

XR-C200/C202

SERVICE MANUAL

AEP Model
UK Model
E Model
XR-C200

German Model
XR-C202

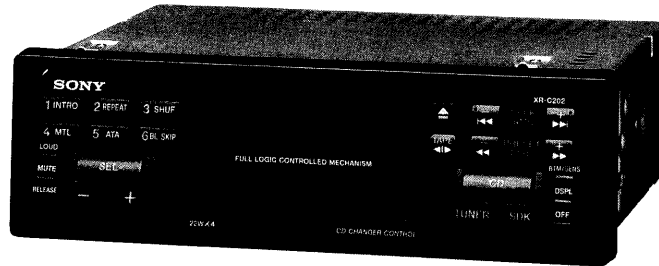


Photo : XR-C202

| | |
|------------------------------------|--------------|
| Model Name Using Similar Mechanism | XR-C210/C212 |
| Tape Transport Mechanism Type | MG-50A-39 |

SPECIFICATIONS

Cassette player section

| | |
|-----------------------|--------------------------|
| Tape track | 4-track 2-channel stereo |
| Wow and flutter | 0.08 % (WRMS) |
| Frequency response | 30 - 18,000 Hz |
| Signal-to-noise ratio | |
| Cassette type | |
| TYPE II, IV | 61 dB |
| TYPE I | 58 dB |

Tuner section

FM

| | |
|--------------|--|
| Tuning range | AEP, UK, German Model : 87.5-108.0MHz E Model : FM tuning interval: 50 kHz/200 kHz switchable 87.5 - 108.0 MHz (at 50 kHz step) 87.5 - 107.9 MHz (at 200 kHz step) |
|--------------|--|

| | |
|------------------------------|---------------------------------|
| Antenna terminal | External antenna connector |
| Intermediate frequency | 10.7 MHz |
| Usable sensitivity | 8 dBf |
| Selectivity | 75 dB at 400 kHz |
| Signal-to-noise ratio | 65 dB (stereo), 70 dB (mono) |
| Harmonic distortion at 1 kHz | 0.5 % (stereo), 0.3 % (mono) |
| Separation | 35 dB at 1 kHz |
| Frequency response | 30 - 15,000 Hz |
| Capture ratio | 2 dB |

MW/LW (AEP, UK model)/SW (German Model)

| | |
|------------------------|---|
| Tuning range | MW: 531 - 1,602 kHz LW: 153 - 281 kHz SW: 5,950 - 6,205 kHz |
| Antenna terminal | External antenna connector |
| Intermediate frequency | 10.71 MHz/450 kHz |
| Sensitivity | MW: 30 μ V LW: 50 μ V SW: 50 μ V |

AM (E model)

| | |
|------------------------|---|
| Tuning range | AM tuning interval: 9 kHz/10 kHz switchable 531 - 1,602 kHz (at 9 kHz step) 530 - 1,710 kHz (at 10 kHz step) |
| Antenna terminal | External antenna connector |
| Intermediate frequency | 10.71 MHz/450 kHz |
| Sensitivity | 30 μ V |

—continued on next page—

FM/AM CASSETTE CAR STEREO

E Model

FM/MW/LW CASSETTE CAR STEREO

AEP/UK Model

FM/MW/SW CASSETTE CAR STEREO

German Model

SONY®



Power amplifier section

| | |
|----------------------|---|
| Outputs | Speaker outputs (sure seal connectors) |
| Speaker impedance | 4 – 8 ohms |
| Maximum power output | 25W × 4 (at 4 ohms) (E model) 22W × 4 (at 4 ohms) (Except E model) |

General

| | |
|----------------------|--|
| Output lead | Power antenna relay control lead |
| Tone controls | Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz |
| Power requirements | 12 V DC car battery (negative ground) |
| Dimensions | Approx. 186 × 57 × 170 mm (w/h/d) not incl. projecting parts and controls |
| Mounting dimension | Approx. 182 × 53 × 153 mm (w/h/d) not incl. projecting parts and controls |
| Mass | Approx. 1.3 kg |
| Supplied accessories | Power connecting cord (1) Mounting hardware (1 set) Front panel case (1) |

Design and specifications are subject to change without notice.

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SECTION 1 GENERAL

This section is extracted from AEP, UK and German model's instruction manual.

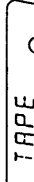
Listening to Tape Playback

After inserting the cassette, playback will start automatically.

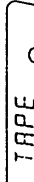


If a cassette is already inserted, press the **TAPE** button to start playback. If you press during playback, the tape transport direction will change.

Indication of Tape Transport Direction



The side facing up is being played.



The side facing down is being played.

To stop playback, eject the cassette by pressing the **TAPE** button or press the OFF button.

Playback stops also when you select another source (radio, CD) by pressing the **DISC** button, the **FM** button or the **AM** button.

Ejecting the Cassette

Press the **TAPE** button.

Fast-winding the Tape



Rewind

To start playback during rewinding or fast-forwarding, press the **TAPE** button.

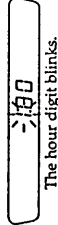
Setting the Clock

The clock has a 24-hour digital indication.

For example, setting it to 10:08

1 Display the time. Press the OFF or the **DISP** button during the unit operation.

2 Press the **DISP** button for more than two seconds.

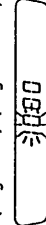


The hour digit blinks.

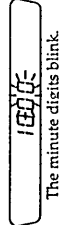
Set the hour digits.



(to go back) (to go forward)



Press the SEL button.

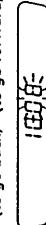


The minute digits blink.

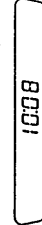
Set the minute digits.



(to go back) (to go forward)

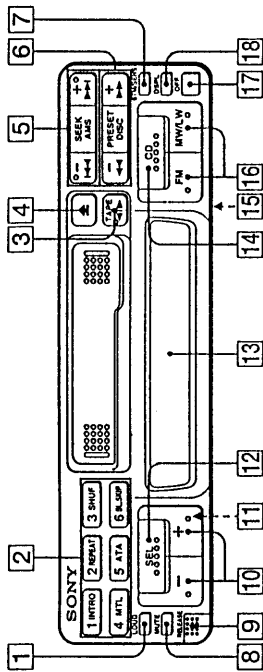


3 Release the **DISP** button.



The clock activates.

Button Locations



Refer to the pages in ● for details.

- 1 LOUD (loudness) button ●
- 2 During radio reception: Preset number buttons ●
- During tape/CD playback:
 - 1 INTRO button ●10
 - 2 REPEAT button ●10
 - 3 SHUF button ●11
 - 4 MTL button ●11
 - 5 ATA button ●11
 - 6 BLSKIP button ●6
- 3 TAPE/◀▶ (playback/transport direction change) button ●
- 4 ▲ (eject) button ●6
- 5 SEEK/AMS button ●7
- 6 PRESET/DISC button ●7
- 7 BTM/SENS (Best Tuning Memory/sensitivity adjust) button ●7
- 8 MUTE button ●
- 9 RELEASE (front panel release) button ●10
- 10 (volume/bass/treble/balance/fader control) button ●6
- 11 Reset button (located on the front side of the unit hidden by the front panel) ● Press this button when you use this unit for the first time, when you have changed the car battery, or when the buttons of this unit do not function properly.
- 12 SEL (control mode select) button ●6
- 13 Display window ●10
- 14 CD (disc play/CD changer select) button ●10
- 15 POWER SELECT switch (located on the bottom of the unit) See "POWER SELECT Switch" in the installation/connections manual.
- 16 XR-C200: (radio on/band select) button ●7
- XR-C202: (radio on/band select) button ●7
- (traffic announcement) button ●
- 17 OFF button ●6
- 18 DISP (display mode change/time set) button ●

The illustration of the front panel in this manual is of the XR-C200.

Playing a CrO2 or Metal Tape

Press the **[MTL]** button when you want to listen to a CrO2 (TYPE II) or metal (TYPE IV) tape. → "MTL" will appear on the display.

To cancel, press again.

Convenient Functions

Locating the Beginnings of the Tracks

— AMS (Automatic Music Sensor) Function

During playback, press either side of the SEEK/AMS button the number of times you wish to skip the tracks.



Up to nine tracks can be skipped.

If the blanks between the tracks are shorter than four seconds, or if there are noises, the AMS function will not work. Also, the unit may read long sections of low volume music or quiet sections on a track as blanks between tracks.

Searching the Desired Track

— Intro Scan Function

Press the **[INTRO]** button during playback.

→ "INTRO" appears on the display.

The first 10 seconds of all the tracks are played. When you find the desired track, press the button once more. The unit returns to the normal playback mode.

Playing Tracks Repeatedly

— Repeat Play Function

Press the **[REPEAT]** button during playback. → "REP" appears on the display.

When the currently played track is over, it will be played again from the beginning.

To cancel this mode, press the button again.

Radio Reception during Fast-forwarding or Rewinding of a Tape

— ATA (Automatic Tuner Activation) Function

Press the **[ATA]** button during playback.

→ "ATA" appears on the display.

When fast-forwarding or rewinding with the **[REVERSE]** button, the tuner will turn on automatically.

Skipping Blanks Automatically during Tape Playback

— Blank Skip Function

Press the **[BLANKSKIP]** button during playback.

→ "BLANKSKIP" appears on the display.

Blanks longer than eight seconds will be automatically skipped during tape playback.

Tuning in a Station

Searching for the Stations Automatically

— Automatic Tuning

1 Select the desired band.

XR-C200:

FM1 → FM2 → FM3 → FM1



MW → LW

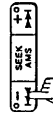


XR-C202:

FM1 → FM2 → FM3 → MW → SW → FM1



2 Press either side of the SEEK/AMS button to search for the station (automatic tuning).



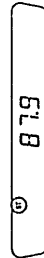
For lower frequencies



For higher frequencies

The scanning stops when a station is received. Press either side of the button repeatedly until the desired station is received.

When an FM stereo program with a sufficient signal strength is tuned in,



the "ST" indication will appear.

To avoid the automatic tuning from stopping on stations too frequently (local seek mode), press the **[TUNING]** button momentarily to get the "LCL" indication.

Only the stations with relatively strong signals can be tuned in. The local seek mode functions only when the automatic tuning is in operation.

If FM Stereo Reception is Poor

— Monaural Mode

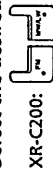
Press the **[MONO]** button momentarily. → "MONO" appears on the display.

The sound will improve, but it will become monaural.

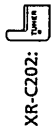
Tuning in by Adjusting the Frequency

— Manual Tuning

1 Select the desired band.



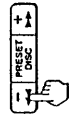
XR-C200:



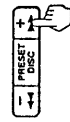
XR-C202:

2 Press and hold either side of the PRESET/DISC button.

Release the button when the desired station is received.



For lower frequencies



For higher frequencies

PREVENTING ACCIDENTS!

When tuning in during driving, use the automatic tuning and the memory preset tuning instead of the manual tuning.

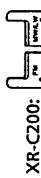
Memorizing Stations

Memorizing Stations Automatically

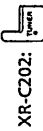
— BTM (Best Tuning Memory) Function

This function selects from the currently received band the stations with the strongest signals and memorizes them in order of frequency.

- 1 Select the desired band.



XR-C200:



XR-C202:

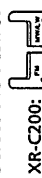
- 2 Press the button for more than two seconds.

- When there is no preset number indicated on the display window, stations will be stored on all preset number buttons on the currently selected band.
- When there is a preset number indicated on the display window, the unit will store stations on all preset number buttons from the one currently displayed.

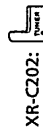
For example, when you select FM2 and preset number 3 is displayed, the operation will start from preset number 3 on FM2, and will stop at preset number 6 on FM3.

Memorizing Only the Desired Stations

- 1 Select the desired band.



XR-C200:



XR-C202:

- 2 Tune in the station which you wish to store on the preset number button.

- 3 Keep the desired preset number button (to) pressed for about two seconds until you hear a beep tone.

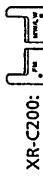
The number of the pressed preset number button appears on the display window.

Up to 6 stations on each band (FM1, FM2, FM3, MW and LW(SW)) can be stored on the preset number buttons in order of your choice. Therefore, 18 stations can be memorized on FM.

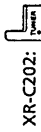
If you try to store another station on the same preset number button, the previously stored station will be erased.

Receiving the Memorized Stations

- 1 Select the desired band.



XR-C200:



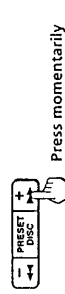
XR-C202:

- 2 Press momentarily the preset number button on which the desired station is stored.

Note

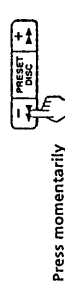
If you press the preset number button for more than two seconds, the currently received station will be memorized again. To receive the previously memorized station, make sure to press the preset number button only momentarily.

Press either side of the PRESET/DISC button momentarily to receive in order the stations stored in the memory (Preset Search Function).



Press momentarily

1 → 2 → ... → 5 → 6 → 1 → ...



Press momentarily

1 → 6 → 5 → ... → 2 → 2 → 1 → ...

Traffic Announcement Reception (XR-C202)

Receiving Traffic Announcements

Press the button. → “SDK” appears on the display.

The unit will search for a traffic information station.

When the station is tuned in, the “SK” indication too will appear.

When a traffic announcement starts → The “SDK” indication will flash.

The reception of the traffic announcement will override the current radio broadcast or tape or CD playback. When the announcement is over, the interrupted radio reception or tape or CD playback will be resumed.

To stop receiving the traffic announcements, press the button again.

Notes

- While the station is broadcasting a traffic announcement (with the “SDK” indication flashing), the SEEK/AMS, PRESET/DISC, BTM/SENS and preset number buttons will not be operational.
- While the unit is receiving a traffic information station (with the “SK” flashing), the BTM function (page 8) cannot be activated.
- During MW and SW reception, the SDK function does not work; if you press the SDK button, the unit will automatically switch to FM1.

Searching for another Traffic Information Station

Press the button while the “SDK” indication is lit but not flashing.

Hearing a Traffic Announcement at the Preset Volume Level

- 1 Adjust the volume to the desired level with the or button.
- 2 Press the button while pressing the button. → A beep sound will be heard, and the volume level will be memorized. When a traffic announcement starts, it is heard at the preset volume level.

Other Functions

Adjusting the Sound Characteristics

- 1 Select the item you want to adjust by pressing the button repeatedly.

VOL (volume) → BAS (bass) → TRE (treble) → BAL (balance) → FAD (fader) → VOL (volume)

- 2 Adjust the selected item by pressing either the or button.

Adjust within three seconds after selecting. (After three seconds the button will again serve as volume control button.)

Enjoying Bass and Treble even at Low Volume

— Loudness Function

Press the button. → “LOUD” will appear on the display. Bass and treble will be reinforced. To cancel, press again.

Muting the Sound Quickly

— Mute Function

Press the button. → The “MUTE” indication flashes. The sound is muted at once. To restore the previous volume level, press again.

This function will be also canceled when:

- the or OFF button is pressed.
- ejecting a cassette by pressing the button during tape playback.

Muting the Beep Tone

Press the button while pressing the button.

To reobtain the beep tone, press these buttons again.

CD Changer Operation

(With the optional CD changer(s) connected)

Playing a CD

Press the **▶▶▶▶▶** button. CD playback starts.

Locating the Beginnings of the Tracks

— AMS (Automatic Music Sensor) Function

During playback, press either side of the SEEK/AMS button the number of times you wish to skip the tracks.



To locate the previous tracks

To locate the succeeding tracks

Locating the Desired Part of a Track

— Manual Search

During playback, press and hold either side of the PRESET/DISC button. Release the button when you have found the desired part.

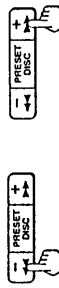


To reverse

To forward

Changing CDs

During playback, press either side of the PRESET/DISC button momentarily.



To return to the previous CD

To advance to the next CD

Selecting CD Changers

(with several CD changers connected)

Press the **▶▶▶▶▶** button during CD playback. Each time you press, another CD changer will be selected.

Searching for the Desired Track — Intro Scan Function

Press the **▶▶▶▶▶** button during playback. → "INTRO" appears on the display.

The first 10 seconds of all the tracks on the currently selected disc are played in order. After the first disc is over, the next CD is played. When two or more CD changers are connected, after the last disc of one changer has finished, CD playback moves on to the next CD changer.

When you find the desired track, press again. The unit returns to the normal CD playback mode.

Playing Repeatedly

— Repeat Play Functions

Playing the currently selected track repeatedly

— Track repeat

Press the **▶▶▶▶▶** button during CD playback to get the "REP 1" indication.

Playing the currently selected disc repeatedly

— Disc repeat

Press the **▶▶▶▶▶** button during CD playback to get the "REP 2" indication.

When the last track on the currently selected disc is over, CD playback is repeated from the beginning of that disc.

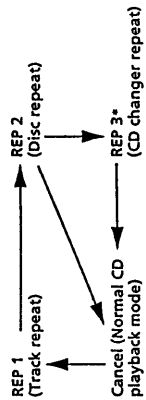
Playing the discs in the currently selected CD changer repeatedly

— CD changer repeat (when two or more CD changers are connected)

Press the **▶▶▶▶▶** button during CD playback to get the "REP 3" indication.

When the last disc in the currently selected CD changer has been played, CD playback will be repeated from the first CD in this changer.

The function of the **▶▶▶▶▶** button changes cyclically as follows:



* CD changer repeat (REP 3) mode functions only when two or more CD changers are connected to the unit. When only one CD changer is connected, the "REP 3" indication will not be displayed. In case you press the **▶▶▶▶▶** button again while the "REP 2" indication is being displayed, the repeat mode will be canceled.

Playing Tracks Randomly

— Shuffle Play Functions

Playing the tracks on the currently selected disc randomly

— Disc shuffle play

Press the **▶▶▶▶▶** button during CD playback to get the "SHUF 1" indication.

All tracks on the currently selected CD are played in random order. After each track has been played once, shuffle play will continue with the next CD.

Playing each track on each CD in the currently selected CD changer randomly

— CD changer shuffle play

Press the **▶▶▶▶▶** button during CD playback to get the "SHUF 2" indication.

All tracks on each CD in the currently selected CD changer are played in random order.

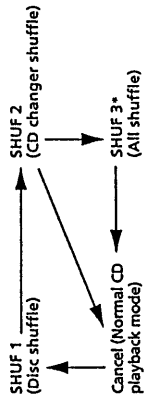
Playing each track on each CD in all connected CD changers randomly

— All shuffle play (when two or more CD changers are connected)

Press the **▶▶▶▶▶** button during CD playback to get the "SHUF 3" indication.

All tracks on each CD in each CD changer connected are played in random order.

The function of the **▶▶▶▶▶** button changes cyclically as follows:



* The all-shuffle (SHUF 3) mode functions only when two or more changers are connected to the unit. When only one changer is connected, "SHUF 3" indication will not be displayed. In case you press the **▶▶▶▶▶** button again while "SHUF 2" is displayed, the shuffle play will be canceled.

If you press the **▶▶▶▶▶** button during shuffle play, the first 10 seconds of all tracks will be played randomly.

Connections

Connexions

Anschluß

Collegamenti

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the yellow and red power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is energized when the ignition key is in the accessory position.
- Run all ground wires to a common ground point.

When the Unit is Used in a Car with No Accessory Position on the Ignition Key

— POWER SELECT Switch

The illumination on the front panel is factory-set to be turned on even when the unit is not being played. However, this setting may cause some car battery wear if the unit is used in a car with no accessory position on the ignition key. To avoid this battery wear when using the unit in such a car, set the POWER SELECT switch located on the bottom of the unit to the OFF position, then press the reset button. The illumination is reset to stay off while the unit is not being played.

Note

The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the OFF position.

Précautions

- Cet appareil est conçu pour fonctionner sur courant continu de 12 V avec masse négative.
- Avant d'effectuer les connexions, débrancher la borne de terre de la batterie du véhicule pour éviter tout court-circuit.
- Brancher les fils d'entrée d'alimentation jaune et rouge seulement après avoir terminé tous les autres branchements.
- Veiller à ne pas raccorder le fil rouge d'entrée d'alimentation à la borne positive de 12 V qui est alimentée quand la clé de contact est sur la position accessoire.
- Rassembler tous les fils de terre en un point de masse commun.

Si l'appareil est utilisé dans une voiture dont la clé de contact n'a pas de position accessoire

— Interrupteur POWER SELECT

L'éclairage du panneau avant est réglé en usine de manière à s'allumer même quand l'appareil ne fonctionne pas. Cependant, ce réglage risque d'épuiser la batterie si l'appareil est utilisé dans une voiture dont la clé de contact ne possède pas de position accessoire. Pour éviter d'épuiser la batterie, régler l'interrupteur POWER sur le socle de l'appareil sur OFF, puis appuyer sur la touche de réinitialisation. L'éclairage est réglé pour rester éteint quand l'appareil n'est pas utilisé.

Remarque

Quand l'interrupteur POWER SELECT est réglé sur OFF, l'avertisseur du panneau avant ne fonctionne pas.

Vorsicht

- Dieses Gerät ist ausschließlich für eine negativ geerdete 12-V-Autobatterie bestimmt.
- Trennen Sie vor dem Anschließen des Geräts die Erdungsklemme der Batterie ab, um einen Kurzschluß zu vermeiden.
- Schließen Sie das gelbe und rote Stromversorgungskabel erst an, wenn alle anderen Kabel bereits angeschlossen sind.
- Leiten Sie das rote Stromversorgungskabel an einen positiven 12-V-Kontakt, an dem Spannung anliegt, wenn sich das Zündschloß in der Position I bzw. ACC (Position vor der Zündposition) befindet.
- Schließen Sie alle Erdungskabel an einen gemeinsamen Massepunkt an.

