

XR-U550/U550RDS/U551RDS XR-U660/U660RDS/U661RDS

SERVICE MANUAL

US Model
Canadian Model
XR-U550

AEP Model
XR-U550RDS/U551RDS
XR-U660RDS/U661RDS

UK Model
XR-U551RDS/U661RDS

E Model
XR-U660

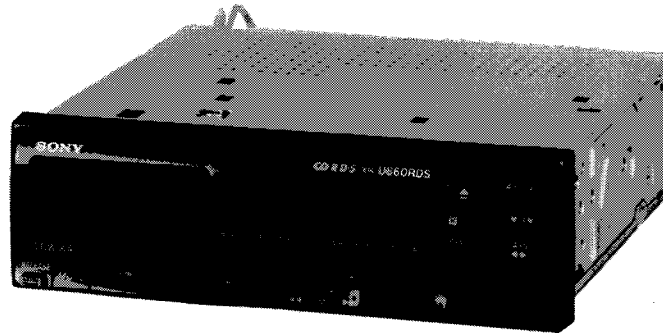


Photo: XR-U660RDS

Model Name Using Similar Mechanism	XR-7130/7140/7142/7600
Tape Transport Mechanism Type	MG-55N-31/55N2-31

SPECIFICATIONS

Cassette player section

Tape track 4-track 2-channel stereo
Frequency response XR-U550/U550RDS/U551RDS
30 - 18,000Hz
XR-U660/U660RDS/U661RDS
30 - 20,000 Hz

Signal-to-noise ratio

Cassette type	Dolby B	Dolby C	Dolby NR off
TYPE II, IV	66 dB	76 dB	58 dB
TYPE I	63 dB	73 dB	55 dB

Wow and flutter 0.09% (WRMS)

Tuner section

FM

Tuning range XR-U550
87.9 - 107.9 MHz
XR-U550RDS/U551RDS/U660/U660RDS/U661RDS
87.5 - 108.0 MHz

Antenna terminal External antenna connector

Intermediate frequency

10.7 MHz
Usable sensitivity 12 dBf (75 ohms)
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

AM (MW/LW) Tuning range

XR-U550
530 - 1,710 kHz
XR-U660
530 - 1,820 kHz (at 10 kHz step)
XR-U550RDS/U660/U660RDS
531 - 1,802 kHz (at 9kHz step)
AM tuning interval
9 kHz/10 kHz switchable
(except the model for
European countries)
XR-U551RDS/U661RDS
MW: 531 - 1,802 kHz
LW: 153 - 281 kHz

— Continued on next page —

FM/AM CASSETTE CAR STEREO
XR-U550/U550RDS/U660/U660RDS
FM/MW/LW CASSETTE CAR STEREO
XR-U551RDS/U661RDS



SONY®

Antenna terminal External antenna connector
 Intermediate frequency 450 kHz
 Sensitivity XR-U550/U550RDS/U660/U660RDS
 30 μ V
 XR-U551RDS/U661RDS
 MW: 30 μ V
 LW: 50 μ V

Power amplifier section

Outputs Speaker outputs
 (sure seal connectors)
 Speaker impedance 3.2–8 ohms
 Maximum power output 20 W \times 4 (at 4 ohms)*
 * Measured at 14.4 V

General

Output lead Power antenna relay control lead
 Power amplifier control lead
 Tone controls Bass \pm 10 dB at 100 Hz
 Treble \pm 10 dB at 10 kHz
 Loudness +10 dB at 100 Hz
 +6 dB at 10 kHz
 Power requirements 12 V DC car battery
 (negative ground)
 Dimensions Approx. 186 \times 57 \times 174 mm
 (w/h/d),
 not incl. projecting parts and controls
 Mounting dimensions Approx. 182 \times 53 \times 154 mm
 (w/h/d),
 not incl. projecting parts and controls
 Weight Approx. 1.3 kg
 Accessories supplied Mounting hardware (1 set)
 Power connecting cord (1)
 Front panel case (1)

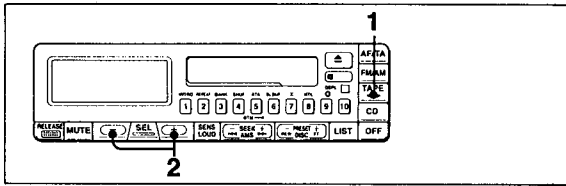
Optional accessory

Remote commander RM-X30 (except the model for XR-U550RDS/U551RDS)
 Design and specifications subject to change without notice.

