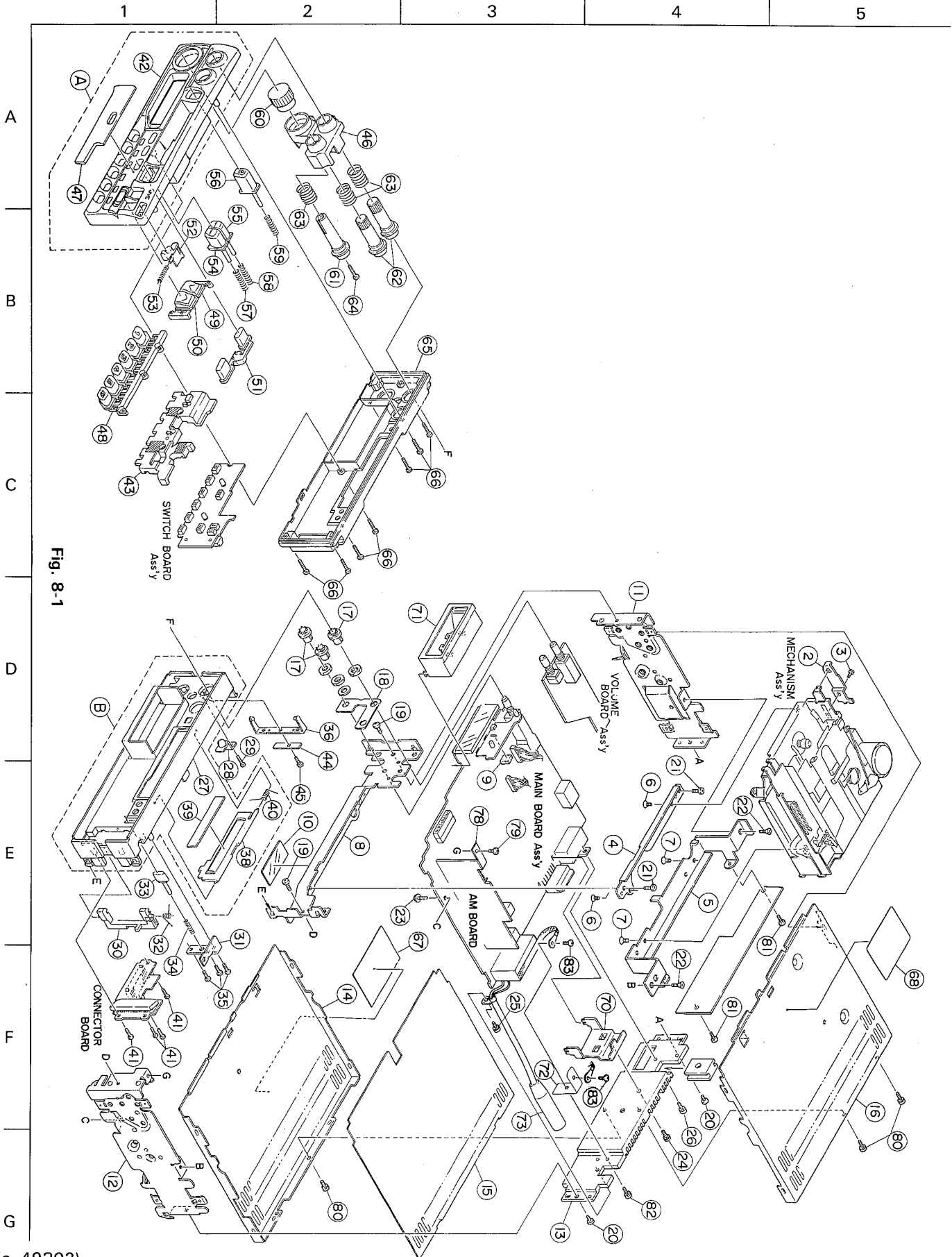


Fig. 8-1



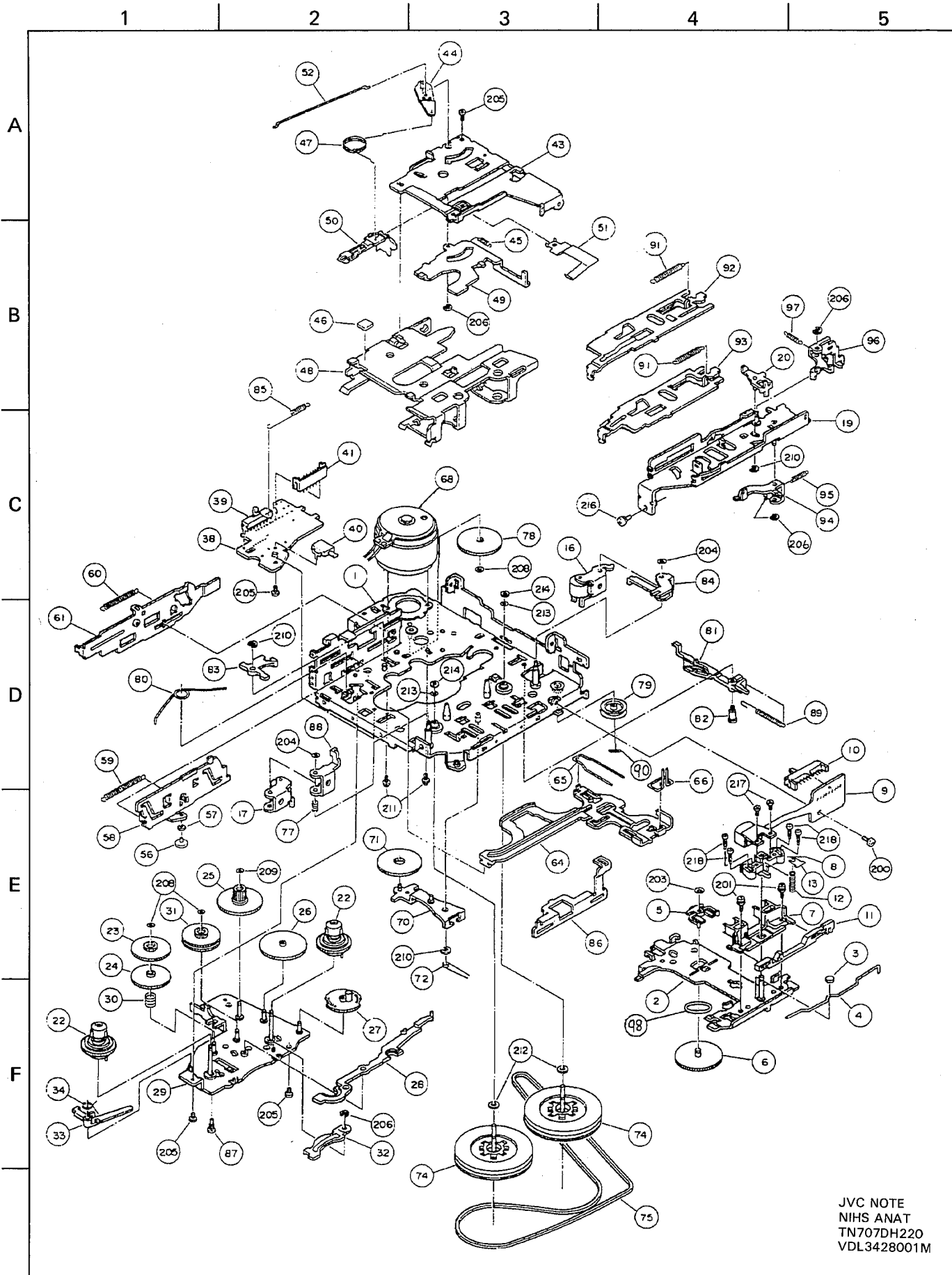
• Enclosure Component Parts List

BLOCK NO. M1MM

| Δ | REF. | PARTS NO.      | PARTS NAME      | REMARKS         | QTY | SUFFIX | CLR |
|---|------|----------------|-----------------|-----------------|-----|--------|-----|
|   | A    | ZCKSRT45K-NPA  | FRONT PANEL     |                 | 1   | B/E/GI |     |
|   | A    | ZCKSRT45G-NPA  | FRONT PANEL     |                 | 1   | G/GE   |     |
|   | B    | ZCKSRT45K-FB   | FRONT CHASSIS   |                 | 1   |        |     |
|   | 2    | VKL7226-003    | EJECT LEVER     |                 | 1   |        |     |
|   | 3    | SPSK2625Z      | MINI SCREW      | EJECT LEVER     | 1   |        |     |
|   | 4    | VKM3645-001    | MECHA BRACKET F |                 | 1   |        |     |
|   | 5    | VKM3594-001    | MECHA BRACKET R |                 | 1   |        |     |
|   | 6    | SSSP3005Z      | SCREW           | MECHA BRACKET(F | 2   |        |     |
|   | 7    | SSSP3005Z      | SCREW           | MECHA BRACKET(R | 2   |        |     |
|   | 8    | VKM3642-002    | FRONT BRACKET   |                 | 1   |        |     |
|   | 9    | VYSR103-048    | SPACER          | BACKWARD OF LCD | 1   |        |     |