Wenn das Zündschloß Ihres Wagens keine Position I bzw. ACC besitzt — POWER SELECT-Schalter

— Interrupteur POWER SELECT

Das Gerät ist werkseitig so voreingestellt, daß das Bedienungspult auch dann beleuchtet ist, wenn das Gerät nicht betrieben wird. Besitzt das Zündschloß Ihres Fahrzeugs keine Position I bzw. ACC, so ist die Beleuchtung ständig eingeschaltet und entzieht der Batterie Strom. Stellen Sie in einem solchen Fall den POWER SELECT-Schalter an der Unterseite des Geräts auf OFF, und drücken Sie dann die Rücksetztaste. Bei ausgeschaltetem Gerät ist das Bedienungspult dann nicht mehr beleuchtet.

Hinweis

Der Warnton für die Frontplatte ertönt nicht, wenn der POWER SELECT-Schalter auf OFF gestellt ist.

Attenzione

- Questo apparecchio è stato progettato per l'uso solo a 12 V CC con massa negativa.
- Prima di eseguire i collegamenti, scollegare il terminale di massa della batteria dell'auto per evitare cortocircuiti.
- Collegare i cavi di collegamento alimentazione rosso e giallo solo dopo aver collegato tutti gli altri cavi.
- Assicurarsi di collegare il cavo rosso di collegamento alimentazione al terminale di alimentazione 12 V positivo che è sotto tensione quando la chiavetta di accensione è in posizione accessoria.
- Portare tutti i cavi di massa a un punto di massa comune.

Quando si usa l'apparecchio in un'auto priva di posizione accessoria per la chiavetta di accensione

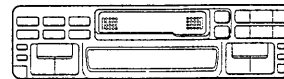
— Interruttore POWER SELECT

L'illuminazione del pannello anteriore è stata predisposta in fabbrica per l'attivazione anche quando non si usa l'apparecchio. Tuttavia questa regolazione può causare scaricamento della batteria dell'auto se si usa l'apparecchio in un'auto priva di posizione accessoria per la chiavetta di accensione. Per evitare lo scaricamento della batteria quando si usa l'apparecchio in questo tipo di auto, regolare su OFF l'interruttore POWER SELECT situato sul fondo e quindi premere il pulsante di azzeramento. L'illuminazione viene così regolata per lo spegnimento quando non si usa l'apparecchio.

Nota

La suoneria di avvertimento per il pannello anteriore non si attiva quando l'interruttore POWER SELECT è regolato sulla posizione OFF.

Change the position with a jeweler's screwdriver, etc.
Changer la position avec un tournevis de joaillier ou un objet similaire.
Den Schalter mit einem kleinen Schraubenzieher o.ä. umstellen.
Cambiare la posizione con un cacciavite da gioielliere, ecc.



Reset Button

When the installation and connections are over, be sure to press the reset button with a ball-point pen etc.

Touche de réinitialisation

Quand l'installation et les connexions sont terminées, appuyer sur la touche de réinitialisation avec un stylo bille ou un objet pointu.

Rücksetztaste

Nach der Installation und dem Anschluß muß die Rücksetztaste mit einem Kugelschreiber o.ä. gedrückt werden.

Pulsante di azzeramento

Dopo avere terminato l'installazione e i collegamenti, assicurarsi di premere il pulsante di azzeramento con la punta di una penna a sfera ecc.



Reset button
Touche de réinitialisation
Rücksetztaste
Pulsante di azzeramento

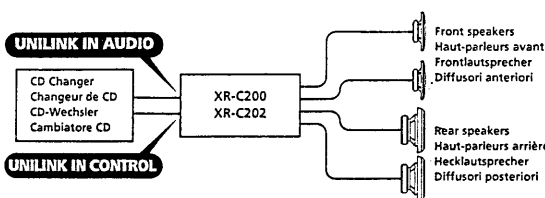
Connection Diagram

Schémas de connexion

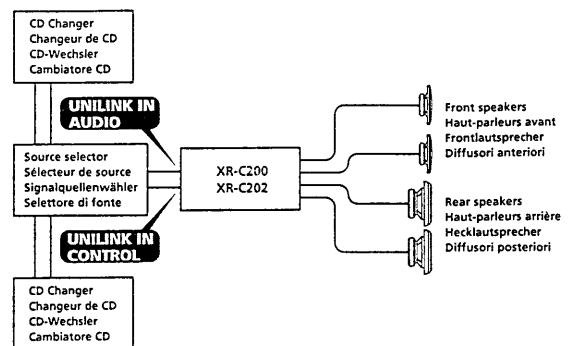
Anschlußdiagramm

Schema di collegamento

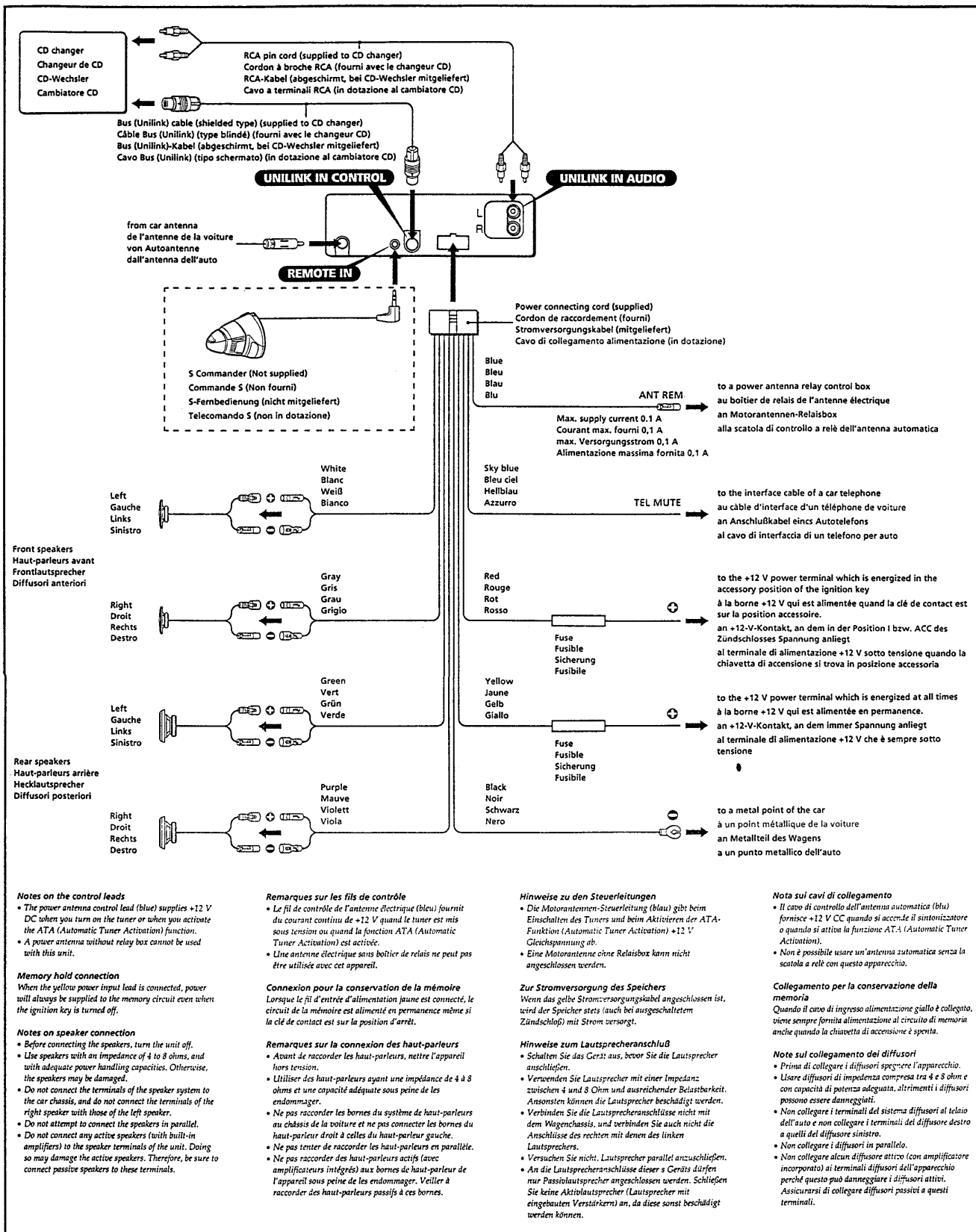
Example 1/Exemple 1/Beispiel 1/Esempio 1



Example 2/Exemple 2/Beispiel 2/Esempio 2



If you connect two or more CD changers, the source selector XA-U20 or XA-U40 is required.
Vous devrez utiliser le sélecteur de source XA-U20 or XA-U40, si vous raccordez au moins deux changeurs.
Bei Anschluß von zwei oder mehr CD-Wechslern wird der Signalquellenwähler XA-U20 oder XA-U40 benötigt.
Se si collegano due o più cambiatori CD, è necessario il selettore di fonte XA-U20 o XA-U40.

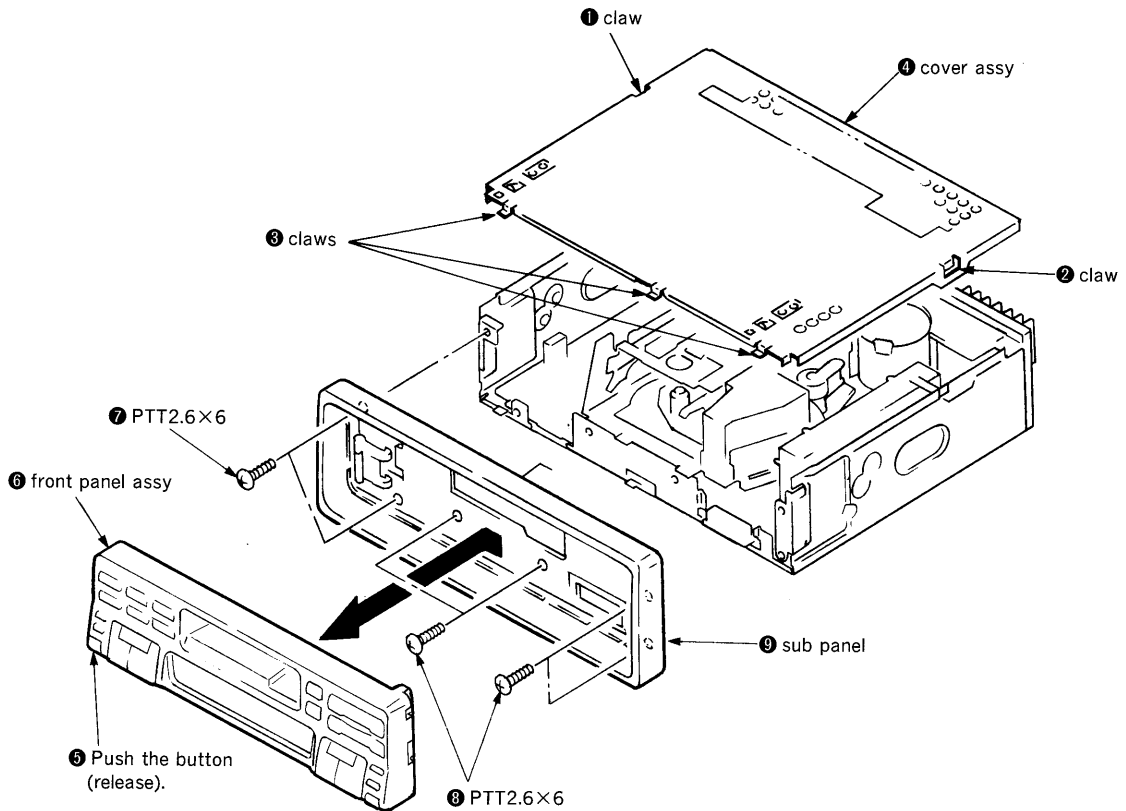


SECTION 2 DISASSEMBLY

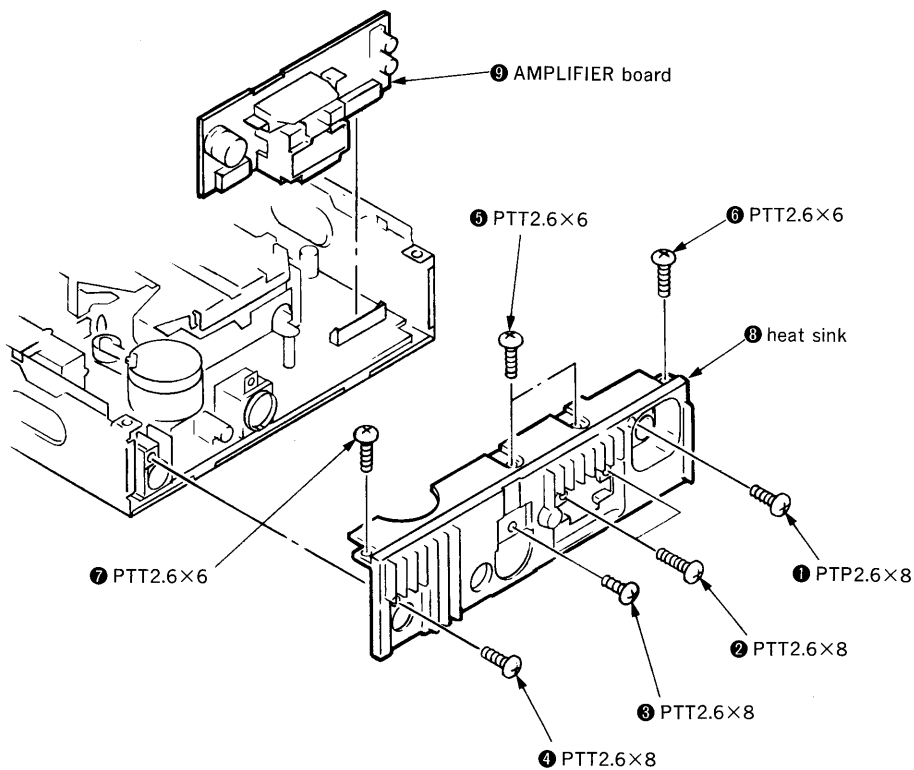
SEE ADDITIONAL
INFORMATION

Note: Follow the disassembly procedure in the numerical order given.

2-1. SUB PANEL

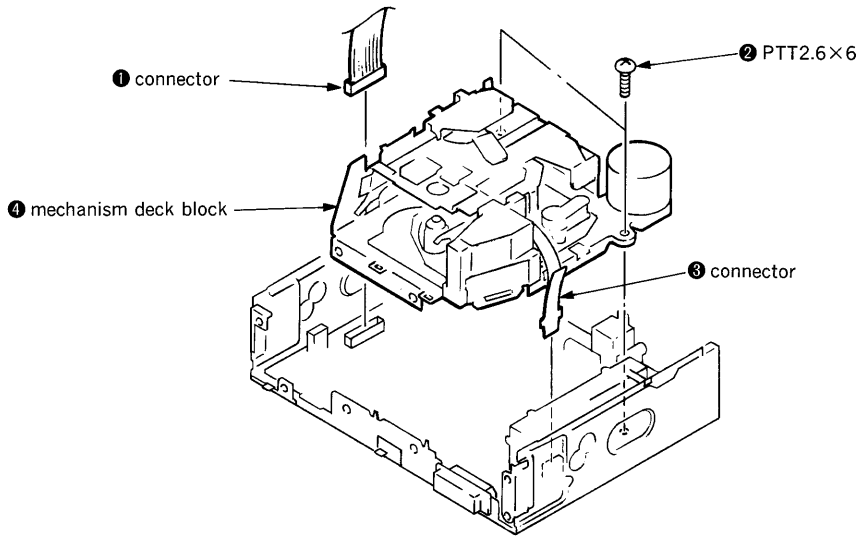


2-2. AMPLIFIER BOARD

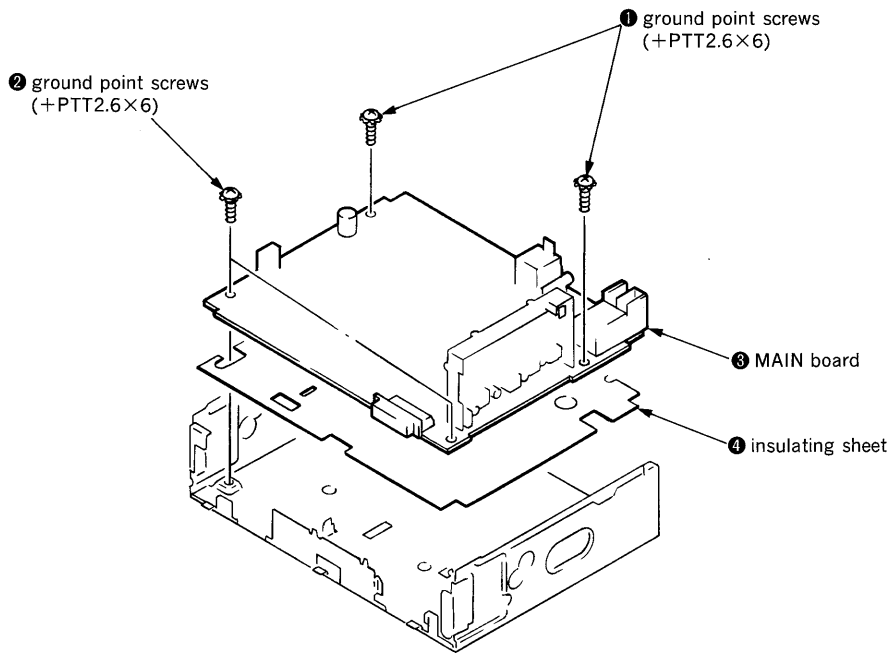


SEE ADDITIONAL INFORMATION

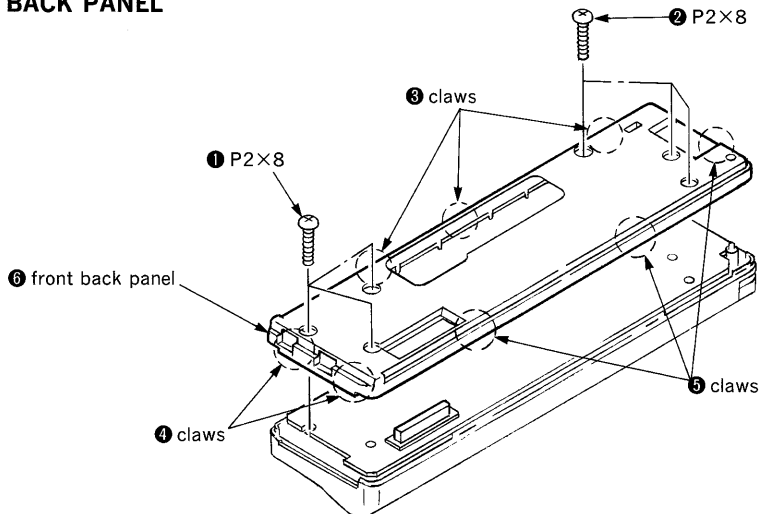
2-3. MECHANISM DECK BLOCK



2-4. MAIN BOARD



2-5. FRONT BACK PANEL



SECTION 3 MECHANICAL ADJUSTMENTS

PRECAUTION

1. Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment :

| | |
|---------|--------------|
| PB head | Pinch roller |
| Idler | Rubber belt |
| Capstan | |
2. Demagnetize the PB head using a head demagnetizer.
3. Be careful not to use a magnetized screwdriver.
4. After the adjustment is completed, lock the adjustment parts using screws.
5. Unless otherwise specified, make adjustments at the specified voltage (14.4V).

Torque Measurement

| Mode | Torque Meter | Meter Reading |
|---------------------|--------------|--|
| FWD | CQ-102C | 30 – 65g•cm (0.42 – 0.90 oz•inch) |
| FWD Back Tension | | 0.5 – 4.5g•cm (0.01 – 0.06 oz•inch) |
| REV | CQ-102RC | 30 – 65g•cm (0.42 – 0.90 oz•inch) |
| REV Back Tension | | 0.5 – 4.5g•cm (0.01 – 0.06 oz•inch) |
| FF, REW | CQ-201B | 60 – 200g•cm (0.83 – 2.78 oz•inch) |

Tape Tension Measurement

| Mode | Tension Meter | Meter Reading |
|------|---------------|--------------------------------------|
| FWD | CQ-403A | more than 90g (more than 3.18 oz) |
| REV | CQ-403R | |

SECTION 4 ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and MW (AM) Auto Scan/Stop Level adjustments can be performed easier than it in ordinaly procedure.

<Set the Test Mode>

1. Set the "OFF" mode.
2. Push the preset [4] button.
3. Push the preset [5] button.
4. Press the preset [1] button for two seconds.
5. Then the display indicates all lights, the test mode is set.

<Release the Test mode>

1. Push the "OFF" button.

See the adjustment location from on page 14 for the adjustment.

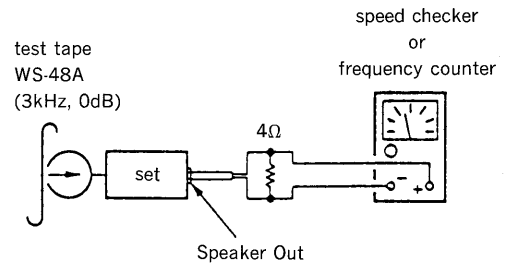
DECK SECTION

0dB=0.775V

Tape Speed Adjustment

Procedure :

1. Put the set into the FWD PB mode.



Specification : Constant speed

| Speed checker | Frequency counter |
|---------------|-------------------|
| -1.5 to +2.5% | 2,955 to 3,075Hz |

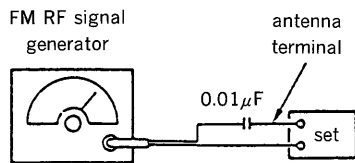
Adjustment Location : See page 14.

TUNER SECTIONOdB=1 μ V**Cautions during repair**

When the front end is defective, replace it by a new one because its internal block is difficult to repair.