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Listening to the Tape Playback



1 Insert a cassette to start playback.

If a cassette is already inserted

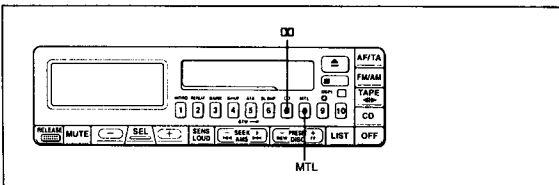
2 Adjust the volume with the or .

Getting the clock indication during a tape playback

Press it again to return to the previous indication.

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Listening to the Tape Playback



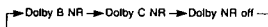
Listening to the CrO₂ (TYPE II) or Metal (TYPE IV) Tapes



The "MTL" indication appears in the display window. To listen to the normal (TYPE I) tapes, press the button again.

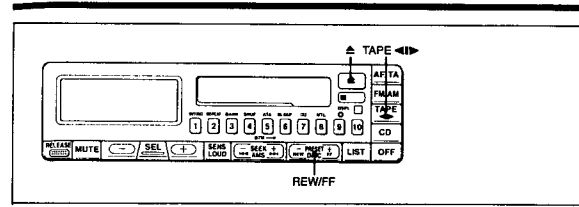
Listening to a Tape Recorded in the Dolby-NR System

This unit adapts to the tapes recorded in the Dolby B and Dolby C NR system.



The Dolby noise reduction system reduces the hiss noises which occur during tape playback in the treble and bass areas. This system emphasizes the treble area during the recording and returns it to the original level at the playback. Therefore, when you listen to the tapes which are recorded in the Dolby NR system, be sure to use the Dolby NR system during a playback as well.

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Other Operations

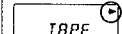
To fast-forward →

To rewind →

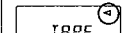
To listen to the reverse side of a cassette →

To eject the tape →

Tape transport direction indication



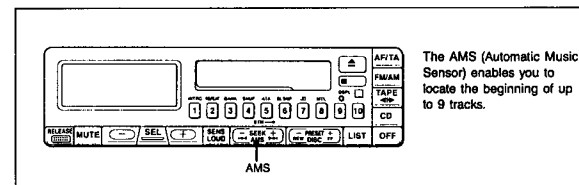
The side facing up is being played.



The side facing down is being played.

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Locating a Desired Track —AMS Function



The AMS (Automatic Music Sensor) enables you to locate the beginning of up to 9 tracks.

During playback, press the AMS button for the same number of times as the number of tracks you wish to skip.

To locate the beginning of the tracks ahead →

To locate the beginning of the previous tracks →

The number of times that you pressed the AMS button will be displayed on the display window. Be sure to include the current track in the number of the tracks you wish to skip.

The AMS may not function properly and the track starting positions may not be located in the following cases:

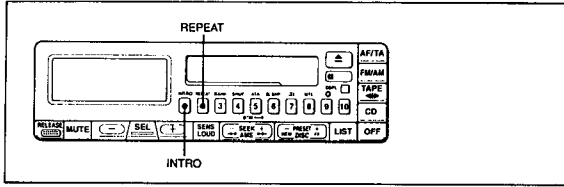
- Tapes which contain noises between the tracks are used.
- Tapes which contain less than four second blank spaces in between the tracks are used.
- When you press the AMS button immediately before or after the track which you wish to locate.

The unit may consider the following as the blank spaces between tracks and start playback:

- Long silent music sections on a track.
- Quiet sections or a continuous low volume sound on a track.
- Tracks which contain a gradual increase and decrease of the sound volume.