|   | 10   | VYSS1R4-040    | SPACER          | BOTTOMSIDE OF N | 1   |        |     |
|   | 11   | VKL2723-001    | SIDE BKT(L)     |                 | 1   |        |     |
|   | 12   | VKL2724-002SS  | SIDE BKT(R)     |                 | 1   |        |     |
|   | 13   | VJC3260-001    | REAR PANEL      |                 | 1   |        |     |
|   | 14   | VKM3352-004    | BOTTOM COVER    |                 | 1   |        |     |
|   | 15   | VMA3216-001    | INSULATOR       |                 | 1   |        |     |
|   | 16   | VKM3398-005    | TOP COVER       |                 | 1   |        |     |
|   | 17   | VKS5439-001    | SHAFT KNOB      |                 | 3   |        |     |
|   | 18   | VKL7274-002    | VOLUME HOLDER   |                 | 1   |        |     |
|   | 19   | SDST2606Z      | SCREW           | FRONT+SIDE(L,R) | 2   |        |     |
|   | 20   | SDST2606Z      | SCREW           | SIDE(L,R)+REAR  | 2   |        |     |
|   | 21   | SDST2606Z      | SCREW           | FRONT BRACKET   | 2   |        |     |
|   | 22   | SSST2606Z      | SCREW           | M.BKT+SIDE(L,R) | 2   |        |     |
|   | 23   | SDST2606Z      | SCREW           | MAIN PWB+SIDE B | 1   |        |     |
|   | 24   | LPSP2606Z      | SCREW           | IC BKT+REAR BRA | 1   |        |     |