FM Auto Scan/Stop Level Adjustment**Setting :**

TUNER button (C202) : FM
 FM button (C200) : FM
 9k/10k switch (E model) : 9k

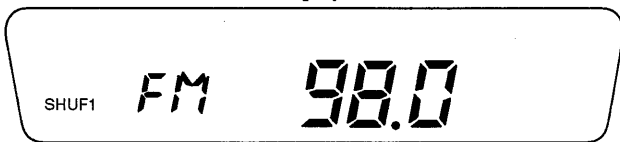


Carrier frequency : 98.0MHz
 Output level : 22dB (12.6 μ V)
 Mode : mono
 Modulation : 1kHz, 22.5kHz deviation

Procedure :

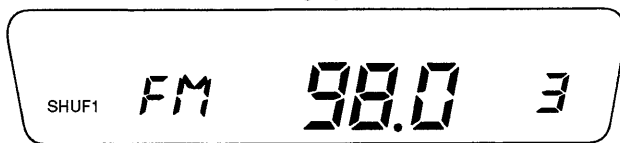
1. Set to the test mode. (See page 11.)
2. Push the **TUNER** button (C202) or **FM** button (C200) and set to FM.

Display



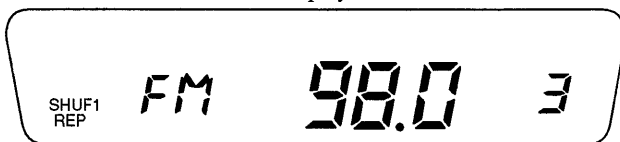
3. Push the preset **3** button.

Display

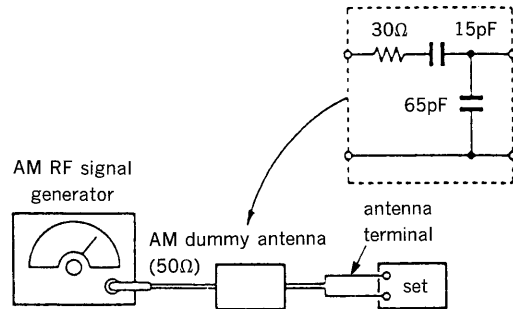


4. Adjust with the volume RV3 on TU10 so that put light "REP" indication on the display window. But, in case of already indicated "REP", turn the RV3 so that put out light "REP" indication and adjustment.

Display

**Adjustment Location :** See page 14.**MW (AM) Auto Scan/Stop Level Adjustment****Setting :**

MW/LW button (AEP, UK model) : MW
 AM button (E model) : AM
 TUNER button (C202) : MW
 9k/10k switch (E model) : 9k

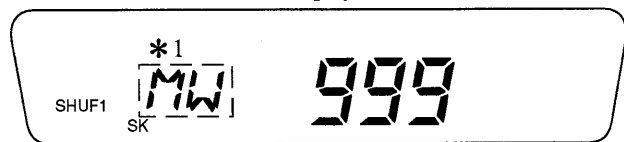


Carrier frequency : 999kHz
 30% amplitude
 modulation by
 1kHz signal
 Output level : 33dB (44.7 μ V)

Procedure :

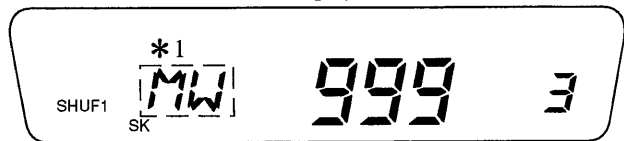
1. Set to the test mode. (See page 11.)
2. Push the **MW/LW** button (AEP, UK model) or **AM** button (E model) or **TUNER** button (C202) and set to MW.

Display



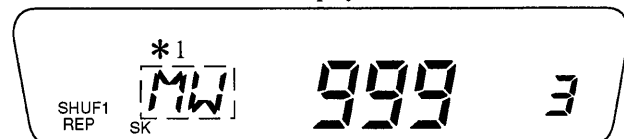
3. Push the preset **3** button.

Display



4. Adjust with the volume RV1 on TU10 so that put light "REP" indication on the display window. But, in case of already indicated "REP", turn the RV1 so that put out light "REP" indication and adjustment.

Display



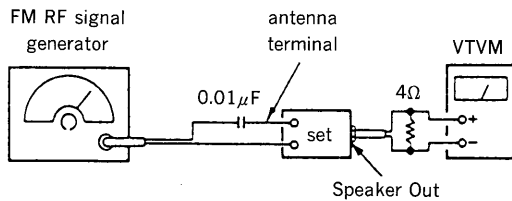
* 1 : E model is indicates "AM".

Adjustment Location : See page 14.

High Cut Control Effect Adjustment

Setting :

TUNER button (C202) : FM
 FM button (C200) : FM



Carrier frequency : 98.0MHz
 Output level : 60dB (1mV)
 Mode : mono
 Modulation : 10kHz, 40kHz deviation

Procedure :

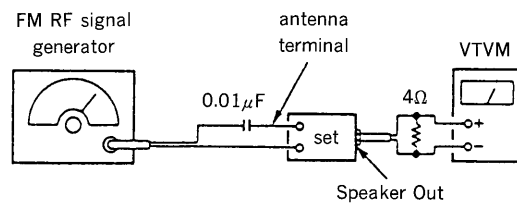
1. Tune the 98.0MHz.
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV2 on TU10 so that the output level is (A)–5dB then signal generator input set to 20dB.

Adjustment Location : See page 14.

FM Noise Focus Adjustment

Setting :

TUNER button (C202) : FM
 FM button (C200) : FM



Carrier frequency : 98.0MHz
 Output level : 60dB (1mV)
 Mode : mono
 Modulation : 1kHz, 75kHz deviation

Procedure :

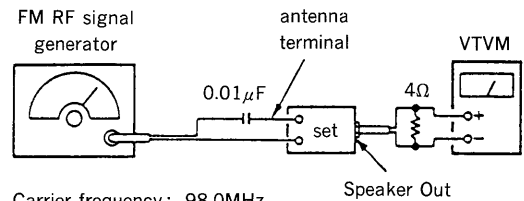
1. Tune the 98.0MHz.
2. The then output level is supposing that (B) dB.
3. Adjust with the volume RV5 on TU10 so that the output level is (B)–30dB then signal generator input set to –20dB.

Adjustment Location : See page 14.

FM Stereo Separation Adjustment

Setting :

TUNER button (C202) : FM
 FM button (C200) : FM



Carrier frequency : 98.0MHz
 Output level : 70dB (3.2mV)
 Mode : stereo
 Modulation : main : 1kHz, 20kHz deviation
 sub : 1kHz, 20kHz deviation
 19kHz pilot : 7.5kHz deviation

Procedure :

| FM stereo signal generator output channel | VTVM connection | VTVM reading (dB) |
|---|-----------------|---|
| L-CH | L-CH | Ⓐ |
| R-CH | L-CH | Ⓑ [Ⓐ] Adjust RV4 on TU10 for minimum reading. |
| R-CH | R-CH | Ⓒ |
| L-CH | R-CH | Ⓓ [Ⓒ] Adjust RV4 on TU10 for minimum reading. |

L-CH Stereo separation : Ⓐ–Ⓑ

R-CH Stereo separation : Ⓒ–Ⓓ

The separations of both channels should be equal.

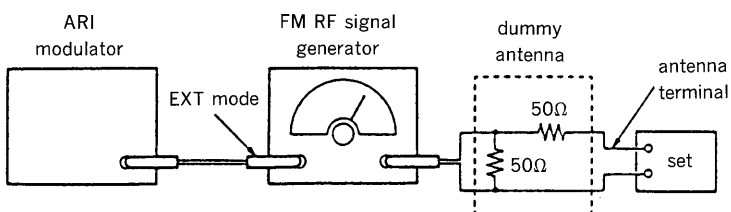
Specification : Separation more than 30dB

Adjustment Location : See page 14.

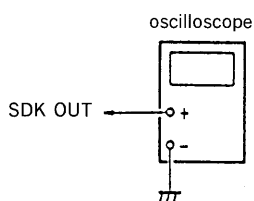
SDK Adjustment (XR-C202 only)

Setting :

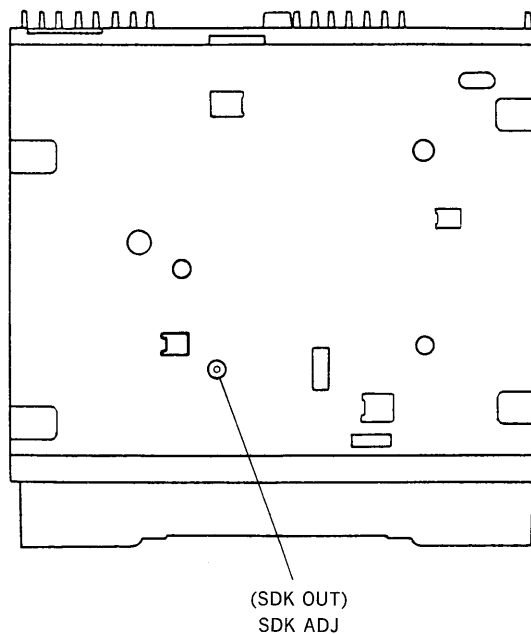
SDK (Traffic Announcement) button : ON



| | |
|----------------|-------------------------------------|
| ARI modulation | Carrier frequency : 98.0MHz |
| SK : 2% | Output level : 60dB (1mV) |
| DK : 30% | Mode : mono |
| BK : 60% | Modulation : 1kHz, 7.5kHz deviation |



—SET LOWER VIEW—

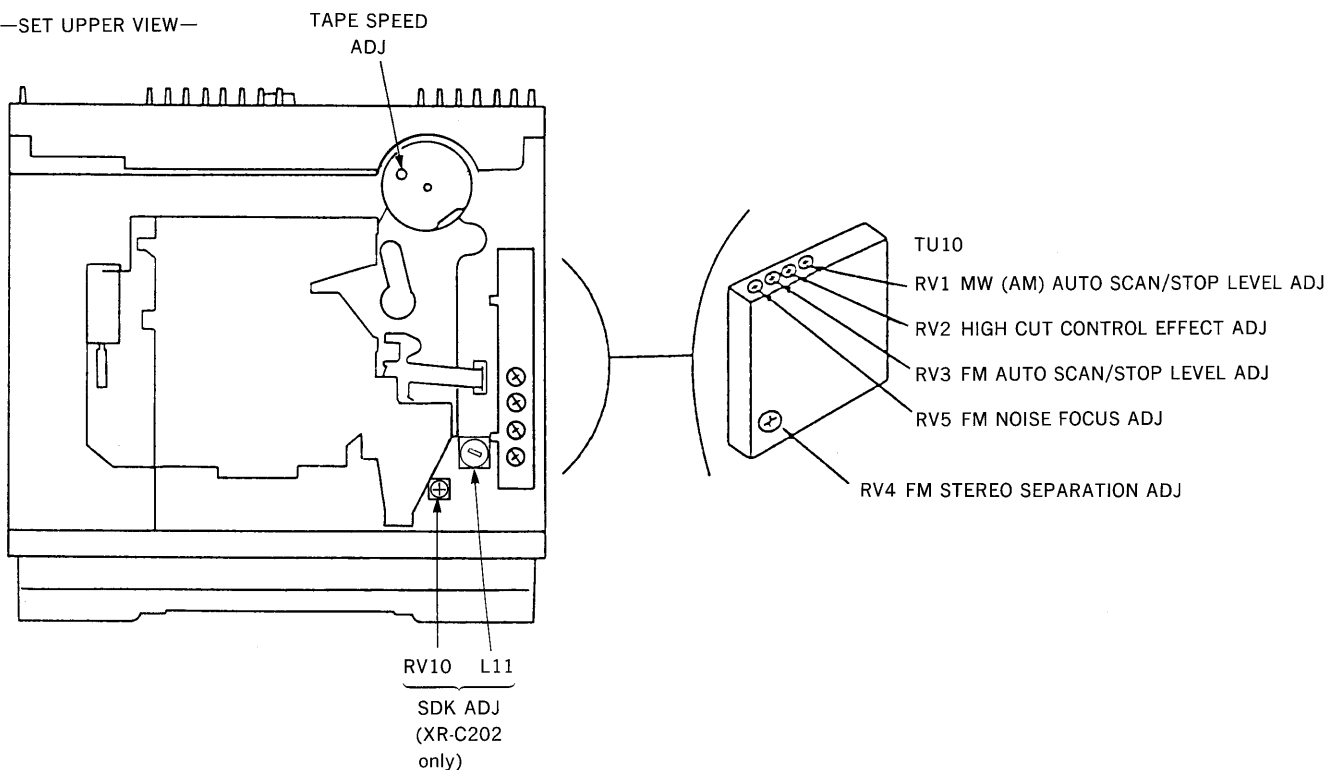


Procedure :

1. Adjust L11 and RV10 so that the output waveform become the maximum.

Adjustment Location :

—SET UPPER VIEW—



SECTION 5 DIAGRAMS

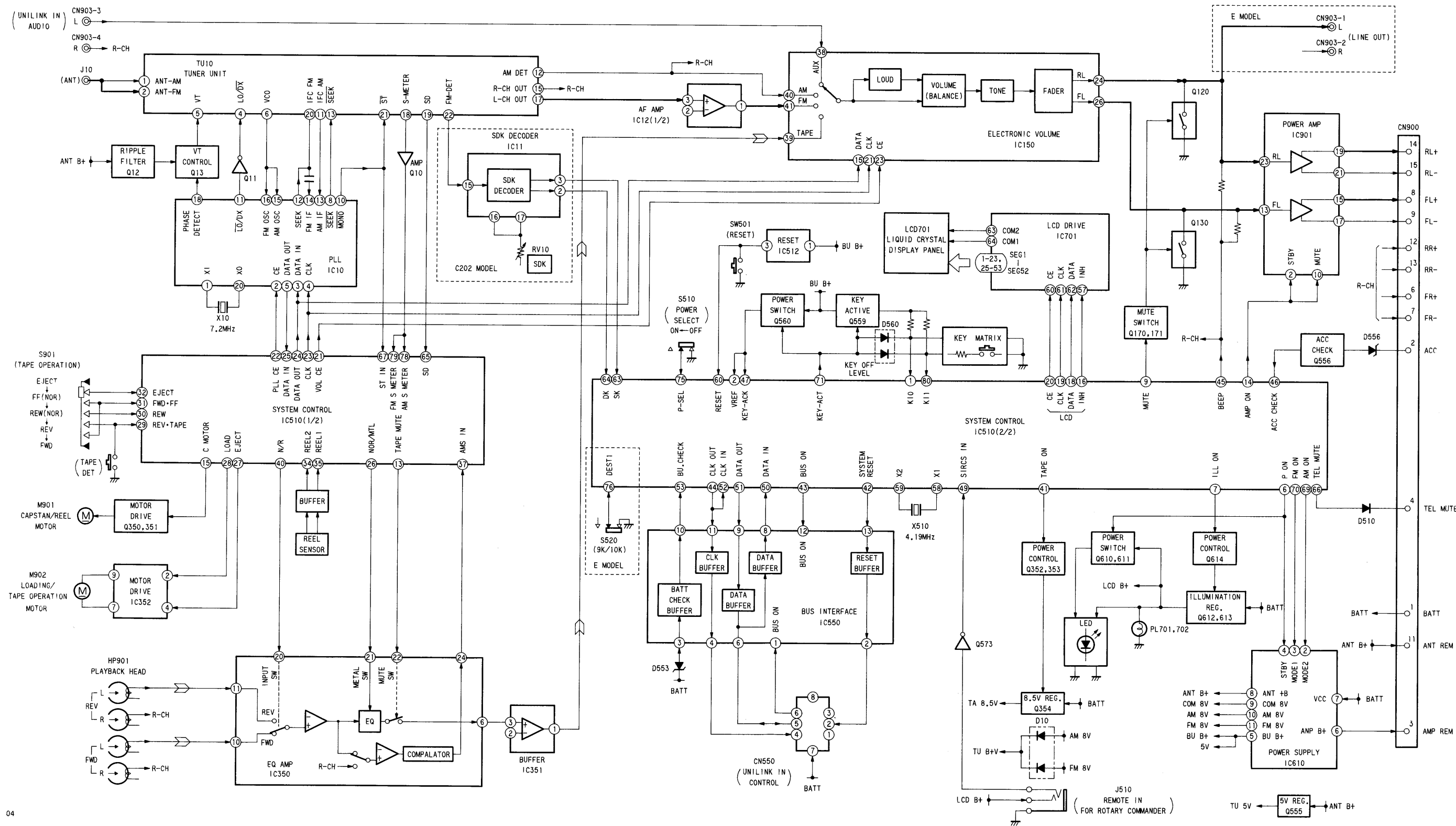
5-1. IC PIN DESCRIPTION

● IC510 μ PD75518GF-247-3B9 (System Control)

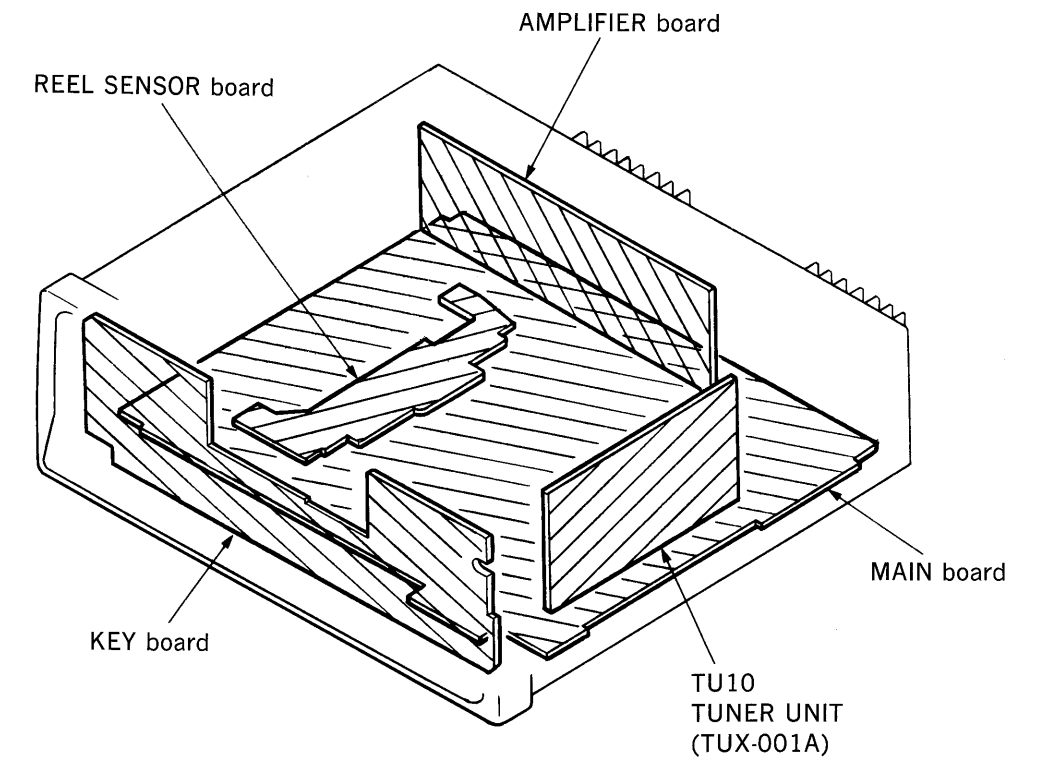
| Pin No. | Pin Name | I/O | Pin Description |
|---------|---------------|-----|---|
| 1 | KI0 | I | KEY input |
| 2 | VREF | I | A/D reference voltage input |
| 3, 4 | VDD | — | Power supply terminal |
| 5 | N. C | — | No connection |
| 6 | P-ON | O | At P-ON : High output |
| 7 | ILL-ON | O | At ACC-ON : High output (P-SEL : ON) At P-ON : High output (P-SEL : OFF) |
| 8 | COLOR | — | No used. |
| 9 | MUTE | O | At MUTE : High output |
| 10 | AUX-MUTE | — | No used. |
| 11 | DOLBY-ON/OFF | — | Not used. |
| 12 | TUNER-MUTE | — | Not used. |
| 13 | TAPE-MUTE | O | Except for TAPE PLAYBACK : High output (At movement on FF, REW and AMS : Low output) |
| 14 | AMP-ON | O | Inner power amplifier control terminal. At AMP-ON : High output |
| 15 | C-MOTOR | O | Capstan motor control terminal. At MOTOR-ON : High output |
| 16 | LCD-INH | O | INHIBIT signal to LCD driver IC. At Low output : Light off |
| 17 | TEST MODE | I | At Low input : TEST MODE 1. Input available at timing only of RESET L to H and BU CHECK L to H. |
| 18 | LCD-DATA | O | DATA output terminal to LCD driver IC. |
| 19 | LCD-CLK | O | CLOCK output terminal to LCD driver IC. |
| 20 | LCD-CE | O | LATCH output terminal to LCD driver IC. |
| 21 | VOL-CE | O | LATCH output terminal to VOL IC. |
| 22 | PLL-CE | O | LATCH output terminal to PLL IC. |
| 23 | VOL. PLL-CLK | O | CLOCK output terminal to VOL and PLL IC. |
| 24 | VOL. PLL-DATA | O | DATA output terminal to VOL and PLL IC. |
| 25 | PLL DATA IN | I | DATA input terminal from PLL IC. |
| 26 | NOR/MTL | I/O | At AUTO METAL : METAL input terminal. At METAL : Low input, at NORMAL : High input. At no AUTO METAL : METAL output terminal. At METAL : High output, at NORMAL : Low input. |
| 27 | EJECT | O | LOADING MOTOR control terminal. At moving in the direction of EJECT : High output. |
| 28 | LOAD | O | LOADING MOTOR control terminal. At moving in the direction of LOAD and PLAY. |
| 29—32 | POS4—POS1 | I | MD position detection terminal |
| 33 | GND | — | GND |
| 34 | REEL2 | I | MD reel table rotation detection terminal. FWD supply side |
| 35 | REEL1 | I | MD reel table rotation detection terminal. FWD take-up side |
| 36 | AUT-MTL | — | Connect to GND. |
| 37 | AMS-IN | I | TAPE music with/without detection terminal. Low input : With music, High input : Without music |
| 38 | EEPROM-DATA | — | Connect to GND. |
| 39 | EEPROM-CLK | — | Not used. |
| 40 | N/R | O | NORMAL/ $\overline{\text{REVERSE}}$ output terminal |
| 41 | TAPE-ON | O | OR output of LM•EJECT and LM•LOAD. At one side ACTIVE : High output, at REEL detection : High output |
| 42 | SYSTEM RESET | O | UNILINK $\overline{\text{SYSTEM RESET}}$ terminal. Low output : SYSTEM RESET |

| Pin No. | Pin Name | I/O | Pin Description |
|---------|------------|-----|---|
| 43 | BUS-ON | O | For UNILINK terminal |
| 44 | CLK-OUT | O | For UNILINK terminal |
| 45 | BEEP | O | For piezoelectric buzzer output terminal |
| 46 | ACC-CHECK | I | Accessory detection terminal, Low input : ACC ON |
| 47 | KEY-ACK | I | KEY ACKNOWLEDGE input terminal. For KEY insert input |
| 48 | C-ALARM | I | Caution alarm with/without initial setting terminal. Low input : With caution alarm |
| 49 | SIRCS-IN | I | SIRCS (REM DET) input terminal |
| 50 | DATA-IN | I | For UNILINK terminal |
| 51 | DATA-OUT | O | For UNILINK terminal |
| 52 | CLK-IN | I | For UNILINK terminal |
| 53 | BU. CHECK | I | Back Up voltage detection terminal |
| 54 | VSS | — | GND |
| 55 | XT1 | — | Connect to GND. |
| 56 | XT2 | — | Not used. |
| 57 | IC | — | Connect to GND. |
| 58 | X1 | — | Connect to crystal. (4.19MHz) |
| 59 | X2 | — | Connect to crystal. (4.19MHz) |
| 60 | RESET | I | RESET input |
| 61, 62 | — | — | Connect to GND. |
| 63 | SK | I | High input : With SK |
| 64 | DK | I | High input : With DK |
| 65 | SD | I | High input : With SD |
| 66 | TEL-MUTE | I | Low input : 20dB audio mute |
| 67 | ST-IN | I | Low input : Stereo |
| 68 | N-SW | I | Low input : With front panel |
| 69 | AM-ON | O | At TUNER ON : High output |
| 70 | FM-ON | O | At FM (both playing and behind) : High output |
| 71 | KEY-ACT | O | Reverse pin ⑤ and Active output terminal |
| 72 | — | — | Not used. |
| 73 | A. GND | — | A/D GND |
| 74 | DOLBY-SEL | I | Connect to GND. |
| 75 | P-SEL | I | POWER SELECT switch input. High input : ON, Low input : OFF. (Low input : Setting without ACC position) |
| 76 | DEST1 | I | Destination setting terminal |
| 77 | DEST0 | I | Destination setting terminal |
| 78 | AM-S-METER | I | AM S meter input terminal |
| 79 | FM-S-METER | I | FM S meter input terminal |
| 80 | KI1 | I | KEY input terminal |