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Playing in Other Modes



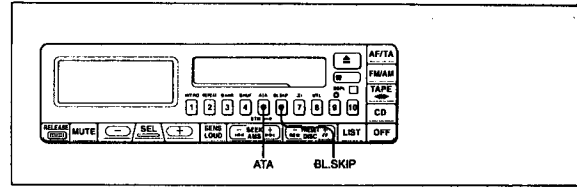
Searching for a Desired Track by Listening to the First 10 Seconds of Each Track —Intro Scan Function

During playback The first 10 seconds of all the tracks will be played in order from the next track. When you find the track of your choice, press the button again. The unit will go back to the normal mode.

Note
The intro scan function will be canceled if you turn off the unit by pressing the OFF button or turning the ignition key to the OFF position and leaving it for more than eight seconds. However, the blank skip and ATA function will not be canceled unless each button is pressed once again.

Listening to the Currently Playing Track Repeatedly —Repeat Play Function

When the track is over, it will return to the beginning and will be repeated again. To cancel this mode, press the button again.



Turning on the Radio while the Tape is Being Fast-wound —ATA Function

If you press either FF or REW during the tape playback, the radio will come on automatically. When the tape playback starts, the radio will be turned off automatically. To cancel the mode, press the button again.

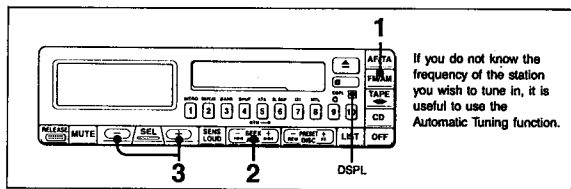
Getting a radio frequency indication on the display window while the radio is turned on using the ATA function
Press the DSPL button several times. The frequency of the last radio program received or the name of the last station received will be indicated on the display window for a few seconds.

Skipping Blank Spaces of the Tape Automatically during Tape Playback —Blank Skip Function

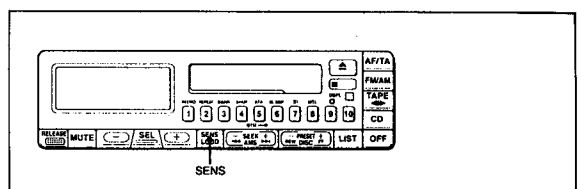
If there is a blank space longer than eight seconds on a tape, the unit automatically fast-forwards the tape to the next track and the playback will start. To cancel the mode, press the button again.

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Searching for the Stations Automatically —Automatic Tuning



If you do not know the frequency of the station you wish to tune in, it is useful to use the Automatic Tuning function.



Avoiding the Automatic Tuning from Stopping on Stations Too Frequently —Local Seek Mode

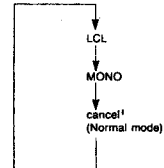
Press the button lightly to get the "LCL" indication. The mode changes to the local seek mode where only the stations with relatively strong signals are tuned in. It functions only when the Automatic Tuning is in operation.

If FM Stereo Broadcasting is Difficult to Receive —Monaural Mode

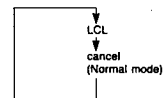
Press the button lightly to get the "MONO" indication. The sound improves, but it will become monaural.

Each time you press the SENS button, the mode changes as follows:

While receiving FM broadcasting



While receiving AM (MW, LW) broadcasting



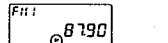
Note
The SENS button also functions as the LOUD button if it is kept pressed for more than two seconds.

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- Select the desired band from FM1, FM2 or AM (MW, LW).
The band changes in the following order:
FM1 → FM2 → AM (MW → LW).
 XR-U660RDS XR-U661RDS
- Press the SEEK button.

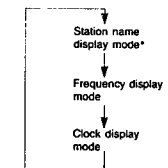
For lower frequencies For higher frequencies
The scanning stops when a station is received. Press the button repeatedly until the desired station is received.
- Adjust the volume with the or button.