|   | 25   | LPSP2606Z      | SCREW           | REAR BKT+ANT CO | 1   |        |     |
|   | 26   | LPSP2606Z      | SCREW           | CONNECTOR+REAR  | 1   |        |     |
|   | 27   | FSJC2004-002   | FRONT CHASSIS   |                 | 1   |        |     |
|   | 28   | VJK4399-002    | LENS            |                 | 1   |        |     |
|   | 29   | SPSN1755N      | MINI SCREW      | F.CHASSIS+LENS  | 1   |        |     |
|   | 30   | VKS5438-001    | LOCK LEVER      |                 | 1   |        |     |
|   | 31   | VKL7267-001    | LEVER BRACKET   |                 | 1   |        |     |
|   | 32   | FSKW4005-002   | TORSION SPRING  | LOCK LEVER      | 1   |        |     |
|   | 33   | VXP5139-001    | RLS KNOB        |                 | 1   |        |     |
|   | 34   | VKW3001-298    | COMP.SPRING     | RLS KNOB        | 1   |        |     |
|   | 35   | SDSF2006Z      | SCREW           | F.CHASSIS+L.BKT | 3   |        |     |
|   | 36   | VKY4665-00E    | LOCK SP ASS'Y   |                 | 1   |        |     |
|   | 38   | VJC4145-002SS  | CASSETTE LID    |                 | 1   |        |     |
|   | 39   | FSJC4001-001   | LID PLATE       |                 | 1   |        |     |
|   | 40   | VKW4947-003    | DOOR SPRING     |                 | 1   |        |     |