5-2. BLOCK DIAGRAM



5-3. CIRCUIT BOARDS LOCATION

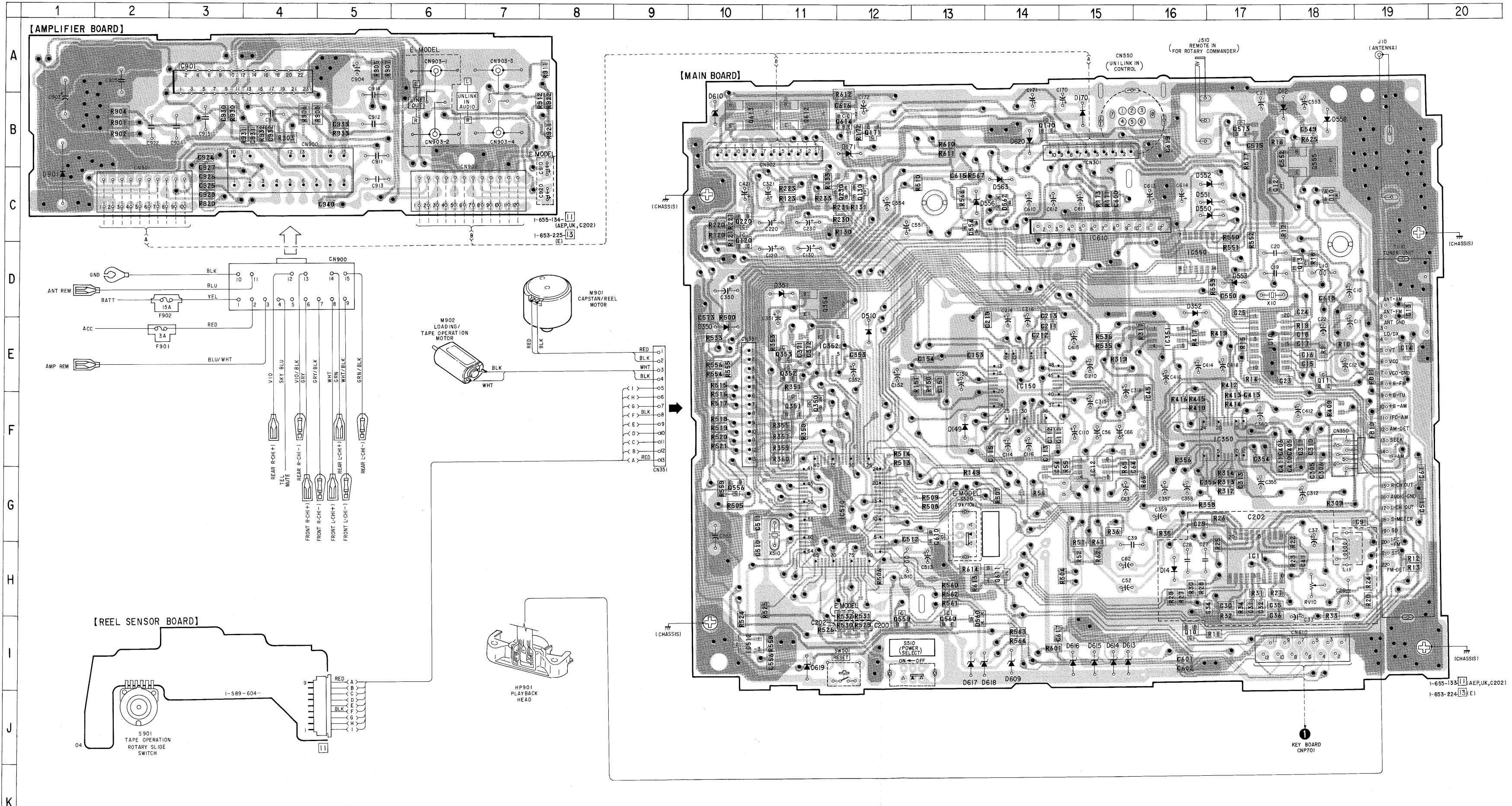


• Semiconductor Location

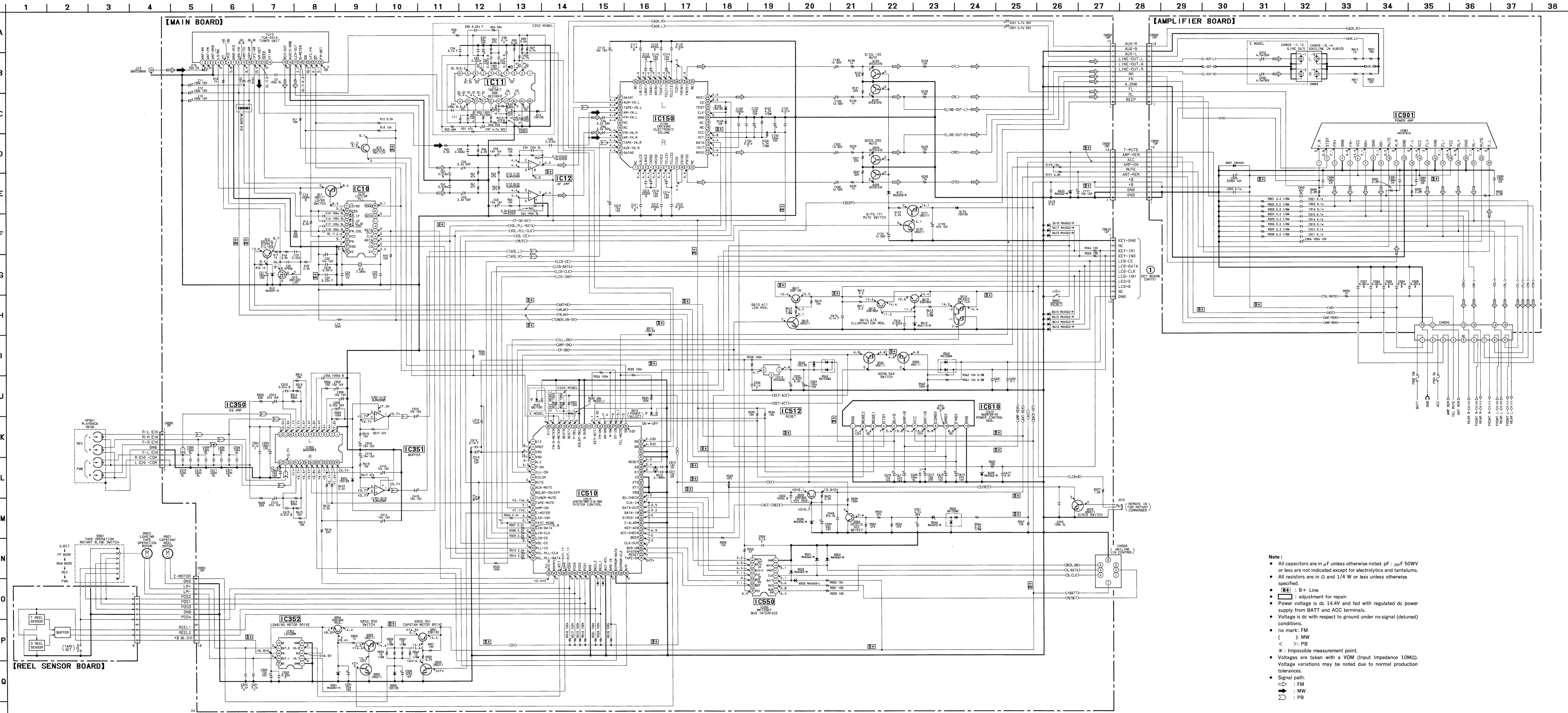
| Ref. No. | Location | Ref. No. | Location |
|----------|----------|----------|----------|
| D10 | C-18 | IC150 | E-14 |
| D12 | B-18 | IC350 | F-17 |
| D14 | H-16 | IC351 | E-16 |
| D149 | F-13 | IC352 | E-11 |
| D170 | B-15 | IC510 | G-11 |
| D171 | B-12 | IC512 | I-10 |
| D350 | E-10 | IC550 | D-16 |
| D351 | D-11 | IC610 | C-15 |
| D352 | D-16 | IC901 | A-3 |
| D510 | E-12 | | |
| D550 | C-16 | Q10 | I-16 |
| D551 | C-16 | Q11 | E-18 |
| D552 | C-16 | Q12 | C-17 |
| D553 | D-17 | Q13 | D-18 |
| D554 | C-13 | Q120 | C-10 |
| D556 | C-13 | Q130 | C-12 |
| D558 | B-18 | Q170 | B-14 |
| D560 | H-13 | Q171 | B-12 |
| D562 | C-14 | Q220 | C-10 |
| D563 | C-14 | Q230 | C-12 |
| D609 | I-14 | Q350 | F-11 |
| D610 | B-10 | Q351 | F-11 |
| D613 | I-15 | Q352 | E-11 |
| D614 | I-15 | Q353 | E-11 |
| D615 | I-15 | Q354 | D-11 |
| D616 | I-15 | Q555 | B-18 |
| D617 | I-13 | Q556 | G-10 |
| D618 | I-13 | Q559 | H-12 |
| D619 | I-11 | Q560 | H-13 |
| D620 | B-14 | Q573 | B-17 |
| D901 | C-1 | Q610 | G-13 |
| | | Q611 | H-14 |
| IC10 | E-17 | Q612 | B-11 |
| IC11 | H-17 | Q613 | B-10 |
| IC12 | F-15 | Q614 | B-12 |

Note:
 • ○ : parts extracted from the component side.
 • ● : Through hole.
 • ◐ : Pattern on the side which is seen.
 • ◑ : Pattern on the rear side.

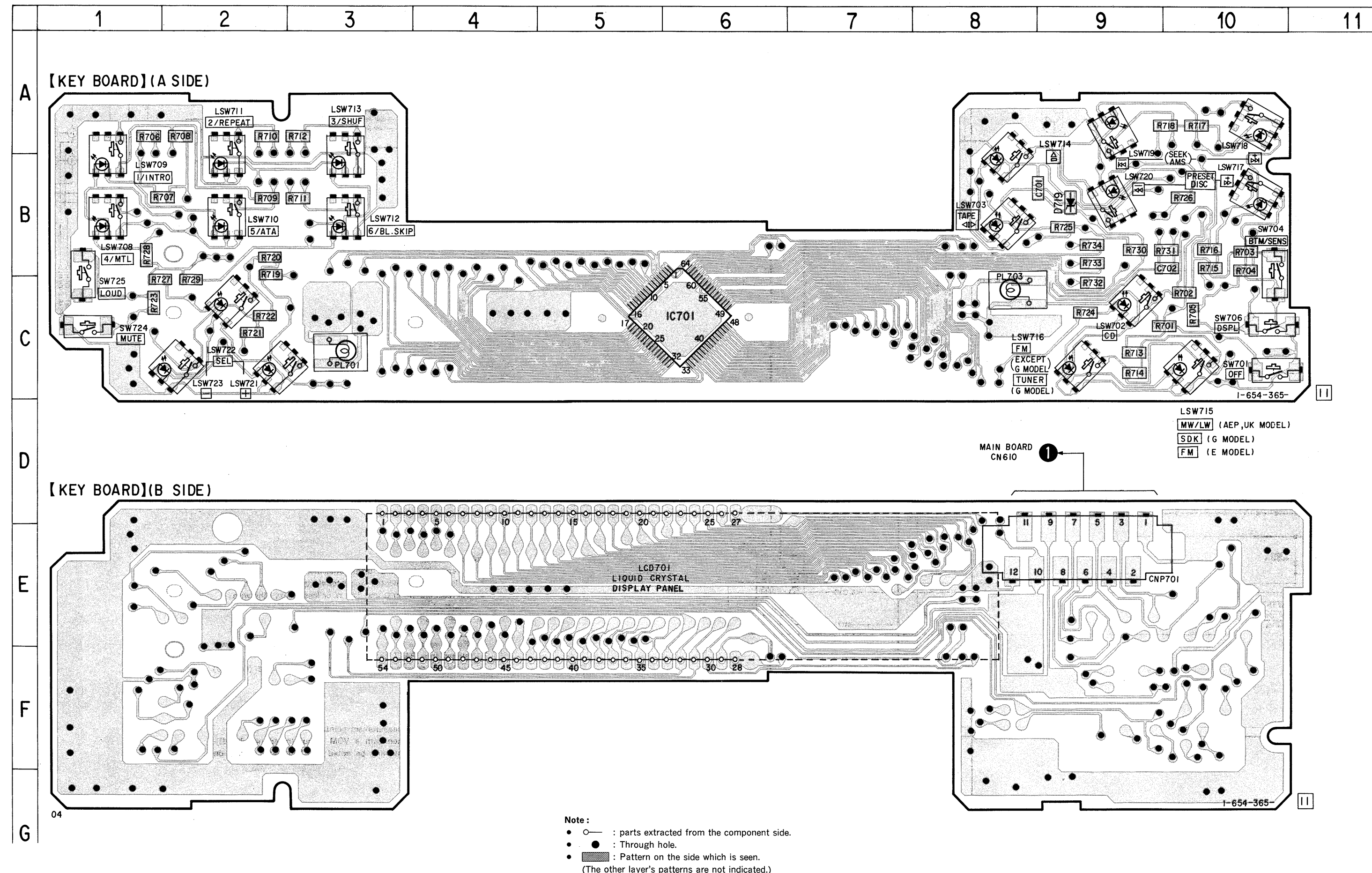
5-4. PRINTED WIRING BOARDS—MAIN SECTION— • Refer to page 35 for Semiconductor Locations.



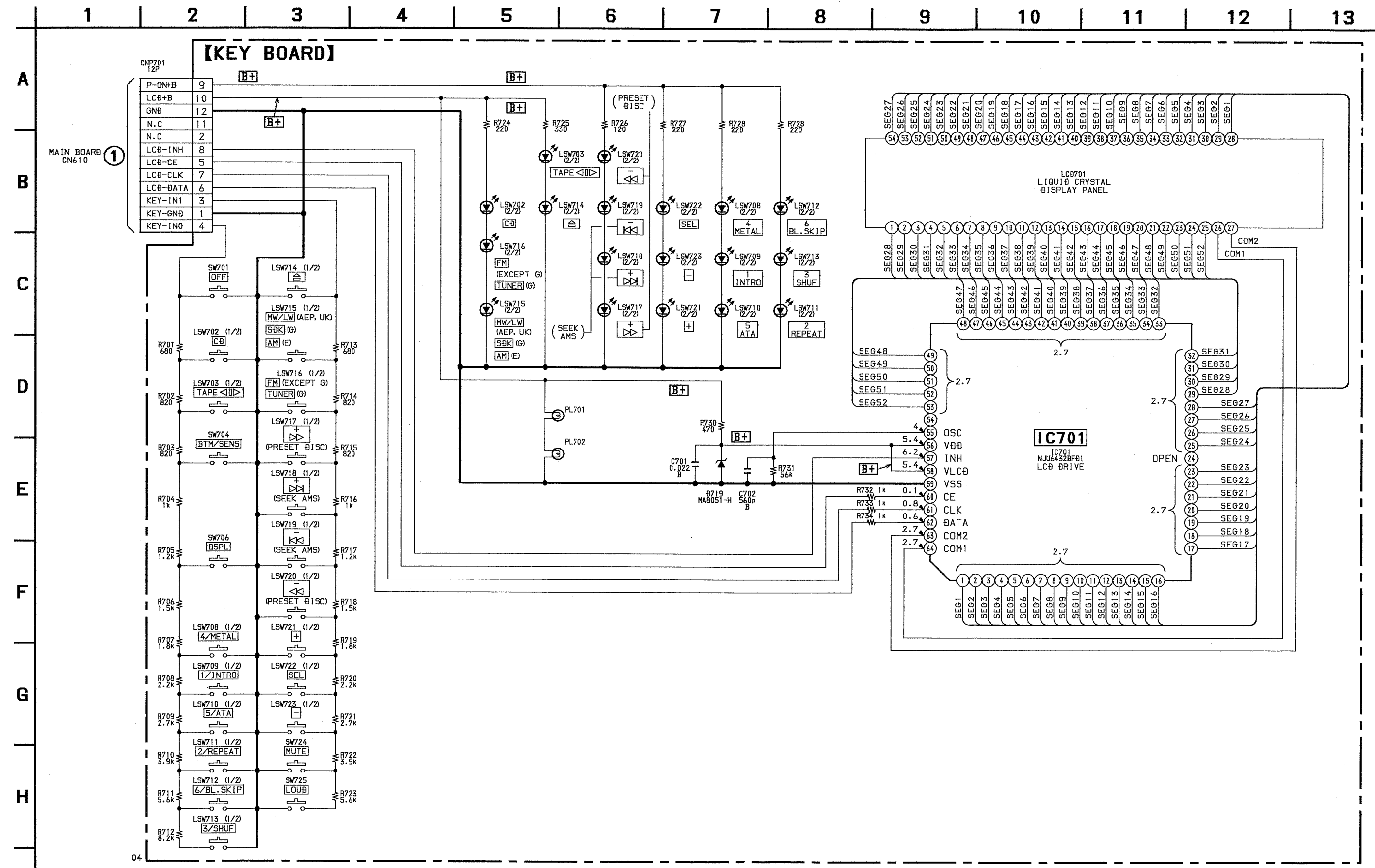
5-5. SCHEMATIC DIAGRAM—MAIN SECTION— Refer to page 33 for IC Block Diagrams.



5-6. PRINTED WIRING BOARD—PANEL SECTION— • Refer to page 35 for Semiconductor Lead Layouts.