While receiving FM broadcasting



The "ST" indication will appear when an FM stereo program with sufficient signal strength is tuned in. The program will be received in stereo.

Getting the clock indication while listening to the radio
Press the DSPL button. Each time you press the button, the display mode changes as follows:



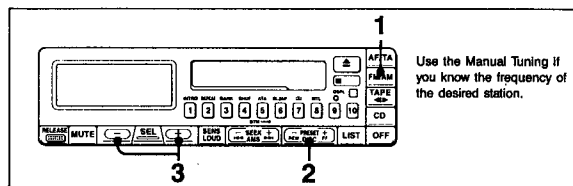
* Refer to page 29 for the station name display mode.

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Tuning in by Adjusting the Frequency

—Manual Tuning

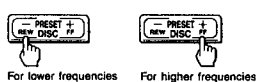


Use the Manual Tuning if you know the frequency of the desired station.

- 1 Select the desired band from FM1, FM2 or AM (MW, LW).
The band changes in the following order:
FM1 → FM2 → AM (MW → LW).



- 2 Press the PRESET button for more than 0.5 second.



- 3 Adjust the volume with the \ominus or \oplus button.



Note
You cannot use the Manual Tuning with the optional remote commander.

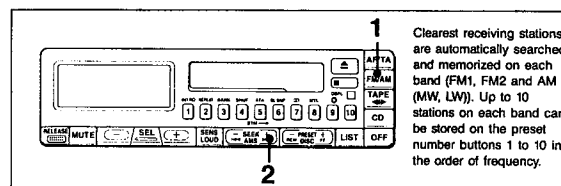
PREVENTING ACCIDENTS!
While you are driving, the use of the Automatic Tuning and the BTM function is recommended in favor of the Manual Tuning.

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Memorizing the Stations Automatically

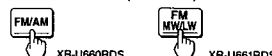
Memorizing the Stations Automatically

—BTM (Best Tuning Memory) Function



Clearer receiving stations are automatically searched and memorized on each band (FM1, FM2 and AM (MW, LW)). Up to 10 stations on each band can be stored on the preset number buttons 1 to 10 in the order of frequency.

- 1 Select the desired band from FM1, FM2 or AM (MW, LW).
The band changes in the following order:
FM1 → FM2 → AM (MW → LW).



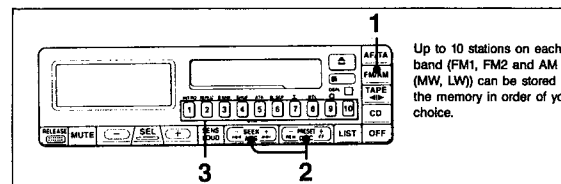
- 2 Keep the SEEK + button pressed for more than two seconds.



The receivable frequencies of FM1 and FM2 are the same. Therefore, 20 stations can be memorized on FM.

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Memorizing Only the Desired Stations



Up to 10 stations on each band (FM1, FM2 and AM (MW, LW)) can be stored in the memory in order of your choice.

The BTM function — how this function operates

This function starts by searching stations from the lowest frequency of the currently tuned in band. When a station is located, it will be stored in the memory on the preset number button whose number is indicated on the display window. If there is no preset number indicated, it will be stored in the memory on the preset number button 1 onward. It continues to store the stations in the memory until all the preset number buttons are occupied.

For example, if the FM1 band was selected, it will continue until the preset number button 10 on the FM2 band is occupied.

When all the preset number buttons are occupied with the memories before the highest receivable frequency is searched, the unit will start searching for higher frequencies from where it was left off. This is to check if there are any more stations with clearer receptions than the ones already stored in the memory.

If a station with a clearer reception is found, the unit will store it in the memory in place of a station with an inferior reception.

Lastly, it rearranges all the stations in the order of frequency from the lowest and stores them in the memory. The whole operation is now completed. The stations with clearer receptions are stored in the memory on the preset number buttons in the order of frequency.