|   | 41   | SPSN1755N      | MINI SCREW      | F.CHASSIS+C.PWB | 4   |        |     |
|   | 42   | FSJC1010-006   | FRONT PANEL     |                 | 1   |        |     |
|   | 43   | ZCKSRT45K-LENS | LIGHT LENS ASSY |                 | 1   |        |     |
|   | 44   | VKL7647-001    | PLATE           |                 | 1   |        |     |
|   | 45   | SDSF2008M      | SCREW           | F.CHASSIS+L.SPR | 1   |        |     |
|   | 46   | VJK2182-001    | KNOB LENS       |                 | 1   |        |     |
|   | 47   | FSJD3006-00J   | FINDER          |                 | 1   |        |     |
|   | 48   | VXP2066-001    | PRESET BUTTON   | 1/2/3/4/5/B     | 1   |        |     |
|   | 49   | VXP3571-001    | DOWN BUTTON     |                 | 1   |        |     |
|   | 50   | VXP3572-001    | UP BUTTON       |                 | 1   |        |     |
|   | 51   | VXP3577-005    | PUSH BUTTON     | MODE/A HBS      | 1   |        |     |
|   | 52   | FSXP3007-003   | DETACH BUTTON   |                 | 1   |        |     |
|   | 53   | VKW3001-302    | COMP. SPRING    | DETACH BUTTON   | 1   |        |     |
|   | 54   | FSXP3009-001   | FF BUTTON       |                 | 1   |        |     |
|   | 55   | FSXP3010-001   | REW BUTTON      |                 | 1   |        |     |