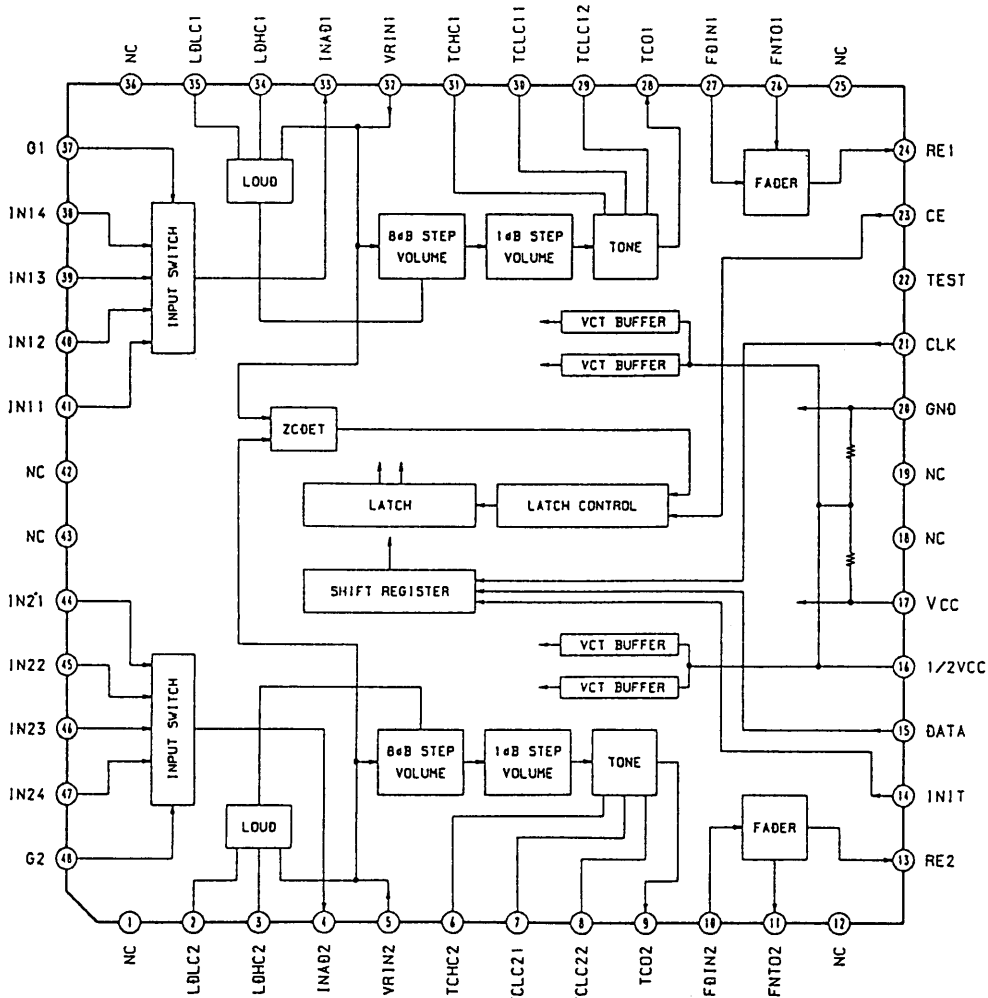


5-7. SCHEMATIC DIAGRAM—PANEL SECTION—

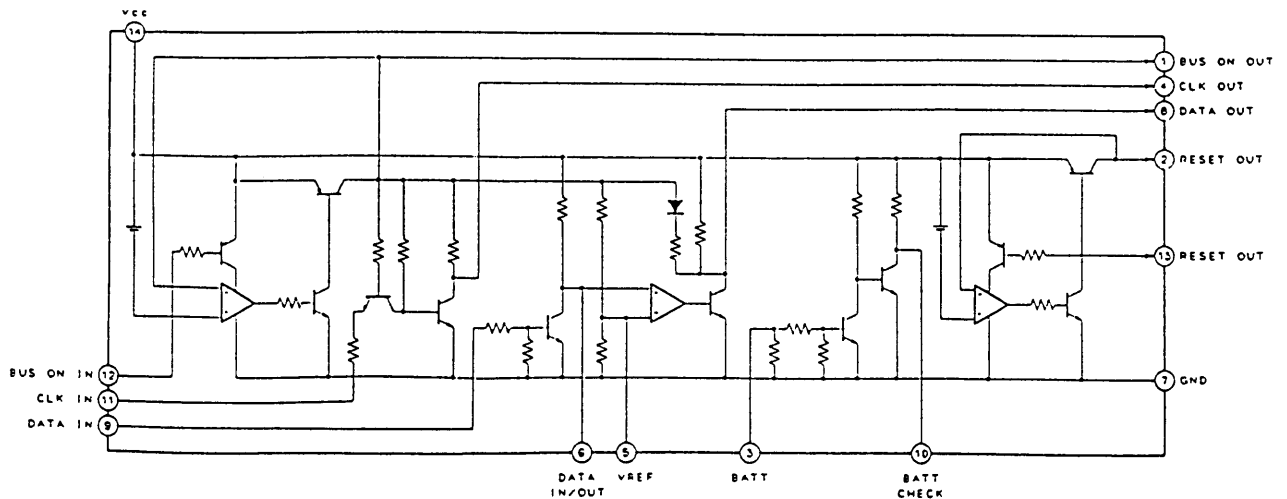


• IC Block Diagrams

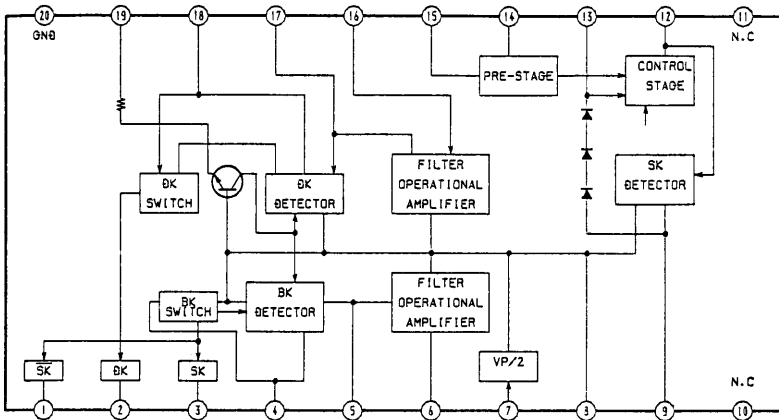
IC150 CXA1646Q



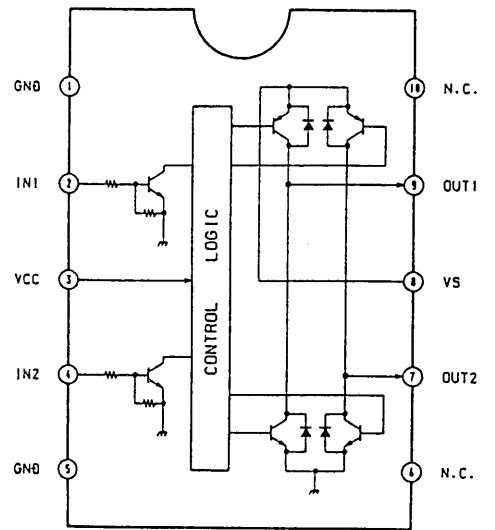
IC550 MM1175XFF



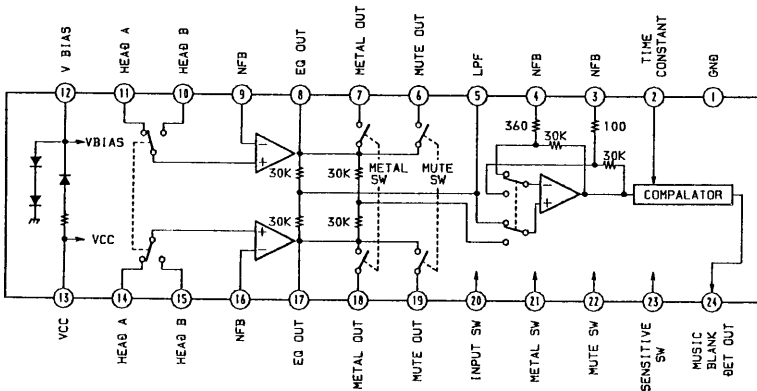
IC11 TDA1581T



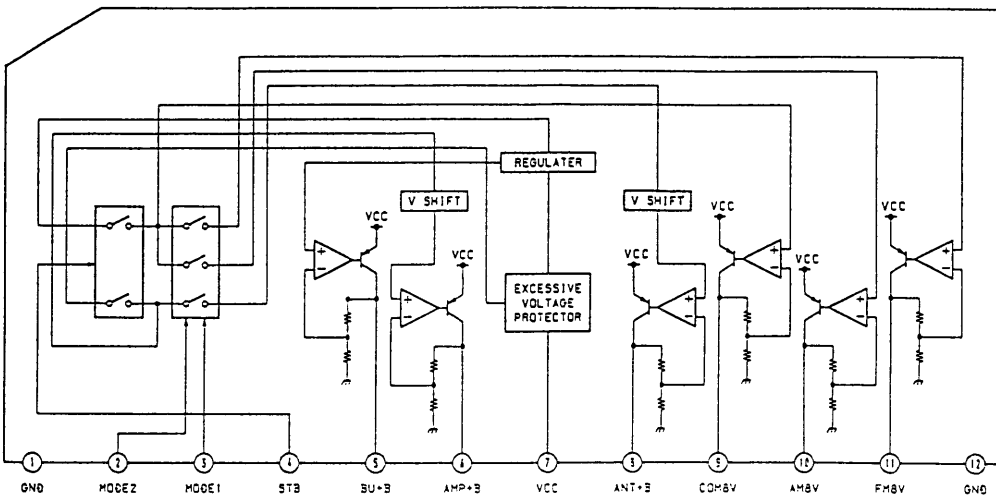
IC352 LB1638M



IC350 BA3430FS

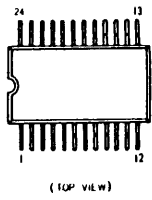


IC610 BA3910B-V2

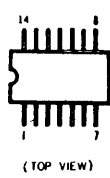


5-8. SEMICONDUCTOR LEAD LAYOUTS

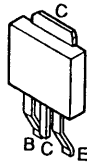
BA3430FS



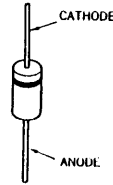
MM1175XFF



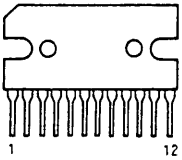
2SD1802-S



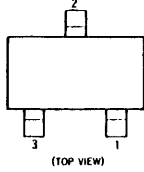
1N5404TU
ISS133



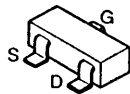
BA3910B-V2



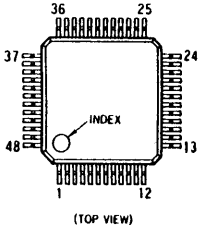
PST600EMT-T1



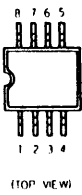
2SK1657-T1B



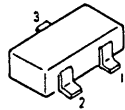
CXA1646Q
NJU6432BFD1



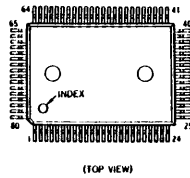
μPC4558G2



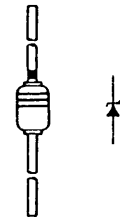
MA152WA



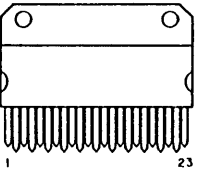
μPD75518GF-247
-3B9



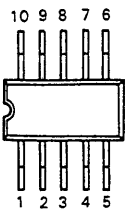
MA4039-M (QZ)
MA4056-M (QZ)
MA4062-M (QZ)
MA4068-L (QZ)
MA4075-M (QZ)
MA4091-H (QZ)
MA4110-M (QZ)



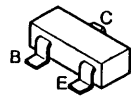
HA13151A



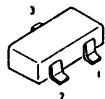
LB1638M



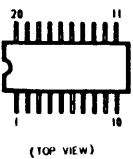
DTA114EKA-T146
DTC114EKA-T146
DTC314TKH04
UN2111
UN2211
2SB1115A-YQ
2SC1623-L5L6
2SC2712-YG



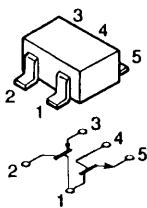
MA721WK-(TX)
ISS184



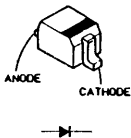
LC7216M
TDA1581T



XN1A312-TX



MA8051-H



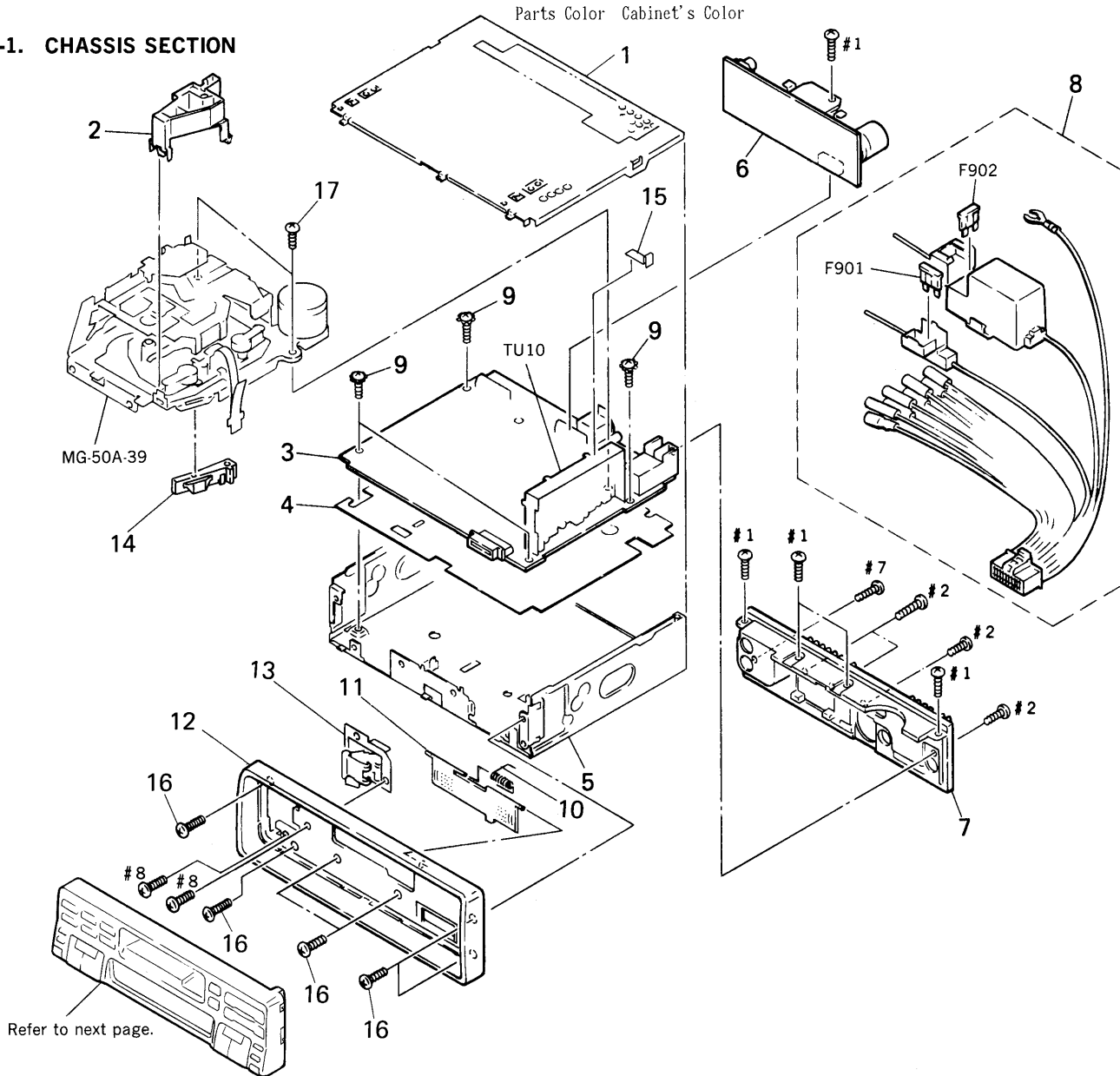
SECTION 6 EXPLODED VIEWS

**SEE ADDITIONAL
INFORMATION**

NOTE:

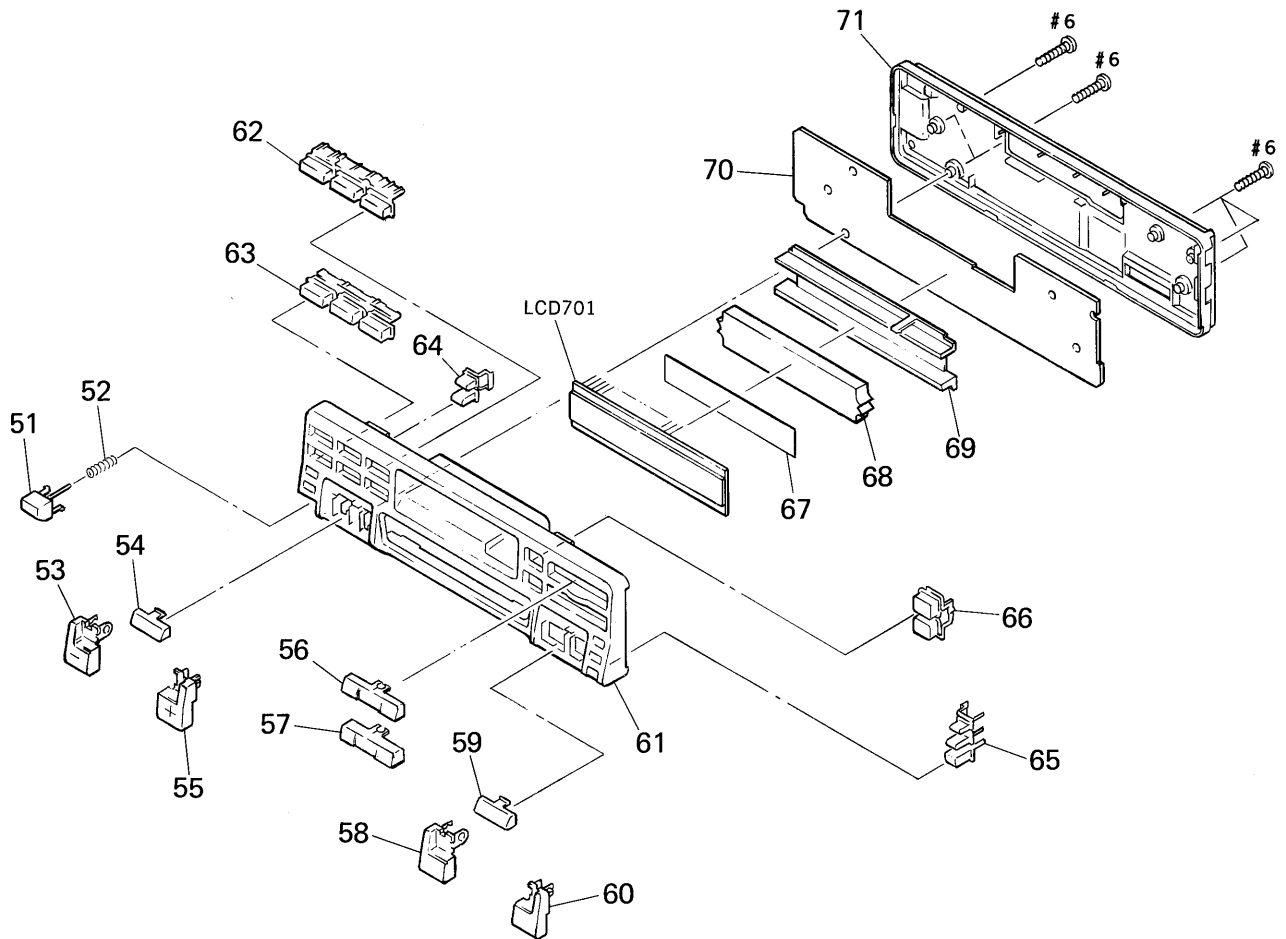
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
Example :
 ↑ ↑
 Parts Color Cabinet's Color
 KNOB, BALANCE (WHITE)... (RED)
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