Notes

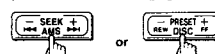
- There may be cases where there are not enough receivable stations due to the lack of stations in the vicinity or weak broadcasting signals. In such cases, the BTM operation may stop without all the buttons being occupied with memories.
- If you start the BTM operation from the FM1 band, it will continue to store stations in the memory on the FM2 band. Care must be taken if you wish to keep the stored stations on the FM2 band.
- If you start the BTM operation from the FM2 band, it will stop when all the memories on the FM2 band are occupied. It will not continue to the FM1 band.

For example, store a station on the preset number button 1.

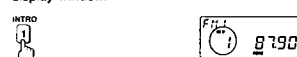
- 1 Select the desired band from FM1, FM2 or AM (MW, LW).
The band changes in the following order:
FM1 → FM2 → AM (MW → LW).



- 2 Tune in the station which you wish to store on the preset number button (page 20 or 22).



- 3 Keep the preset number button pressed for about two seconds until the "MEM" indication comes on the display window.



The number of the preset number button of which you are pressing now comes on the display window. When the "MEM" indication comes on, the station is stored in the memory and the operation is now completed. The "MEM" indication goes off after a while.

Repeat the same procedure to store other stations.

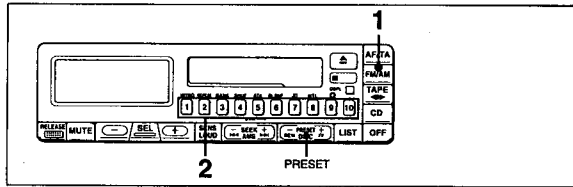
Only one station per band (FM1, FM2 and AM (MW, LW)) can be stored in the memory on each preset number button.
If you try to store another station on the same preset number button, the previously stored station will be erased.

If the station to be memorized is an RDS station if the unit is tuned to an FM band and a station to be memorized happens to be an RDS station transmitting the AF data, the unit will memorize the AF data as well. (See "Network Stations Memory" page 31.)

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Receiving Stations Stored in the Memory



1 Select the desired band from FM1, FM2 or AM (MW, LW).
The band changes in the following order:
FM1 → FM2 → AM (MW → LW).

2 Press the preset number button lightly on which the desired station is to be stored.

Notes

- There may be cases where even the stations which are stored in the memory cannot be received due to weak signals in the vicinity of your car.
- If you keep pressing the preset number button for more than two seconds, the currently received station will be memorized. To receive the previously memorized station, make sure that the preset number button is pressed lightly.

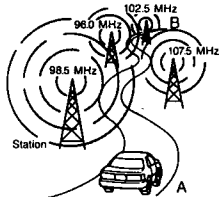
Receiving in Order the Stations Stored in the Memory—Preset Search Function

The number will advance in the following order:
1 → 2 → 3 → ... → 8 → 9 → 10 → 1 → ...
(Press lightly.)

The number will reverse in the following order:
1 → 10 → 9 → ... → 4 → 3 → 2 → 1 → ...
(Press lightly.)

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Overview of the RDS Function



Automatic Re-tuning — AF Function (page 30)

This function automatically re-tunes in a station with a relatively stronger signal within the same broadcasting network using the PI and AF data.

The illustration above shows an example of a car passing through an area with four stations of the same broadcasting network between points A and B.

As the car moves on, the reception frequency of the station in the network changes from 98.5 MHz to 107.5 MHz then to 96.0 MHz and to 102.5 MHz.

By using the AF function, the driver will be able to keep listening to a program in the same broadcasting network without tuning in the station manually every time he enters a different frequency zone between points A and B.

Traffic Announcement Reception — TA Function (page 32)

This function searches and stands by for a traffic announcement station using the TP and TA data.

Using this function, the unit automatically searches the station and changes its mode to receive the traffic announcement when the broadcasting starts while you are listening to a tape or CD play.

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Overview of the RDS Function

What is RDS?

The RDS (Radio Data System) is a radio digital information system developed and introduced in 1987 by the EBU (European Broadcasting Union). Using the 57 kHz sub-carrier of FM broadcasting, the RDS enables you to receive a variety of information such as station names and traffic information. It also offers some useful functions such as automatic re-tuning of the best available signal carrying the chosen program.