# 9 Exploded View of Melchanism Component Pa



JVC NOTE  
NIHS ANAT  
TN707DH220  
VDL3428001M

# Parts and Parts List

## • Mechanism Component Parts List

BLOCK NO.    

| △ | REF. | PARTS NO.  | PARTS NAME      | REMARKS       | QTY | SUFFIX | CLR |
|---|------|------------|-----------------|---------------|-----|--------|-----|
|   | 1    | 194001519T | CHASSIS ASS'Y   |               | 1   |        |     |
|   | 2    | 194016501T | HEAD PANEL ASY  |               | 1   |        |     |
|   | 3    | 19400303T  | SP ROLLER       |               | 1   |        |     |
|   | 4    | 19400304T  | P.R.SPRING      |               | 1   |        |     |
|   | 5    | 19400305T  | P.GEAR METAL    |               | 1   |        |     |
|   | 6    | 19400306T  |                 |               | 1   |        |     |
|   | 7    | 19400312T  | TAPE GUIDE U    |               | 1   |        |     |
|   | 8    | 19400327T  | HEAD HOLDER B   |               | 1   |        |     |
|   | 9    | 62011702T  |                 | P-7542-BB0571 | 1   |        |     |
|   | 10   | 64020207T  | SLIDE SWITCH    | SSSSA3002A    | 1   |        |     |
|   | 11   | 19400328T  | SHIFT PLATE B   |               | 1   |        |     |
|   | 12   | 19400315T  | H.G SPRING      |               | 1   |        |     |
|   | 13   | 9F2635010T | FASTEN WASHER   |               | 1   |        |     |
|   | 16   | 194004301T | P.ROLL.ARM(F)AS |               | 1   |        |     |
|   | 17   | 194004302T | P.ROLL.ARM(R)AS |               | 1   |        |     |
|   | 19   | 194005503T | F.R.BKT(M)ASS'Y |               | 1   |        |     |
|   | 20   | 194005504T | SEESAW P(M)ASY. |               | 1   |        |     |
|   | 22   | 194006302T | T.REEL ASS'Y    |               | 2   |        |     |
|   | 23   | 19400612T  | P.GEAR (R)      |               | 1   |        |     |
|   | 24   | 19400613T  | F.GEAR (R)      |               | 1   |        |     |
|   | 25   | 19400615T  | P.D.GEAR        |               | 1   |        |     |
|   | 26   | 19400616T  | E.D.GEAR        |               | 1   |        |     |
|   | 27   | 19400617AT | REVERSE GEAR(M) |               | 1   |        |     |
|   | 28   | 19400648T  | E.D.PLATE B     |               | 1   |        |     |
|   | 29   | 194002501T | M.G.P.SEMI-ASY. |               | 1   |        |     |
|   | 30   | 19400635T  | TN SPRING       |               | 1   |        |     |
|   | 31   | 194006312T | P.CLUTCH ASS'Y  |               | 1   |        |     |
|   | 32   | 194014129T | LIFT UP PLATE   |               | 1   |        |     |
|   | 33   | 19401464T  | ANTI-REV ARM    |               | 1   |        |     |
|   | 34   | 19401460T  | TRI ARM SPRING  |               | 1   |        |     |
|   | 38   | 19400704T  | SW SUBSTRATE    |               | 1   |        |     |
|   | 39   | 64020206T  | SLIDE SWITCH    | SSSSA2001A    | 1   |        |     |
|   | 40   | 64020405T  | PUSH SWITCH     | SPVC11001A    | 1   |        |     |
|   | 41   | 68140245T  | CONNECTOR       | 53253-0720    | 1   |        |     |
|   | 43   | 19400801T  | CASE LIFTER     |               | 1   |        |     |
|   | 44   | 184008503T | P.E PLATE ASS'Y |               | 1   |        |     |
|   | 45   | 18400820T  | SPRING          |               | 1   |        |     |
|   | 46   | 18400875T  | CUSSHION RUBBER |               | 1   |        |     |
|   | 47   | 19400813T  | REVERSE SP.C    |               | 1   |        |     |
|   | 48   | 19401410T  | CASSETTE CASE M |               | 1   |        |     |
|   | 49   | 19400804T  | C.D PLATE B     |               | 1   |        |     |
|   | 50   | 19400810T  | PACK SLIDER     |               | 1   |        |     |
|   | 51   | 19400806T  | PACK PRESS.SP.  |               | 1   |        |     |
|   | 52   | 18400823T  | P.E SPRING      |               | 1   |        |     |
|   | 56   | 19400901T  | H.P.ROLLER(A)   |               | 1   |        |     |
|   | 57   | 19400902T  | H.P.ROLLER(B)   |               | 1   |        |     |
|   | 58   | 19400903T  | C.H.PUSH PLAT.M |               | 1   |        |     |
|   | 59   | 19400905T  | C.H.SPRING      |               | 1   |        |     |
|   | 60   | 19400906T  | PUSH LEVER SP.  |               | 1   |        |     |
|   | 61   | 19400907T  | PUSH LEVER M    |               | 1   |        |     |
|   | 64   | 19401001T  | MAIN PLATE      |               | 1   |        |     |
|   | 65   | 19401002T  | M.S.SPRING      |               | 1   |        |     |
|   | 66   | 19401007T  | H.S.SPRING      |               | 1   |        |     |
|   | 68   | 194011310T | MOTOR ASS'Y     | MCI-5U3LCKA   | 1   |        |     |