6-1. CHASSIS SECTION



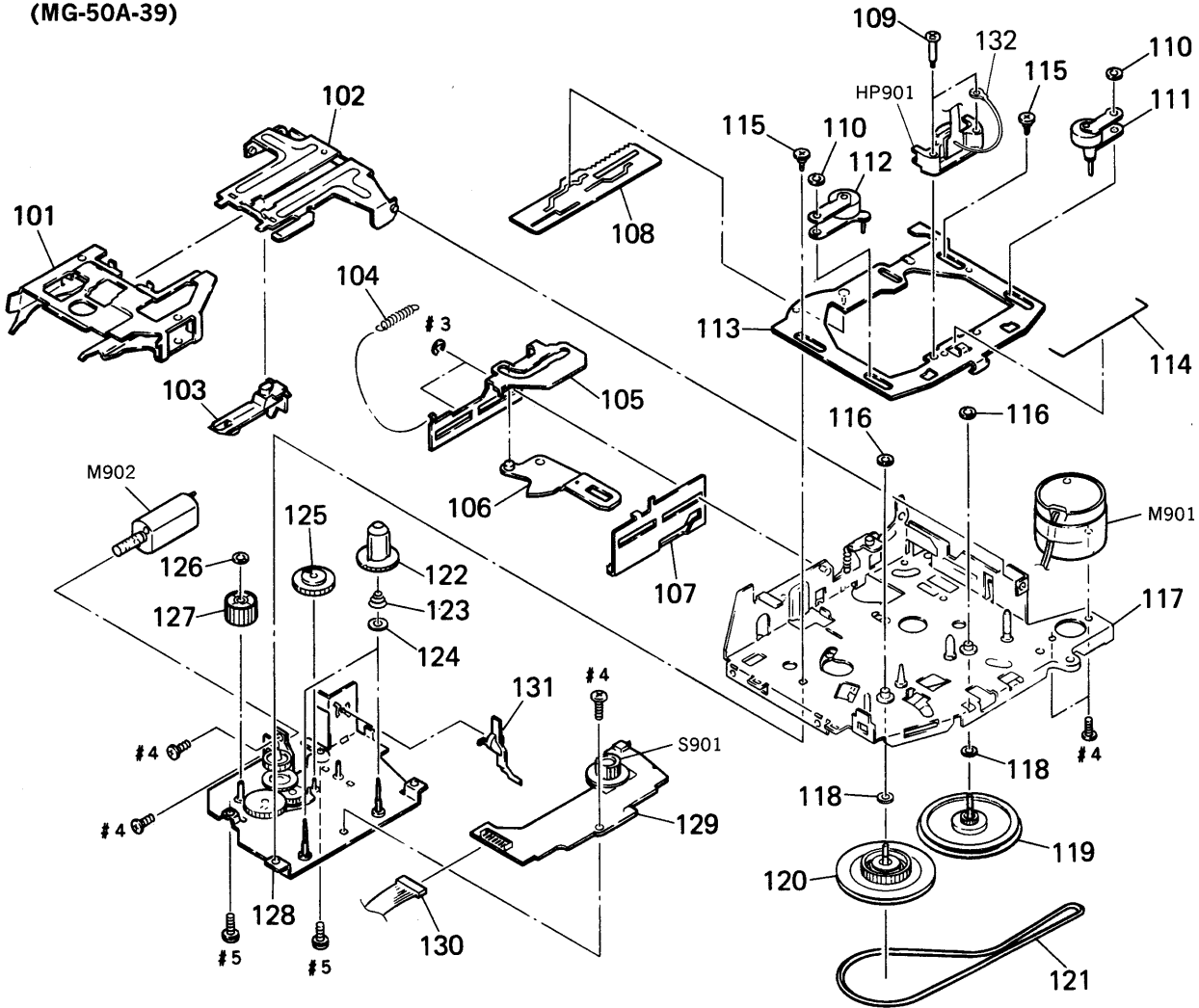
| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--------------------------------------|--------|----------|--------------|-------------------------------------|--------|
| * 1 | X-3368-833-1 | COVER ASSY | | 9 | 3-376-464-11 | SCREW (+PTT 2.6X6), GROUND POINT | |
| 2 | 3-916-872-01 | GUIDE | | 10 | 3-913-076-01 | SPRING (C DOOR), TORSION | |
| * 3 | A-3298-353-A | MAIN BOARD, COMPLETE (AEP, UK) | | 11 | 3-918-692-01 | DOOR, CASSETTE (C200) | |
| * 3 | A-3298-359-A | MAIN BOARD, COMPLETE (C202) | | 11 | 3-918-692-11 | DOOR, CASSETTE (C202) | |
| * 3 | A-3298-361-A | MAIN BOARD, COMPLETE (E) | | 12 | 3-918-675-01 | PANEL, SUB | |
| * 4 | 3-916-426-01 | SHEET, INSULATING | | 13 | X-3367-636-1 | LOCK ASSY | |
| * 5 | X-3368-832-1 | CHASSIS ASSY | | 14 | 3-918-294-01 | GUIDE (BELT) | |
| * 6 | A-3298-225-A | AMPLIFIER BOARD, COMPLETE (E) | | * 15 | 3-355-209-01 | PLATE (B), GROUND | |
| * 6 | A-3298-352-A | AMPLIFIER BOARD, COMPLETE (EXCEPT E) | | 16 | 3-907-995-01 | SCREW (2.6X8) (BZN), +PTT | |
| * 7 | 3-916-377-01 | HEAT SINK (EXCEPT E) | | 17 | 3-919-171-01 | SCREW (2.6X6) (C TIGHT) | |
| * 7 | 3-916-377-11 | HEAT SINK (E) | | F901 | 1-533-326-11 | FUSE (BLADE TYPE) (AUTO FUSE) (3A) | |
| 8 | 1-765-081-11 | CORD (WITH CONNECTOR) (E) | | F902 | 1-533-331-11 | FUSE (BLADE TYPE) (AUTO FUSE) (15A) | |
| 8 | 1-765-651-11 | CORD (WITH CONNECTOR) (EXCEPT E) | | TU10 | A-3282-003-A | TUNER UNIT (TUX-001A) | |

6-2. FRONT PANEL SECTION



| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|----------------------|--------|----------|--------------|-------------------------------|--------|
| 51 | 3-918-689-01 | BUTTON (RELEASE) | | 62 | 3-918-676-01 | BUTTON (1-3) | |
| 52 | 3-918-693-01 | SPRING (RELEASE) | | 63 | 3-918-677-01 | BUTTON (4-6) | |
| 53 | 3-918-680-01 | BUTTON (-) | | 64 | 3-918-687-01 | BUTTON (2 GANG) | |
| 54 | 3-918-678-01 | BUTTON (SEL) | | 65 | 3-918-688-01 | BUTTON (3 GANG) | |
| 55 | 3-918-679-01 | BUTTON (+) | | 66 | 3-918-684-01 | BUTTON (EJECT) | |
| 56 | 3-918-685-01 | BUTTON (SEEK) | | * 67 | 3-918-704-01 | SHEET (REFLECTOR) | |
| 57 | 3-918-686-01 | BUTTON (PRESET) | | * 68 | 3-918-691-01 | PLATE, LIGHT DUIDE | |
| 58 | 3-918-682-01 | BUTTON (L) (C202) | | * 69 | 3-918-690-01 | HOLDER (LCD) | |
| 58 | 3-918-682-11 | BUTTON (L) (C200) | | * 70 | A-3298-355-A | KEY BOARD COMPLETE (AMBER) | |
| 59 | 3-918-681-01 | BUTTON (U) | | * 70 | A-3298-357-A | KEY BOARD COMPLETE (GREEN) | |
| 60 | 3-918-683-01 | BUTTON (R) (C202) | | 71 | 3-918-674-01 | PANEL, FRONT BACK | |
| 60 | 3-918-683-11 | BUTTON (R) (AEP, UK) | | LCD701 | 1-810-697-11 | DISPLAY PANEL, LIQUID CRYSTAL | |
| 60 | 3-918-683-21 | BUTTON (R) (E) | | | | | |
| 61 | 3-918-673-01 | PANEL, FRONT (C200) | | | | | |
| 61 | 3-918-673-11 | PANEL, FRONT (C202) | | | | | |

**6-3. MECHANISM DECK SECTION
(MG-50A-39)**



| Ref. No. | Part No. | Description | Remark |
|----------|--------------|-----------------------------------|--------|
| 101 | 3-912-881-01 | HOUSING, CASSETTE | |
| * 102 | 3-912-882-01 | HANGER, HOUSING | |
| 103 | 3-912-884-01 | CATCHER | |
| 104 | 3-912-885-01 | SPRING (LOADING LEVER), TENSION | |
| * 105 | 3-912-892-01 | LEVER (B), LOADING | |
| * 106 | 3-912-883-01 | ARM, SUCTION | |
| * 107 | 3-912-891-01 | LEVER (A), LOADING | |
| * 108 | 3-912-876-01 | LEVER, MODE | |
| 109 | 3-912-893-01 | SCREW, HEAD FITTING | |
| 110 | 3-579-788-01 | WASHER, STOPPER | |
| 111 | X-3368-266-1 | PINCH LEVER (F) ASSY | |
| 112 | X-3368-267-1 | PINCH LEVER (R) ASSY | |
| * 113 | X-3368-268-1 | BASE ASSY, HEAD | |
| 114 | 3-912-879-01 | SPRING, PINCH PRESS | |
| 115 | 3-912-897-01 | SCREW (HB), STEP | |
| 116 | 3-364-151-01 | WASHER | |
| 117 | X-3368-841-1 | CHASSIS (SV) ASSY (A), MECHANICAL | |
| 118 | 3-701-437-21 | WASHER | |

| Ref. No. | Part No. | Description | Remark |
|----------|--------------|---------------------------------------|--------|
| 119 | 3-913-825-01 | FLYWHEEL (FZ) | |
| 120 | X-3369-124-1 | CLUTCH (S) ASSY, FR | |
| 121 | 3-912-896-01 | BELT | |
| 122 | X-3368-843-1 | GEAR ASSY, REEL | |
| 123 | 3-917-222-01 | SPRING (B-T), COIL | |
| 124 | 3-917-324-01 | WASHER (B-T) | |
| 125 | 3-912-888-01 | GEAR (LOADING E) | |
| 126 | 3-321-813-01 | WASHER, COTTER POLYETHYLENE | |
| 127 | 3-912-889-01 | GEAR (LOADING F) | |
| 128 | X-3368-842-1 | BRACKET ASSY, REEL | |
| 129 | 1-589-604-11 | REEL SENSOR BOARD | |
| 130 | 1-765-460-11 | CORD (WITH CONNECTOR) | |
| 131 | 3-916-358-01 | LEVER (TAPE IN 2) | |
| * 132 | 3-917-258-01 | PLATE, GROUND | |
| HP901 | 1-500-105-11 | HEAD, MAGNETIC (PLAYBACK) | |
| M901 | X-3368-684-1 | MOTOR ASSY, MAIN | |
| M902 | X-3368-685-1 | MOTOR ASSY, SUB | |
| S901 | 1-692-885-11 | SWITCH, ROTARY SLIDE (TAPE OPERATION) | |

SECTION 7 ELECTRICAL PARTS LIST

**SEE ADDITIONAL
INFORMATION**

AMPLIFIER **KEY**

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA ..: μ A. uPA..: μ PA.
uPB..: μ PB. uPC..: μ PC. uPD..: μ PD.
- CAPACITORS
uF: μ F
- COILS
uH: μ H

When indicating parts by reference number, please include the board.

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---|---------|----------|--------------|-------------------------------|--------|
| * | A-3298-225-A | AMPLIFIER BOARD, COMPLETE (E) | | | | < DIODE > | |
| * | A-3298-352-A | AMPLIFIER BOARD, COMPLETE (EXCEPT E) | | D901 | 8-719-049-38 | DIODE 1N5404TU | |
| | | ***** | | | | < IC > | |
| * | 3-916-377-01 | HEAT SINK (EXCEPT E) | | IC901 | 8-759-279-87 | IC HA13151A | |
| * | 3-916-377-11 | HEAT SINK (E) | | | | < RESISTOR > | |
| | 7-685-134-19 | SCREW +P 2. 6X8 TYPE2 NON-SLIT | | | | | |
| | 7-621-770-67 | SCREW +PTT 2. 6X6 (S) | | | | | |
| | 7-621-770-XX | SCREW +PTT 2. 6X8 (S) | | | | | |
| | | < CAPACITOR > | | R901-908 | | | |
| C903 | 1-126-768-11 | ELECT 2200uF | 20% 16V | | 1-216-134-00 | METAL CHIP 2.2 5% 1/8W | |
| C904 | 1-124-443-00 | ELECT 100uF | 20% 10V | R911 | 1-216-049-00 | METAL CHIP 1K 5% 1/10W | |
| | | (E) | | R912 | 1-216-049-00 | METAL CHIP 1K 5% 1/10W | |
| C904 | 1-124-584-00 | ELECT 100uF | 20% 10V | R920 | 1-216-049-00 | METAL CHIP 1K 5% 1/10W | |
| | | (EXCEPT E) | | R921 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| C905 | 1-130-495-00 | MYLAR 0. 1uF | 5% 50V | R922 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| C910 | 1-126-163-11 | ELECT 4. 7uF | 20% 50V | R930-933 | | | |
| | | (E) | | | 1-216-129-00 | METAL CHIP 2. 2M 5% 1/10W | |
| | | | | | | ***** | |
| C911-916 | | | | * | A-3298-355-A | KEY BOARD, COMPLETE (AMBER) | |
| | 1-130-495-00 | MYLAR 0. 1uF | 5% 50V | * | A-3298-357-A | KEY BOARD, COMPLETE (GREEN) | |
| C920 | 1-126-163-11 | ELECT 100uF | 20% 50V | | | ***** | |
| | | (E) | | * | 3-918-690-01 | HOLDER (LCD) | |
| C921 | 1-130-495-00 | MYLAR 0. 1uF | 5% 50V | * | 3-918-691-01 | PLATE, LIGHT GUIDE | |
| C922 | 1-130-495-00 | MYLAR 0. 1uF | 5% 50V | * | 3-918-704-01 | SHEET (REFLECTOR) | |
| C924 | 1-164-232-11 | CERAMIC CHIP 0. 01uF | 50V | | | < CAPACITOR > | |
| C925 | 1-164-232-11 | CERAMIC CHIP 0. 01uF | 50V | | | | |
| C926-928 | | | | C701 | 1-163-037-11 | CERAMIC CHIP 0. 022uF 10% 25V | |
| | 1-163-275-11 | CERAMIC CHIP 0. 001uF | 5% 50V | C702 | 1-163-006-11 | CERAMIC CHIP 560PF 10% 50V | |
| C930-933 | | | | | | < CONNECTOR > | |
| | 1-163-251-11 | CERAMIC CHIP 100PF | 5% 50V | | | | |
| C940 | 1-163-109-00 | CERAMIC CHIP 47PF | 5% 50V | CNP701 | 1-764-423-11 | PIN, CONNECTOR 12P | |
| | | | | | | < DIODE > | |
| | | < CONNECTOR > | | D719 | 8-719-422-43 | DIODE MA8051-H | |
| CN900 | 1-764-426-21 | PLUG, CONNECTOR 15P | | | | < IC > | |
| * CN901 | 1-563-464-11 | SOCKET, CONNECTOR 10P | | IC701 | 8-759-279-54 | IC NJU6432BFD1 | |
| CN902 | 1-573-122-11 | SOCKET, CONNECTOR 12P | | | | | |
| CN903 | 1-766-452-11 | JACK, PIN 2P (UNILINK IN AUDIO/LINE OUT) (EXCEPT E) | | | | | |
| CN903 | 1-766-453-11 | JACK, PIN 4P (UNILINK IN AUDIO/LINE OUT) (E) | | | | | |

KEY

| Ref. No. | Part No. | Description | Remark |
|----------|--------------|---|--------|
| | | < LIQUID CRYSTAL DISPLAY > | |
| LCD701 | 1-810-697-11 | DISPLAY PANEL, LIQUID CRYSTAL | |
| | | < SWITCH > | |
| LSW702 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (CD) (AMBER) | |
| LSW702 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (CD) (GREEN) | |
| LSW703 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (TAPE <□□>) (AMBER) | |
| LSW703 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (TAPE <□□>) (GREEN) | |
| LSW708 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (4/METAL) (AMBER) | |
| LSW708 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (4/METAL) (GREEN) | |
| LSW709 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (1/INTRO) (AMBER) | |
| LSW709 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (1/INTRO) (GREEN) | |
| LSW710 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (5/ATA) (AMBER) | |
| LSW710 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (5/ATA) (GREEN) | |
| LSW711 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (2/REPEAT) (AMBER) | |
| LSW711 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (2/REPEAT) (GREEN) | |
| LSW712 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (6/BL. SKIP) (AMBER) | |
| LSW712 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (6/BL. SKIP) (GREEN) | |
| LSW713 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (3/SHUF) (AMBER) | |
| LSW713 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (3/SHUF) (GREEN) | |
| LSW714 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (⊕) (AMBER) | |
| LSW714 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (⊕) (GREEN) | |
| LSW715 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (MW/LW) (AEP, UK:AMBER) | |
| LSW715 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (MW/LW) (AEP, UK:GREEN) | |
| LSW715 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (SDK) (G:AMBER) | |
| LSW715 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (AM) (E:GREEN) | |
| LSW716 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (FM) (EXCEPT G:AMBER) | |
| LSW716 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (FM) (EXCEPT G:GREEN) | |

| Ref. No. | Part No. | Description | Remark |
|----------|--------------|---|--------|
| LSW716 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (TUNER) (G:AMBER) | |
| LSW717 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (+ ⏪ (PRESET DISC)) (AMBER) | |
| LSW717 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (+ ⏪ (PRESET DISC)) (GREEN) | |
| LSW718 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (+ ⏩ (SEEK AMS)) (AMBER) | |
| LSW718 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (+ ⏩ (SEEK AMS)) (GREEN) | |
| LSW719 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (- ⏪ (SEEK AMS)) (AMBER) | |
| LSW719 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (- ⏪ (SEEK AMS)) (GREEN) | |
| LSW720 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (- ⏩ (PRESET DISC)) (AMBER) | |
| LSW720 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (- ⏩ (PRESET DISC)) (GREEN) | |
| LSW721 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (+) (AMBER) | |
| LSW721 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (+) (GREEN) | |
| LSW722 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (SEL) (AMBER) | |
| LSW722 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (SEL) (GREEN) | |
| LSW723 | 1-762-141-11 | SWITCH, KEY BOARD (WITH LED) (-) (AMBER) | |
| LSW723 | 1-762-142-11 | SWITCH, KEY BOARD (WITH LED) (-) (GREEN) | |

< PILOT LAMP >

| | | |
|-------|--------------|---------------------|
| PL701 | 1-517-165-21 | LAMP, PILOT (AMBER) |
| PL701 | 1-517-166-21 | LAMP, PILOT (GREEN) |
| PL702 | 1-517-165-21 | LAMP, PILOT (AMBER) |
| PL702 | 1-517-166-21 | LAMP, PILOT (GREEN) |

< RESISTOR >

| | | | | | |
|------|--------------|------------|------|----|-------|
| R701 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R702 | 1-216-047-00 | METAL CHIP | 820 | 5% | 1/10W |
| R703 | 1-216-047-00 | METAL CHIP | 820 | 5% | 1/10W |
| R704 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R705 | 1-216-051-00 | METAL CHIP | 1.2K | 5% | 1/10W |
| R706 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R707 | 1-216-055-00 | METAL CHIP | 1.8K | 5% | 1/10W |
| R708 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R709 | 1-216-059-00 | METAL CHIP | 2.7K | 5% | 1/10W |
| R710 | 1-216-063-00 | METAL CHIP | 3.9K | 5% | 1/10W |
| R711 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W |
| R712 | 1-216-071-00 | METAL CHIP | 8.2K | 5% | 1/10W |
| R713 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R714 | 1-216-047-00 | METAL CHIP | 820 | 5% | 1/10W |
| R715 | 1-216-047-00 | METAL CHIP | 820 | 5% | 1/10W |
| R716 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R717 | 1-216-051-00 | METAL CHIP | 1.2K | 5% | 1/10W |

| Ref. No. | Part No. | Description | Remark | | |
|---------------|--------------|--------------------------------|----------|-----|-------|
| R718 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R719 | 1-216-055-00 | METAL CHIP | 1.8K | 5% | 1/10W |
| R720 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R721 | 1-216-059-00 | METAL CHIP | 2.7K | 5% | 1/10W |
| R722 | 1-216-063-00 | METAL CHIP | 3.9K | 5% | 1/10W |
| R723 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W |
| R724 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R725 | 1-216-037-00 | METAL CHIP | 330 | 5% | 1/10W |
| R726 | 1-216-027-00 | METAL CHIP | 120 | 5% | 1/10W |
| R727-729 | | | | | |
| | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R730 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R731 | 1-216-091-00 | METAL CHIP | 56K | 5% | 1/10W |
| R732-734 | | | | | |
| | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| < SWITCH > | | | | | |
| SW701 | 1-692-037-31 | SWITCH, KEY BOARD (OFF) | | | |
| SW704 | 1-692-037-31 | SWITCH, KEY BOARD (BTM/SENS) | | | |
| SW706 | 1-692-037-31 | SWITCH, KEY BOARD (DSPL) | | | |
| SW724 | 1-692-037-31 | SWITCH, KEY BOARD (MUTE) | | | |
| SW725 | 1-692-037-31 | SWITCH, KEY BOARD (LOUD) | | | |
| ***** | | | | | |
| * | A-3298-353-A | MAIN BOARD, COMPLETE (AEP, UK) | | | |
| * | A-3298-359-A | MAIN BOARD, COMPLETE (C202) | | | |
| * | A-3298-361-A | MAIN BOARD, COMPLETE (E) | | | |
| ***** | | | | | |
| < CAPACITOR > | | | | | |
| C9 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V |
| C10-12 | | | | | |
| | 1-124-584-00 | ELECT | 100uF | 20% | 10V |
| C13 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C14 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C15-18 | | | | | |
| | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V |
| C19 | 1-136-169-00 | FILM | 0.22uF | 5% | 50V |
| C20 | 1-130-479-00 | MYLAR | 0.0047uF | 5% | 50V |
| C21 | 1-124-584-00 | ELECT | 100uF | 20% | 10V |
| C22 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C23 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C24 | 1-163-237-11 | CERAMIC CHIP | 27PF | 5% | 50V |
| C25 | 1-163-237-11 | CERAMIC CHIP | 27PF | 5% | 50V |
| C26 | 1-130-477-00 | MYLAR | 0.0033uF | 5% | 50V |
| | | (C202) | | | |
| C27 | 1-136-495-11 | FILM | 0.068uF | 5% | 50V |
| | | (C202) | | | |
| C28 | 1-136-495-11 | FILM | 0.068uF | 5% | 50V |
| | | (C202) | | | |

| Ref. No. | Part No. | Description | Remark | | |
|----------|--------------|---------------------|----------|-----|------|
| C29 | 1-163-038-00 | CERAMIC CHIP (C202) | 0.1uF | | 25V |
| C30 | 1-163-038-00 | CERAMIC CHIP (C202) | 0.1uF | | 25V |
| C31 | 1-163-809-11 | CERAMIC CHIP (C202) | 0.047uF | 10% | 25V |
| C32 | 1-163-809-11 | CERAMIC CHIP (C202) | 0.047uF | 10% | 25V |
| C33 | 1-124-229-00 | ELECT (C202) | 33uF | 20% | 10V |
| C34 | 1-163-033-00 | CERAMIC CHIP (C202) | 0.022uF | | 50V |
| C35 | 1-164-489-11 | CERAMIC CHIP (C202) | 0.22uF | | 25V |
| C36 | 1-163-038-00 | CERAMIC CHIP (C202) | 0.1uF | | 25V |
| C37 | 1-126-163-11 | ELECT (C202) | 4.7uF | 20% | 50V |
| C39 | 1-136-495-11 | FILM | 0.068uF | 5% | 50V |
| C41 | 1-163-117-00 | CERAMIC CHIP (C202) | 100PF | 5% | 50V |
| C45 | 1-163-023-00 | CERAMIC CHIP | 0.015uF | 5% | 50V |
| C51 | 1-163-024-00 | CERAMIC CHIP | 0.018uF | 10% | 50V |
| C52 | 1-124-257-00 | ELECT | 2.2uF | 20% | 50V |
| C53 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C54 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V |
| C56 | 1-124-257-00 | ELECT | 2.2uF | 20% | 50V |
| C61 | 1-163-024-00 | CERAMIC CHIP | 0.018uF | 10% | 50V |
| C62 | 1-124-257-00 | ELECT | 2.2uF | 20% | 50V |
| C63 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C64 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V |
| C66 | 1-124-257-00 | ELECT | 2.2uF | 20% | 50V |
| C110 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C111 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C112 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF | 10% | 100V |
| C113 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF | 5% | 50V |
| C114 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C115 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C116 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C120 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C130 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C150 | 1-124-584-00 | ELECT | 100uF | 20% | 10V |
| C151 | 1-163-031-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C152 | 1-124-234-00 | ELECT | 22uF | 20% | 16V |
| C153 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C154 | 1-163-031-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C170 | 1-124-589-11 | ELECT | 47uF | 20% | 16V |
| C171 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C172 | 1-126-301-11 | ELECT | 1uF | 20% | 50V |
| C210 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |