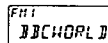
The RDS digital data includes the followings:

- PI Program Identification
- PS Program Service Name
- AF List of Alternative Frequencies
- TP Traffic Program
- TA Traffic Announcement
- PTY Program Type

The following functions are available with this unit using the RDS data. Refer to the marked pages for the operational instructions.

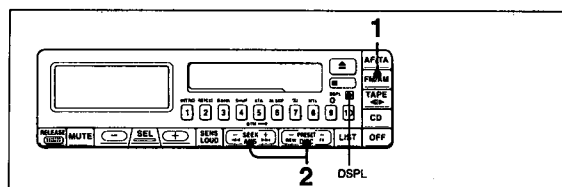
Station Service Name Display (page 29)

This function displays the name of the station which is currently tuned in on the display window.



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Station Name Display



1 Press to select FM1 or FM2.

2 Tune in a desired station by using the Automatic Tuning or Manual Tuning (page 20 or 22).

If the unit is set in the station name display mode and a station transmitting the RDS data is received, the name of that station will be displayed on the display window.

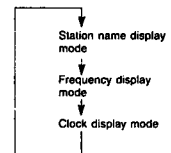
When the "-----" indication appears on the display window in the station name display mode
The received station is not an RDS station.

When the unit is in the frequency display mode and an RDS station is received
The "X" display will come on to indicate that an RDS station is received. To find out the name of the station, press the DSPL button to change the display mode.

Notes

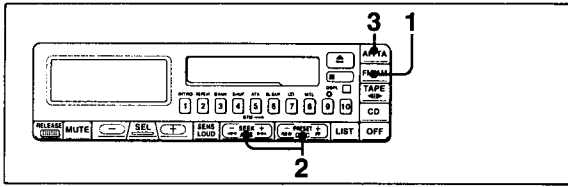
- The RDS data can be received only on the FM band.
- The RDS functions of this unit will not be activated if the FM station being received is not transmitting the RDS data. It may also not work properly in areas where the RDS transmissions are in the experimental stage.

You can change the display mode by pressing the DSPL button. Each time you press the button, the display mode changes as follows:



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Automatic Re-tuning —AF Function



- 1** Press to select the FM1 or FM2.

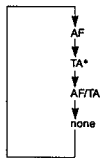
XR-U660RDS XR-U661RDS
- 2** Tune in a desired RDS station by using the Automatic Tuning or Manual Tuning (page 20 or 22).
- 3** Press the AF/TA button to get the "AF" indication.

If the signal level of the tuned in RDS station falls below a certain point, the unit will begin to search for an alternative station with a stronger signal in the same network from the AF data (List of Alternative Frequencies). If a stronger signal station is found, the unit re-tunes in the station.

Notes

- When the "AF" indication appears on the display window, only the RDS stations can be tuned in by the Automatic Tuning.
- If the tuned in RDS station is not transmitting the AF data, this function will not work.
- If you press the AF/TA button while the AM (MW, LW) band is tuned in, the FM1 band will be automatically selected.

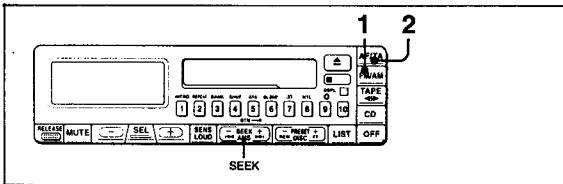
The AF/TA button
Each pressing on the button changes the function cyclically as follows:



* See page 32 about the TA function.

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Receiving Traffic Information —TA Function



- 1** Press to select the FM1 or FM2.

XR-U660RDS XR-U661RDS
- 2** Press the AF/TA button to get the "TA" indication.

The search for a traffic announcement station will start. When an RDS station transmitting the TP data is found, the search stops and the "TP" indication will come on the display window.