BLOCK NO. M2MM

| REF. | PARTS NO.  | PARTS NAME      | REMARKS         | QTY | SUFFIX | CLR |
|------|------------|-----------------|-----------------|-----|--------|-----|
| 70   | 194012504T | FR W.PLT.SEM.AS |                 | 1   |        |     |
| 71   | 19401703T  | F.GEAR          |                 | 1   |        |     |
| 72   | 19401704T  | FR SPRING M     |                 | 1   |        |     |
| 74   | 194013303T | F.L.CAPS.ASS'Y  |                 | 2   |        |     |
| 75   | 19401417T  | MAIN BELT       |                 | 1   |        |     |
| 77   | 18400437T  | P.P SPRING      |                 | 1   |        |     |
| 78   | 194014123T | MAIN GEAR M     |                 | 1   |        |     |
| 79   | 194014115T | MIDDLE PULLEY   |                 | 1   |        |     |
| 80   | 19401403T  | HEAD PANEL SP.M |                 | 1   |        |     |
| 81   | 19401405T  | TRIGGER ARM(C)  |                 | 1   |        |     |
| 82   | 19401406T  | COLLAR SCREW(T) |                 | 1   |        |     |
| 83   | 19401408T  | H.P.PUSH ARM    |                 | 1   |        |     |
| 84   | 19401409T  | SEESAW WRK.PLT. |                 | 1   |        |     |
| 85   | 19401412T  | POWER SW.SPRING |                 | 1   |        |     |
| 86   | 194014127T | FR SLIDE PLT.M  |                 | 1   |        |     |
| 87   | 19401415T  | COLLAR SCREW(P) |                 | 1   |        |     |
| 88   | 19401416T  | H.P.RETURN ARM  |                 | 1   |        |     |
| 89   | 19401407T  | T.A.SPING(C)    |                 | 1   |        |     |
| 90   | 9W0225010T | P.WASHER CUT    |                 | 1   |        |     |
| 91   | 19401589T  | FR LEVER SPRING |                 | 2   |        |     |
| 92   | 19401590T  | FF LEVER (MH)   |                 | 1   |        |     |
| 93   | 19401591T  | REW LEVER (MH)  |                 | 1   |        |     |
| 94   | 19401503T  | P.C.PLATE       |                 | 1   |        |     |
| 95   | 19401504T  | P.C.SPRING      |                 | 1   |        |     |
| 96   | 19401505T  | ROCK PLATE (M)  |                 | 1   |        |     |
| 97   | 19401506T  | ROCK PLATE SP.M |                 | 1   |        |     |
| 98   | 9W0540020T | HL WASHER       | 10 X 14 X 0.4   | 1   |        |     |
| 200  | 9P1220051T | S TAPPING SCREW | M2 X 5          | 1   |        |     |
| 201  | 9P0220051T | TAMS SCREW      | M2 X 5          | 2   |        |     |
| 203  | 9W0640070T | HL WASHER CUT   | 2.1 X 4 X 0.4   | 1   |        |     |
| 204  | 9W0630060T | HL WASHER CUT   | 1.6 X 3.8 X 0.3 | 2   |        |     |
| 205  | 9C0420303T | S TAPPING SCREW | FOR CAMERA M2X3 | 4   |        |     |
| 206  | 9E0100152T | E RING          | S1.5            | 4   |        |     |
| 208  | 9W0625030T | HL WASHER CUT   | 1.2 X 3 X 0.25  | 3   |        |     |
| 209  | 9W0630050T | HL WASHER CUT   | 1.6 X 3.4 X 0.3 | 1   |        |     |
| 210  | 9E0100202T | E RING          | S2.0            | 3   |        |     |
| 211  | 9P0220031T | TAMS SCREW      | M2 X 3          | 2   |        |     |
| 212  | 9W0513060T | HL WASHER       | 2.1 X 5 X 0.13  | 2   |        |     |
| 213  | 9W0520010T | HL WASHER CUT   | 1.85 X 3.2 X 0. | 2   |        |     |
| 214  | 9W0650030T | HL WASHER CUT   | 1.5 X 3.2 X 0.5 | 2   |        |     |
| 216  | 9P0226041T | TAMS SCREW      | M2.6 X 4        | 1   |        |     |
| 217  | 9F2720401T | SCREW           | FOR HEAD        | 2   |        |     |
| 218  | 9F2220071T | ADJUST SCREW    |                 | 4   |        |     |