MAIN

| Ref. No. | Part No. | Description | Remark |
|----------|--------------|--------------|--------------------|
| C211 | 1-164-004-11 | CERAMIC CHIP | 0. 1uF 10% 25V |
| C212 | 1-164-161-11 | CERAMIC CHIP | 0. 0022uF 10% 100V |
| C213 | 1-163-017-00 | CERAMIC CHIP | 0. 0047uF 5% 50V |
| C214 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C215 | 1-164-222-11 | CERAMIC CHIP | 0. 22uF 25V |
| C216 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C220 | 1-126-044-11 | ELECT | 1uF 20% 50V |
| C230 | 1-126-044-11 | ELECT | 1uF 20% 50V |
| C305 | 1-163-117-00 | CERAMIC CHIP | 100PF 5% 50V |
| C306 | 1-163-117-00 | CERAMIC CHIP | 100PF 5% 50V |
| C310 | 1-163-125-00 | CERAMIC CHIP | 220PF 5% 50V |
| C311 | 1-163-125-00 | CERAMIC CHIP | 220PF 5% 50V |
| C312 | 1-124-589-11 | ELECT | 47uF 20% 16V |
| C313 | 1-164-232-11 | CERAMIC CHIP | 0. 01uF 50V |
| C315 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C318 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C321 | 1-126-163-11 | ELECT | 4. 7uF 20% 50V |
| C350 | 1-126-935-11 | ELECT | 470uF 20% 16V |
| C351 | 1-124-234-00 | ELECT | 22uF 20% 16V |
| C352 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C353 | 1-164-222-11 | CERAMIC CHIP | 0. 22uF 25V |
| C354 | 1-163-038-00 | CERAMIC CHIP | 0. 1uF 25V |
| C355 | 1-124-584-00 | ELECT | 100uF 20% 10V |
| C356 | 1-163-009-11 | CERAMIC CHIP | 0. 001uF 10% 50V |
| C357 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C358 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C359 | 1-124-464-11 | ELECT | 0. 22uF 20% 50V |
| C360 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C371 | 1-163-038-00 | CERAMIC CHIP | 0. 1uF 25V |
| C372 | 1-163-038-00 | CERAMIC CHIP | 0. 1uF 25V |
| C405 | 1-163-117-00 | CERAMIC CHIP | 100PF 5% 50V |
| C406 | 1-163-117-00 | CERAMIC CHIP | 100PF 5% 50V |
| C410 | 1-163-125-00 | CERAMIC CHIP | 220PF 5% 50V |
| C411 | 1-163-125-00 | CERAMIC CHIP | 220PF 5% 50V |
| C412 | 1-124-589-11 | ELECT | 47uF 20% 16V |
| C413 | 1-164-232-11 | CERAMIC CHIP | 0. 01uF 50V |
| C414-416 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C418 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C421 | 1-126-163-11 | ELECT | 4. 7uF 20% 50V |
| C510 | 1-163-229-11 | CERAMIC CHIP | 12PF 5% 50V |
| C511 | 1-163-229-11 | CERAMIC CHIP | 12PF 5% 50V |
| C512 | 1-163-038-00 | CERAMIC CHIP | 0. 1uF 25V |
| C513 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C549 | 1-163-116-00 | CERAMIC CHIP | 91PF 5% 50V |
| C550 | 1-163-038-00 | CERAMIC CHIP | 0. 1uF 25V |
| C551 | 1-126-163-11 | ELECT | 4. 7uF 20% 50V |
| C552 | 1-163-009-11 | CERAMIC CHIP | 0. 001uF 10% 50V |
| C553 | 1-124-234-00 | ELECT | 22uF 20% 16V |

| Ref. No. | Part No. | Description | Remark |
|---------------|--------------|--------------------------------------|------------------|
| C554 | 1-124-584-00 | ELECT | 100uF 20% 10V |
| C555 | 1-125-701-11 | DOUBLE LAYER | 0. 047F 5. 5V |
| C556 | 1-163-038-00 | CERAMIC CHIP | 0. 1uF 25V |
| C573 | 1-163-117-00 | CERAMIC CHIP | 100PF 5% 50V |
| C600 | 1-163-117-00 | CERAMIC CHIP | 100PF 5% 50V |
| C601 | 1-163-038-00 | CERAMIC CHIP | 0. 1uF 25V |
| C602 | 1-163-038-00 | CERAMIC CHIP | 0. 1uF 25V |
| C610 | 1-126-157-11 | ELECT | 10uF 20% 16V |
| C611 | 1-124-234-00 | ELECT | 22uF 20% 16V |
| C612 | 1-104-940-11 | ELECT | 10uF 20% 25V |
| C613 | 1-124-589-11 | ELECT | 47uF 20% 16V |
| C614 | 1-124-589-11 | ELECT | 47uF 20% 16V |
| C615 | 1-163-038-00 | CERAMIC CHIP | 0. 1uF 25V |
| C616 | 1-163-033-00 | CERAMIC CHIP | 0. 022uF 50V |
| C617 | 1-163-031-11 | CERAMIC CHIP | 0. 01uF 50V |
| C618 | 1-162-294-31 | CERAMIC | 0. 001uF 10% 50V |
| C619 | 1-164-232-11 | CERAMIC CHIP | 0. 01uF 50V |
| < CONNECTOR > | | | |
| * CN301 | 1-506-981-11 | PIN, CONNECTOR | 10P |
| CN302 | 1-573-121-11 | PIN, CONNECTOR | 12P |
| CN350 | 1-766-260-11 | CONNECTOR, FFC/FPC (ZIF) | 7P |
| * CN351 | 1-506-995-11 | PIN, CONNECTOR (PC BOARD) | 13P |
| CN550 | 1-580-907-31 | PLUG, CONNECTOR (UNILINK IN CONTROL) | |
| CN610 | 1-764-422-11 | PLUG, CONNECTOR | 12P |
| < DIODE > | | | |
| D10 | 8-719-040-04 | DIODE | MA721WK-(TX) |
| D12 | 8-719-034-63 | DIODE | MA4091-H(QZ) |
| D14 | 8-719-050-86 | DIODE | 1SS133 (C202) |
| D149 | 8-719-050-86 | DIODE | 1SS133 |
| D170 | 8-719-050-86 | DIODE | 1SS133 |
| D171 | 8-719-034-22 | DIODE | MA4039-M(QZ) |
| D350 | 8-719-050-86 | DIODE | 1SS133 |
| D351 | 8-719-034-63 | DIODE | MA4091-H(QZ) |
| D352 | 8-719-050-86 | DIODE | 1SS133 |
| D510 | 8-719-050-86 | DIODE | 1SS133 |
| D550 | 8-719-034-46 | DIODE | MA4062-M(QZ) |
| D551 | 8-719-034-46 | DIODE | MA4062-M(QZ) |
| D552 | 8-719-034-46 | DIODE | MA4062-M(QZ) |
| D553 | 8-719-034-49 | DIODE | MA4068-L(QZ) |
| D554 | 8-719-801-78 | DIODE | 1SS184 |
| D556 | 8-719-034-54 | DIODE | MA4075-M(QZ) |
| D558 | 8-719-034-42 | DIODE | MA4056-M(QZ) |
| D560 | 8-719-400-20 | DIODE | MA152WA |
| D562 | 8-719-400-20 | DIODE | MA152WA |
| D563 | 8-719-050-86 | DIODE | 1SS133 |
| D609 | 8-719-034-46 | DIODE | MA4062-M(QZ) |

| Ref. No. | Part No. | Description | Remark |
|------------------|--------------|---------------------------------------|--------|
| D610 | 8-719-034-70 | DIODE MA4110-M(QZ) | |
| D613 | 8-719-034-46 | DIODE MA4062-M(QZ) | |
| D614 | 8-719-034-46 | DIODE MA4062-M(QZ) | |
| D615 | 8-719-034-46 | DIODE MA4062-M(QZ) | |
| D616 | 8-719-034-46 | DIODE MA4062-M(QZ) | |
| D617 | 8-719-034-46 | DIODE MA4062-M(QZ) | |
| D618 | 8-719-034-46 | DIODE MA4062-M(QZ) | |
| D619 | 8-719-034-46 | DIODE MA4062-M(QZ) | |
| D620 | 8-719-034-46 | DIODE MA4062-M(QZ) | |
| < FERRITE BEAD > | | | |
| FB10 | 1-414-233-21 | INDUCTOR, FERRITE BEAD | |
| FB11 | 1-414-233-21 | INDUCTOR, FERRITE BEAD | |
| < IC > | | | |
| IC10 | 8-759-823-81 | IC LC7216M | |
| IC11 | 8-759-998-24 | IC TDA1579T (C202) | |
| IC12 | 8-759-100-96 | IC uPC4558G2 | |
| IC150 | 8-752-063-44 | IC CXA1646Q | |
| IC350 | 8-759-988-33 | IC BA3430FS | |
| IC351 | 8-759-100-96 | IC uPC4558G2 | |
| IC352 | 8-759-823-87 | IC LB1638M | |
| IC510 | 8-759-297-38 | IC uPD75518GF-247-3B9 | |
| IC512 | 8-759-167-83 | IC PST600EMT-T1 | |
| IC550 | 8-759-096-16 | IC MM1175XFF | |
| IC610 | 8-759-182-75 | IC BA3910B-V2 | |
| < JACK > | | | |
| J10 | 1-764-808-11 | JACK (ANT) (ANTENNA) | |
| J510 | 1-566-822-11 | JACK (REMOTE IN FOR ROTARY COMMANDER) | |
| < COIL > | | | |
| L10 | 1-410-509-61 | INDUCTOR 10uH | |
| L11 | 1-409-748-11 | COIL (FILTER) (C202) | |
| L510 | 1-410-509-61 | INDUCTOR 10uH | |
| < TRANSISTOR > | | | |
| Q10 | 8-729-230-49 | TRANSISTOR 2SC2712-YG | |
| Q11 | 8-729-424-08 | TRANSISTOR UN2111 | |
| Q12 | 8-729-230-49 | TRANSISTOR 2SC2712-YG | |
| Q13 | 8-729-021-94 | TRANSISTOR 2SK1657-T1B | |
| Q120 | 8-729-920-21 | TRANSISTOR DTC314TKH04 | |
| Q130 | 8-729-920-21 | TRANSISTOR DTC314TKH04 | |
| Q170 | 8-729-421-22 | TRANSISTOR UN2211 | |
| Q171 | 8-729-424-08 | TRANSISTOR UN2111 | |
| Q220 | 8-729-920-21 | TRANSISTOR DTC314TKH04 | |
| Q230 | 8-729-920-21 | TRANSISTOR DTC314TKH04 | |
| Q350 | 8-729-421-22 | TRANSISTOR UN2211 | |

| Ref. No. | Part No. | Description | Remark |
|--------------|--------------|----------------------------------|--------|
| Q351 | 8-729-106-60 | TRANSISTOR 2SB1115A-YQ | |
| Q352 | 8-729-421-22 | TRANSISTOR UN2211 | |
| Q353 | 8-729-424-08 | TRANSISTOR UN2111 | |
| Q354 | 8-729-807-12 | TRANSISTOR 2SD1802-S | |
| Q555 | 8-729-807-12 | TRANSISTOR 2SD1802-S | |
| Q556 | 8-729-230-49 | TRANSISTOR 2SC2712-YG | |
| Q559 | 8-729-424-08 | TRANSISTOR UN2111 | |
| Q560 | 8-729-424-08 | TRANSISTOR UN2111 | |
| Q573 | 8-729-421-22 | TRANSISTOR UN2211 | |
| Q610 | 8-729-421-22 | TRANSISTOR UN2211 | |
| Q611 | 8-729-106-60 | TRANSISTOR 2SB1115A-YQ | |
| Q612 | 8-729-807-12 | TRANSISTOR 2SD1802-S | |
| Q613 | 8-729-807-12 | TRANSISTOR 2SD1802-S | |
| Q614 | 8-729-020-67 | TRANSISTOR XN1A312-TX | |
| < RESISTOR > | | | |
| R9 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| R10 | 1-216-049-00 | METAL CHIP 1K 5% 1/10W | |
| R11 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| R12 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | |
| R13 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| R14 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | |
| R15 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| R16 | 1-216-049-00 | METAL CHIP 1K 5% 1/10W | |
| R17 | 1-216-049-00 | METAL CHIP 1K 5% 1/10W | |
| R18 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | |
| R19 | 1-216-057-00 | METAL CHIP 2.2K 5% 1/10W | |
| R20 | 1-216-093-00 | METAL CHIP 68K 5% 1/10W (C202) | |
| R21 | 1-216-089-00 | METAL CHIP 47K 5% 1/10W (C202) | |
| R22 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W (C202) | |
| R23 | 1-216-097-00 | METAL CHIP 100K 5% 1/10W (C202) | |
| R24 | 1-216-033-00 | METAL CHIP 220 5% 1/10W (C202) | |
| R25 | 1-216-117-00 | METAL CHIP 680K 5% 1/10W (C202) | |
| R26 | 1-216-105-00 | METAL CHIP 220K 5% 1/10W (C202) | |
| R27 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W (C202) | |
| R28 | 1-216-067-00 | METAL CHIP 5.6K 5% 1/10W (C202) | |
| R29 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W (C202) | |
| R30 | 1-216-067-00 | METAL CHIP 5.6K 5% 1/10W (C202) | |
| R31 | 1-216-116-00 | METAL GLAZE 620K 5% 1/10W (C202) | |
| R32 | 1-216-089-00 | METAL CHIP 47K 5% 1/10W (C202) | |
| R33 | 1-216-017-00 | METAL CHIP 47 5% 1/10W (C202) | |
| R34 | 1-216-085-00 | METAL CHIP 33K 5% 1/10W (C202) | |
| R35 | 1-216-057-00 | METAL CHIP 2.2K 5% 1/10W | |
| R36 | 1-216-069-00 | METAL CHIP 6.8K 5% 1/10W | |
| R51 | 1-216-089-00 | METAL CHIP 47K 5% 1/10W | |
| R52 | 1-216-089-00 | METAL CHIP 47K 5% 1/10W | |
| R55 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W (C200) | |
| R55 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W (C202) | |
| R56 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |

MAIN

| Ref. No. | Part No. | Description | Remark | | |
|----------|--------------|-------------|--------|----|--------------|
| R61 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R62 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R65 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W (C200) |
| R65 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W (C202) |
| R66 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R120 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R121 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W |
| R123 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W |
| R130 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R131 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W |
| R133 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W |
| R149 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R150 | 1-216-214-00 | METAL GLAZE | 4.7K | 5% | 1/8W |
| R151 | 1-216-214-00 | METAL GLAZE | 4.7K | 5% | 1/8W |
| R171 | 1-216-069-00 | METAL CHIP | 6.8K | 5% | 1/10W |
| R172 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R173 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R220 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R221 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W |
| R223 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W |
| R230 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R231 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W |
| R233 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W |
| R309 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R312 | 1-216-079-00 | METAL CHIP | 18K | 5% | 1/10W |
| R313 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W |
| R314 | 1-216-109-00 | METAL CHIP | 330K | 5% | 1/10W |
| R317 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R319 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R350 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W |
| R351 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R353 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R355 | 1-216-150-00 | METAL GLAZE | 10 | 5% | 1/8W |
| R356 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R357 | 1-216-150-00 | METAL GLAZE | 10 | 5% | 1/8W |
| R358 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R359 | 1-216-150-00 | METAL GLAZE | 10 | 5% | 1/8W |
| R360 | 1-216-150-00 | METAL GLAZE | 10 | 5% | 1/8W |
| R409 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R410 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R412 | 1-216-079-00 | METAL CHIP | 18K | 5% | 1/10W |
| R413 | 1-216-077-00 | METAL CHIP | 15K | 5% | 1/10W |
| R414 | 1-216-109-00 | METAL CHIP | 330K | 5% | 1/10W |
| R415 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R416 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W |
| R417 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R419 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R500 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R504 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |

| Ref. No. | Part No. | Description | Remark | | |
|----------|--------------|------------------------------|--------|------|--------------|
| R505 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R506 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R507-509 | | | | | |
| | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R510 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R513 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R514 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R515-521 | | | | | |
| | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R524-526 | | | | | |
| | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R529 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W (C200) |
| R530 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W (C202) |
| R531 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R532 | 1-216-093-00 | METAL CHIP | 68K | 5% | 1/10W (E) |
| R533 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R535 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R536 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R550 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R551 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R552 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R553 | 1-216-017-00 | METAL CHIP | 47 | 5% | 1/10W |
| R554 | 1-216-083-00 | METAL CHIP | 27K | 5% | 1/10W |
| R555 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R556 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R558-560 | | | | | |
| | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R561 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R562 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R563 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R564 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R566 | 1-216-206-00 | METAL GLAZE | 2.2K | 5% | 1/8W |
| R567 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R577 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R601 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R610 | 1-216-298-00 | METAL CHIP | 2.2 | 5% | 1/10W |
| R611 | 1-216-298-00 | METAL CHIP | 2.2 | 5% | 1/10W |
| R612 | 1-216-198-00 | METAL CHIP | 1K | 5% | 1/8W |
| R613 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R614 | 1-216-206-00 | METAL GLAZE | 2.2K | 5% | 1/8W |
| R625 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| | | < VARIABLE RESISTOR > | | | |
| RV10 | 1-238-596-11 | RES, ADJ, CARBON 470 (C202) | | | |
| | | < SWITCH > | | | |
| S510 | 1-571-478-11 | SWITCH, SLIDE (POWER SELECT) | | | |
| S520 | 1-571-478-11 | SWITCH, SLIDE (9K/10K) (E) | | | |
| SW501 | 1-692-431-21 | SWITCH, TACTILE (RESET) | | | |

| Ref. No. | Part No. | Description | Remark |
|------------------------|--------------|---------------------------------------|--------|
| < TUNER UNIT > | | | |
| TU10 | A-3282-003-A | TUNER UNIT (TUX-001A) | |
| < VIBRATOR > | | | |
| X10 | 1-577-126-51 | VIBRATOR, CRYSTAL (7.2MHz) | |
| X510 | 1-567-821-11 | VIBRATOR, CRYSTAL (4.19MHz) | |
| ***** | | | |
| MISCELLANEOUS ***** | | | |
| 130 | 1-765-460-11 | CORD (WITH CONNECTOR) | |
| F901 | 1-533-326-11 | FUSE (BLADE TYPE) (AUTO FUSE) (3A) | |
| F902 | 1-533-331-11 | FUSE (BLADE TYPE) (AUTO FUSE) (15A) | |
| HP901 | 1-500-105-11 | HEAD, MAGNETIC (PLAYBACK) | |
| M901 | X-3368-684-1 | MOTOR ASSY, MAIN | |
| M902 | X-3368-685-1 | MOTOR ASSY, SUB | |
| S901 | 1-692-885-11 | SWITCH, ROTARY SLIDE (TAPE OPERATION) | |

HARDWARE LIST

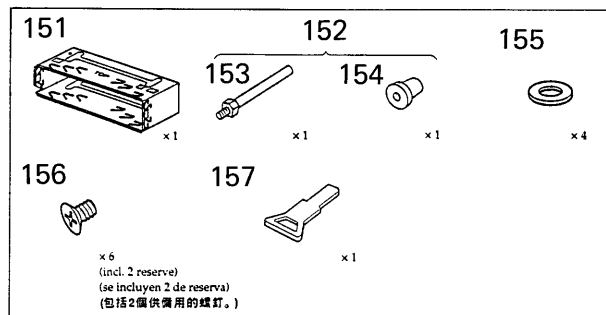
| | | |
|----|--------------|--------------------------------|
| #1 | 7-621-770-67 | SCREW +PTT 2. 6X6 (S) |
| #2 | 7-621-770-XX | SCREW +PTT 2. 6X8 (S) |
| #3 | 7-624-104-04 | STOP RING 2. 0, TYPE -E |
| #4 | 7-627-553-17 | PRECISION SCREW +P 2X2 TYPE 3 |
| #5 | 7-628-253-05 | SCREW +PS 2X4 |
| #6 | 7-685-105-19 | SCREW +P 2X8 TYPE2 NON-SLIT |
| #7 | 7-685-134-19 | SCREW +P 2. 6X8 TYPE2 NON-SLIT |
| #8 | 7-621-772-10 | SCREW +B 2X4 |

ACCESSORIES & PACKING MATERIALS

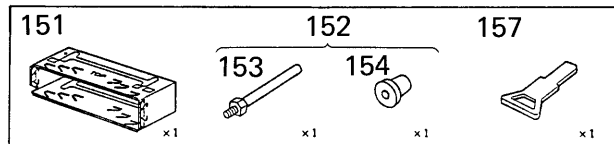
| | |
|--------------|--|
| 3-759-573-11 | MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, ITALIAN) (EXCEPT E) |
| 3-759-573-41 | MANUAL, INSTRUCTION (SPANISH, DUTCH, SWEDISH, PORTUGUESE) (AEP, UK) |
| 3-759-573-51 | MANUAL, INSTRUCTION (ENGLISH, SPANISH, CHINESE) (E) |
| 3-759-574-11 | MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN) (EXCEPT E) |
| 3-759-574-41 | MANUAL, INSTRUCTION, INSTALL (SPANISH, DUTCH, SWEDISH, PORTUGUESE) (AEP, UK) |
| 3-759-574-51 | MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, CHINESE) (E) |
| X-3367-795-1 | CASE ASSY |

| Ref. No. | Part No. | Description | Remark |
|---------------------------|--------------|---------------------------|--------|
| ROUTING HARDWARE ***** | | | |
| * 151 | 3-916-161-01 | FRAME, FITTING | |
| 152 | X-3366-405-1 | SCREW ASSY (EXP), FITTING | |
| 153 | 3-386-828-01 | SCREW, FITTING | |
| 154 | 3-349-410-01 | BUSHING | |
| 155 | 3-918-090-02 | WASHER | |
| 156 | 3-916-830-01 | SCREW (5X8) (TP), +K | |
| 157 | 3-388-078-01 | KEY | |