# 10 Packing Illustration and Packing Parts List

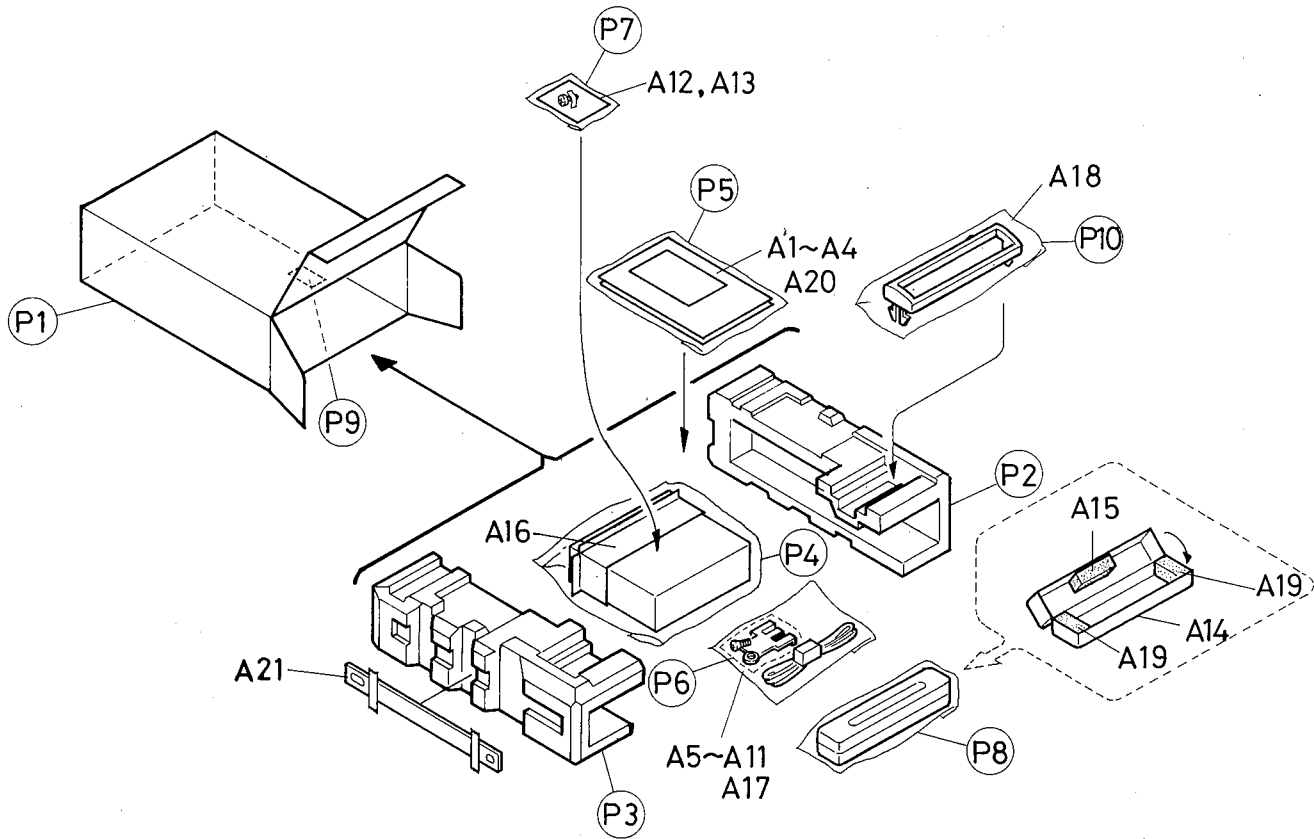


Fig. 10-1

## ■ Screw Kit Illustration (KSRT30K - SCREW1)

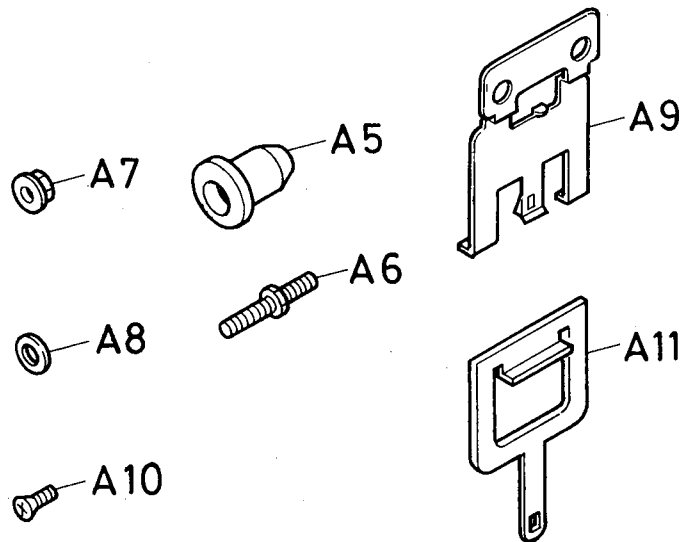


Fig. 10-2

## • Packing Parts List

BLOCK NO. M3MM

| △ | REF. | PARTS NO.     | PARTS NAME    | REMARKS         | QTY | SUFFIX | CLR |
|---|------|---------------|---------------|-----------------|-----|--------|-----|
|   | P 1  | VPC3494-S003  | CARTON        | PRINTED IN SING | 1   |        |     |
|   | P 2  | VPH1647-002   | CUSHION(L)    |                 | 1   |        |     |
|   | P 3  | VPH1648-002   | CUSHION(R)    |                 | 1   |        |     |
|   | P 4  | VPE3005-066   | POLY BAG      | SET             | 1   |        |     |
|   | P 5  | QPGB017-02404 | POLY BAG      | INSTRUCTIONS    | 1   |        |     |
|   | P 6  | QPGA008-01205 | POLY BAG      | SCREW KIT       | 1   |        |     |
|   | P 7  | QPGA008-01205 | POLY BAG      | SCREW KIT 2     | 1   |        |     |
|   | P 8  | QPGA010-03003 | POLY.BAG      | FOR HARD CASE   | 1   |        |     |
|   | P 9  | VND3046-003   | SERIAL TICKET |                 | 1   | E      |     |
|   |      | VND3046-001   | SERIAL TICKET |                 | 1   | GE,GI  |     |
|   |      | VND3046-005   | SERIAL TICKET |                 | 1   | G      |     |
|   |      | VND3046-004   | SERIAL TICKET |                 | 1   | B      |     |
|   | P 10 | QPGA010-03003 | POLY.BAG      | FOR TRIM PLATE  | 1   |        |     |

BLOCK NO. M3MM

| △ | REF.  | PARTS NO.       | PARTS NAME      | REMARKS       | QTY | SUFFIX | CLR |
|---|-------|-----------------|-----------------|---------------|-----|--------|-----|
|   | A 1   | FSUN3004-471S   | INSTRUCTIONS    |               | 1   | GI     |     |
|   |       | FSUN3004-481S   | INSTRUCTIONS    |               | 1   | E      |     |
|   |       | FSUN3004-211S   | INSTRUCTIONS    |               | 1   |        |     |
|   |       | FSUN3004-451S   | INSTRUCTIONS    |               | 1   | E      |     |
|   | A 2   | VNC2400-090     | CAUTION SHEET   |               | 1   |        |     |
|   | A 3   | BT-20135        | WARRANTY CARD   |               | 1   | G      |     |
|   |       | BT-20066A       | WARRANTY CARD   |               | 1   | B      |     |
|   | A 4   | BT20060         | SVC CENTER LIST |               | 1   | B      |     |
|   | A 5   | VKZ4027-002     | PLUG NUT        |               | 1   |        |     |
|   | A 6   | VKH4871-001     | MOUNT BOLT      |               | 1   |        |     |
|   | A 7   | VKZ4328-001     | LOCK NUT        | M5            | 1   |        |     |
|   | A 8   | WNS5000Z        | WASHER          |               | 1   |        |     |
|   | A 9   | VKY3124-001     | SIDE SPRING     |               | 2   |        |     |
|   | A 10  | SSSP4006Z       | SCREW           | SIDE SPRING   | 4   |        |     |
|   | A 11  | VKL7233-001     | HOOK            |               | 2   |        |     |
|   | A 12  | SPSJ1725M       | MINI SCREW      |               | 1   |        |     |
|   | A 13  | VND4619-001     | SHEET           |               | 1   |        |     |
|   | A 14  | VJB2014-001     | HARD CASE       |               | 1   |        |     |
|   | A 15  | VYSH118-002     | SPACER          |               | 1   |        |     |
|   | A 16  | VKL3732-018SS   | MOUNTING SLEEVE |               | 1   |        |     |
|   | A 17  | VMC0014-145     | 11P CORD ASS'Y  |               | 1   |        |     |
|   | A 18  | FSJD2004-002    | TRIM PLATE      |               | 1   |        |     |
|   | A 19  | FSYH3008-002    | SPACER          | FOR HARD CASE | 2   |        |     |
|   | A 20  | VND3050-001     | IDENTITY CARD   |               | 1   |        |     |
|   | A 21  | VKL5460-001     | STAY            |               | 1   |        |     |
|   | KIT 1 | KSRT80RK-SCREW1 | SCREW PARTS KIT | A5-A11,A20,P6 | 1   |        |     |
|   | KIT 2 | KSRT30K-SCREW2  | SCREW PARTS KIT | A12-A13,P7    | 1   |        |     |



**JVC**

VICTOR COMPANY OF JAPAN, LIMITED  
AUDIO PRODUCTS DIVISION 10-1, 1-chome, Ohwatari-machi, Maebashi-city, Japan