E model



Except E model



XR-C200/C202

SONY[®]
SERVICE MANUAL

AEP Model

UK Model

E Model

XR-C200

German Model

XR-C202

SUPPLEMENT-1

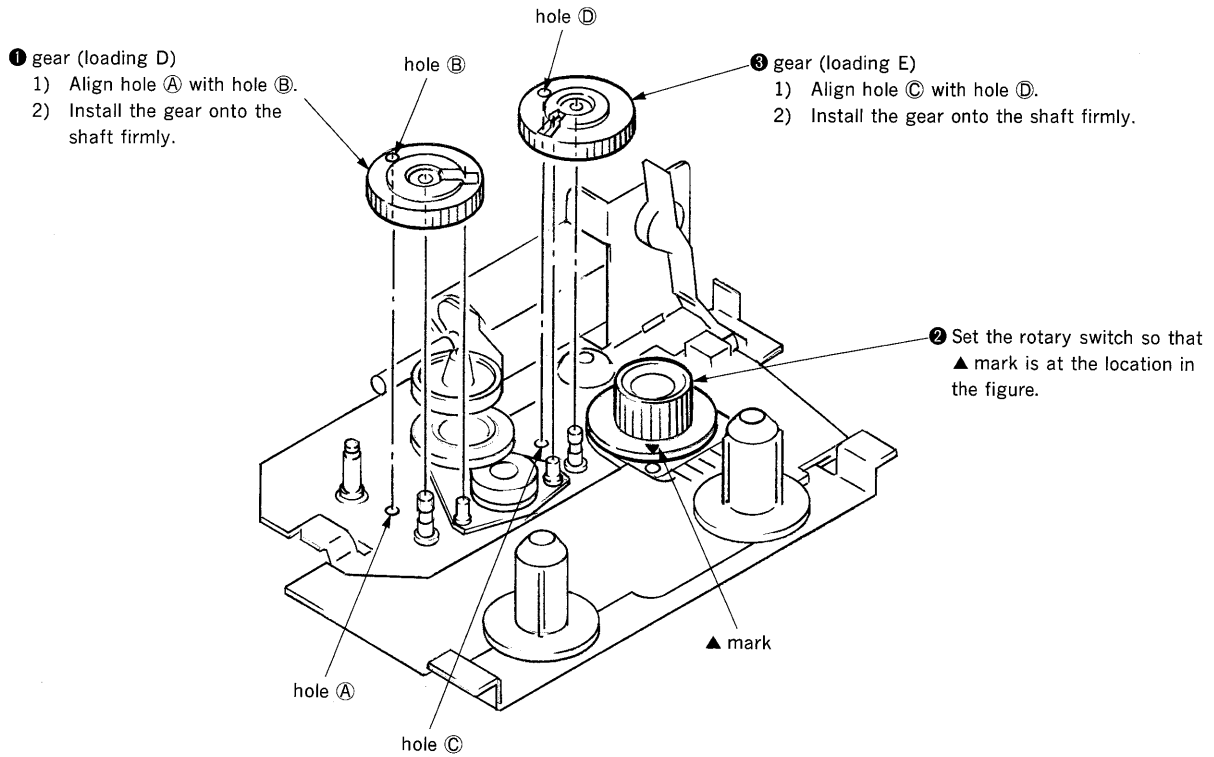
File this supplement with the service manual.

Subject: ASSEMBLY OF MECHANISM DECK

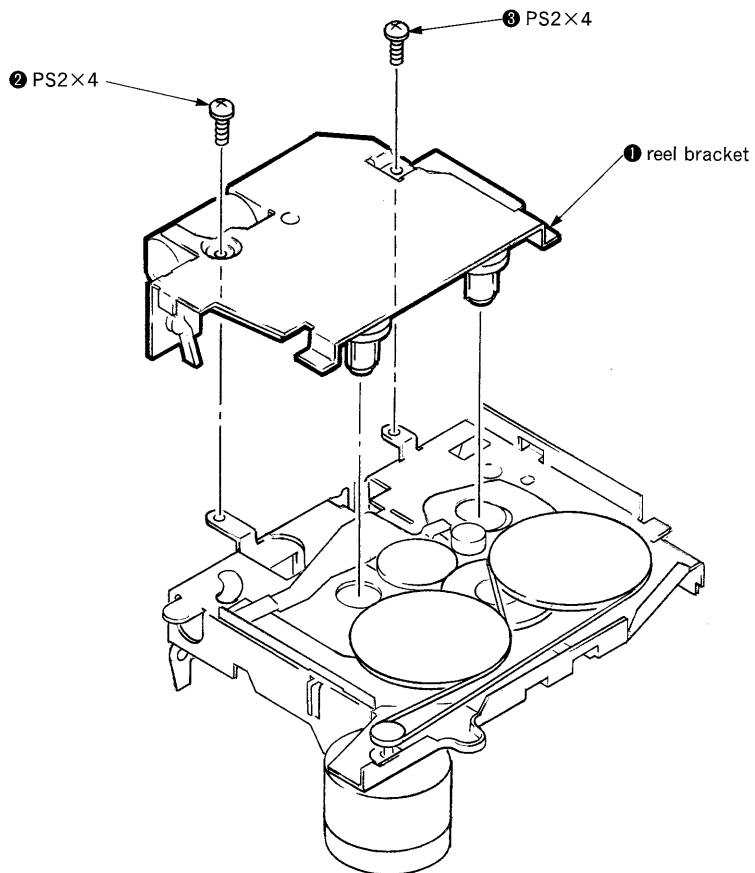
(SPM-94009)

ASSEMBLY OF MECHANISM DECK

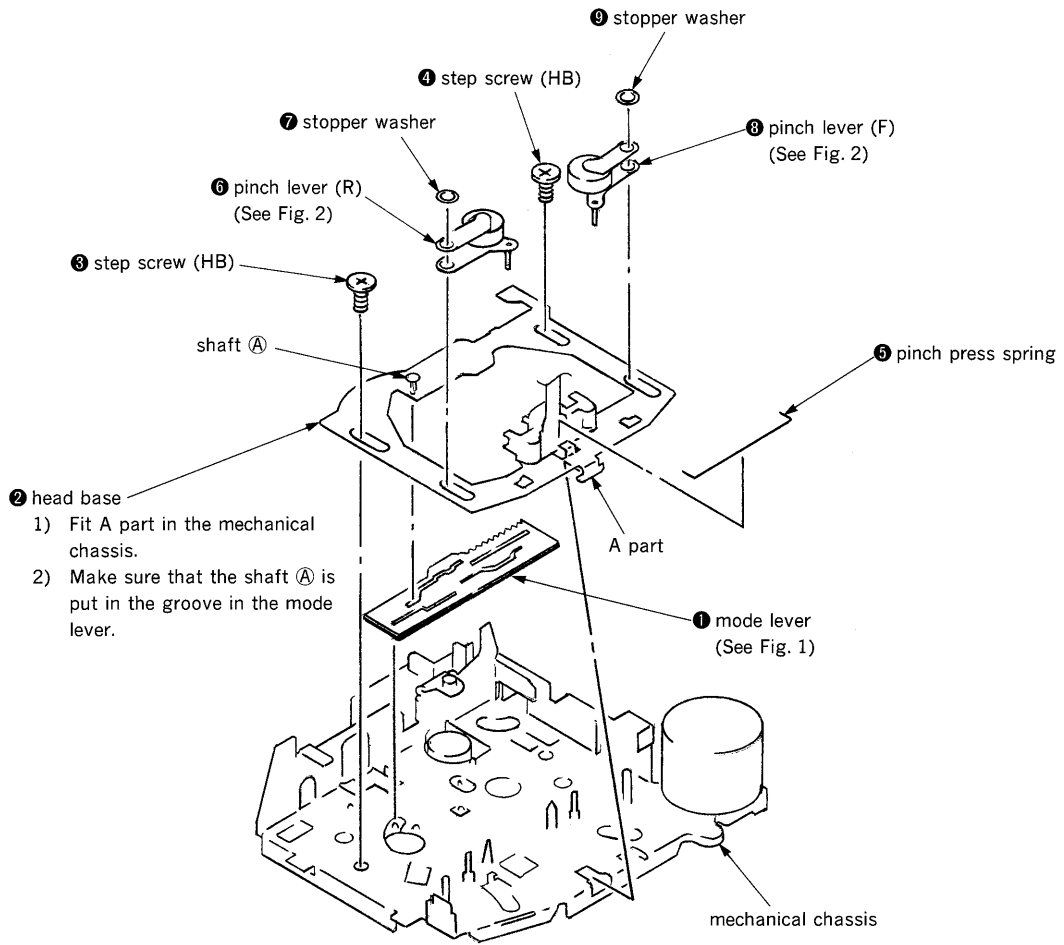
1. INSTALLING THE LOADING GEARS



2. INSTALLING THE REEL BRACKET



3. INSTALLING THE MODE LEVER AND PINCH LEVERS



- 1) Align ● mark on the rotary switch with hole on the mode lever.
- 2) Make sure that the two shafts and three projections are located as shown below.

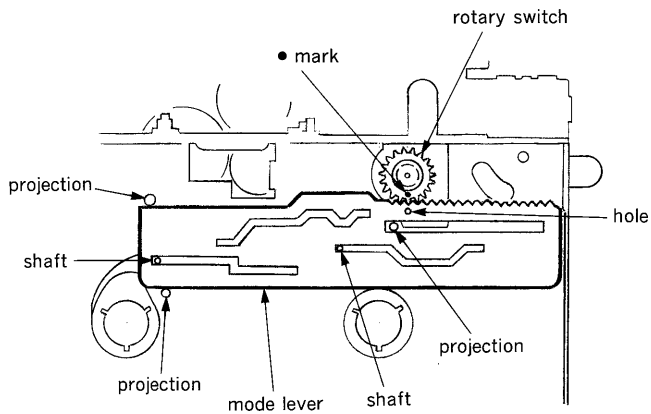


Fig. 1

- 1) Put the shafts of the pinch levers in the pinch press spring on its head side.

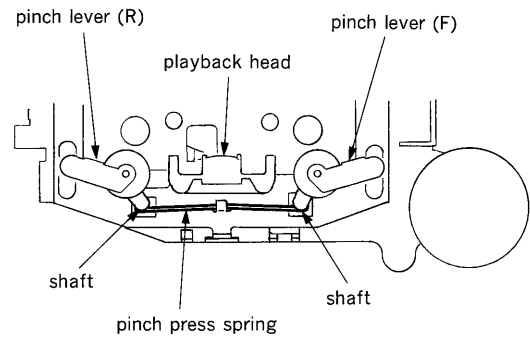


Fig. 2

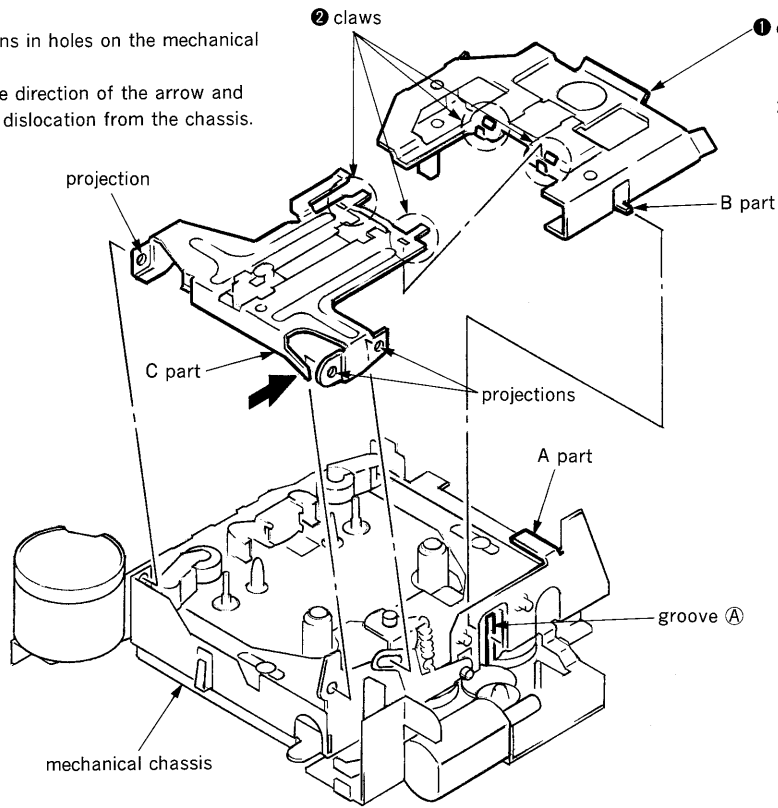
4. INSTALLING THE CASSETTE HOUSING

3 housing hanger

- 1) Fit three projections in holes on the mechanical chassis.
- 2) Bend C part in the direction of the arrow and fasten to prevent dislocation from the chassis.

1 cassette housing

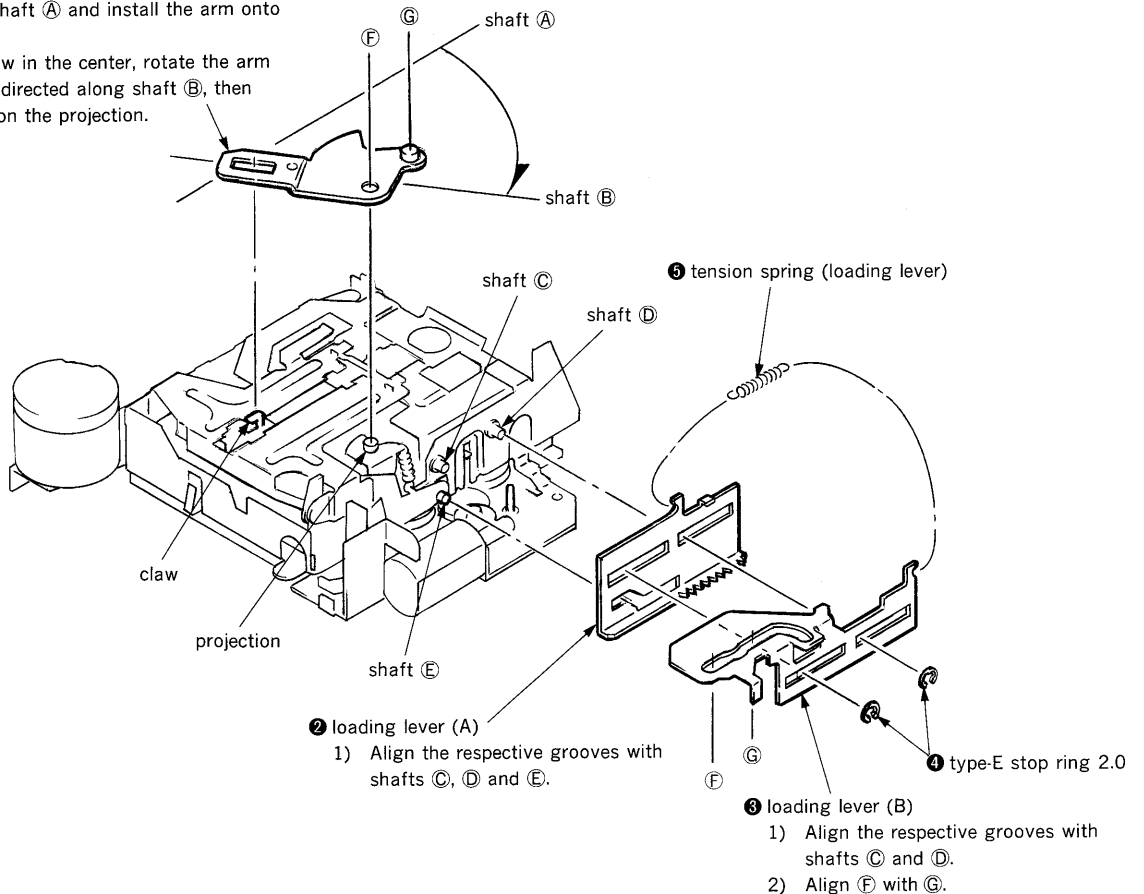
- 1) put the cassette housing under A part.
- 2) Fit B part in groove (A).



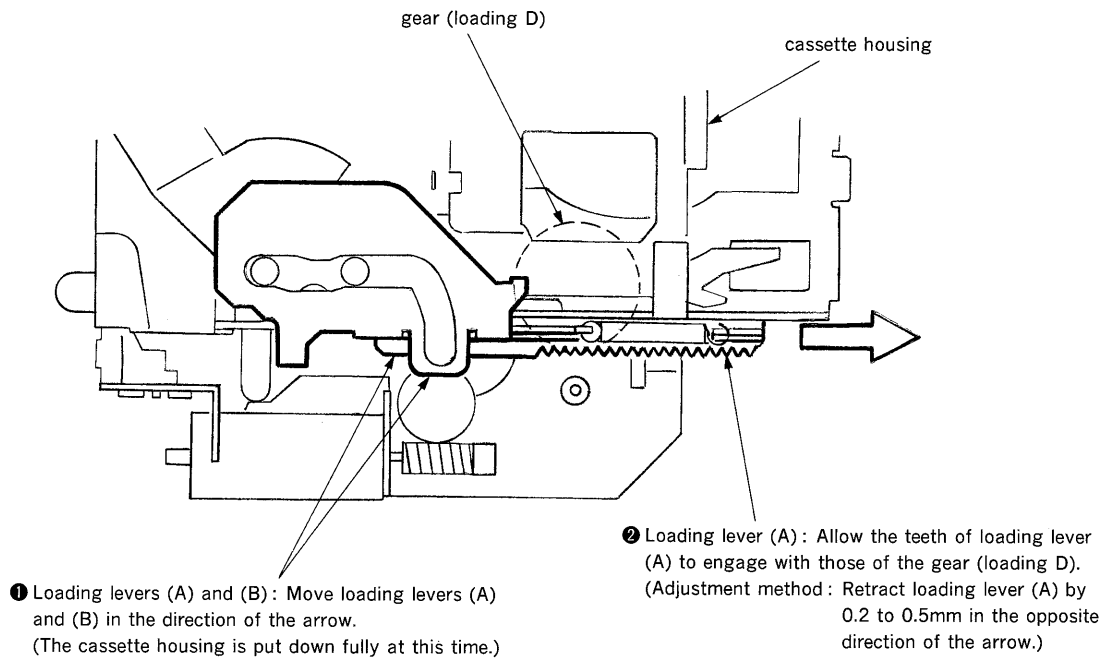
5. INSTALLING THE LOADING LEVER

1 suction arm

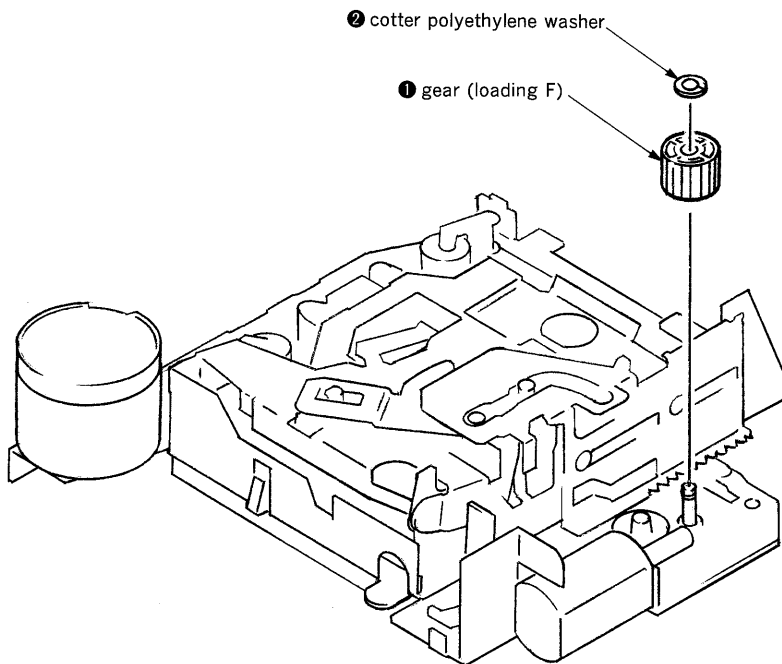
- 1) Align with shaft (A) and install the arm onto the claw.
- 2) With the claw in the center, rotate the arm so as to be directed along shaft (B), then fit the arm on the projection.



6. POSITIONING THE LOADING LEVERS



7. INSTALLING THE GEAR (LOADING F)



XR-C200/C202

SONY

SERVICE MANUAL

AEP Model

UK Model

E Model

XR-C200

German Model

XR-C202

CORRECTION-1

Correct your service manual as shown below.

 : indicates corrected portion.

| Page | INCORRECT | | | | CORRECT | | |
|------|-----------------|-----------------|-------------------------------|---------------|-----------------|-------------------------------|---------------|
| | <u>Ref. No.</u> | <u>Part No.</u> | <u>Description</u> | <u>Remark</u> | <u>Part No.</u> | <u>Description</u> | <u>Remark</u> |
| 36 | * 6 | A-3298-225-A | AMPLIFIER BOARD, COMPLETE (E) | | * A-3298-255-A | AMPLIFIER BOARD, COMPLETE (E) | |
| 39 | * | A-3298-225-A | AMPLIFIER BOARD, COMPLETE (E) | | * A-3298-255-A | AMPLIFIER BOARD, COMPLETE (E) | |

(RPC-97002)