The "TA" indication will flash while the traffic announcement broadcasting is on the air. It will stop flashing when the broadcasting is over.

To search another RDS station transmitting traffic announcement
Press the SEEK button while the "TA" indication is still on the display window.

Notes

- Do not activate the TA function in an area where there is no traffic announcement broadcasting service available. If you do so, the unit will keep searching for it and other stations cannot be tuned in.
- If you activate the TA function while the AM (MW, LW) band is tuned in, the FM1 band will be automatically selected and the unit will start searching for a traffic announcement station.

"TP" Indication
This indicates that the currently tuned in RDS station offers a traffic announcement service.

32

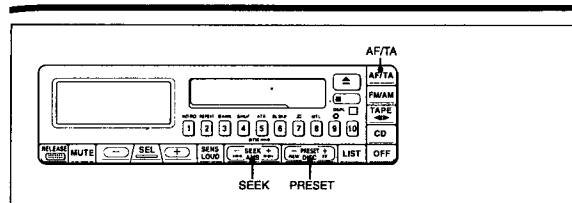
Network Stations Memory

When the unit stores an RDS station transmitting the AF data on a preset number button, it stores not only its frequency but also its PI and AF data. The AF data carries the information of the list of the frequencies of the stations within the same broadcasting network. The unit will store the data in its memory whether the AF function is activated or not.

Getting the Stored RDS Stations in Tune from the Broadcasting Networks

Be sure to press the preset number buttons after pressing the AF/TA button to activate the AF function. The AF function will select a better signal station by re-tuning within the network stations. If you press the preset number buttons without activating the AF function, you will not be able to use this function. In this case, you will only get the individual stations which were tuned in on the previous occasion. The unit will not re-tune to the other stations in the network even if they are stored in the memory.

31



Standing by for Traffic Announcement while Listening to a Tape or CD.

Press the AF/TA button to get the "TA" indication during a tape playback or CD play.



The playback continues while the unit searches for a traffic announcement station.

When a station is found:
The "TP" indication will come on the display window.



When a traffic announcement broadcasting starts:
The "TA" indication will start flashing. The tape or CD play stops and the traffic announcement will be heard.



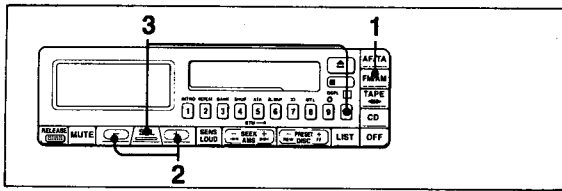
When the broadcasting is over:
The tape playback or CD play resumes from where it was left off.

To cancel the stand-by mode
Press the AF/TA button to turn off the "TA" indication.

Changing the display to that of the frequency or station name during tape playback or CD play
Press the DSPL button a few times. While the frequency or station name is being displayed, the SEEK, PRESET buttons and preset number buttons will function in the same way as they do during a radio reception.

33

Receiving Traffic Information



Traffic Announcement is Heard at the Preset Volume Level

When a traffic announcement broadcast starts, you can hear it at the preset volume level even if the volume control on the front panel has been turned down. (If you are listening to other sources with higher volume level, the level will not change.) The preset volume level can be set in the following manner:

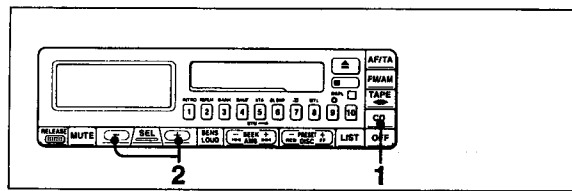
- 1 Press to select FM1 or FM2.
- 2 Adjust the volume to the desired level with the or button.
- 3 Press the preset number button 10 while pressing the SEL button. A beep sound will be heard when the setting is completed.

PTY (alarm) Data Reception

In case of an emergency, or in a situation where there may be danger from a natural disaster in the area, the RDS stations will transmit the PTY data information to warn drivers that they are in danger. The data includes the character display and the interruption signal for automatically turning on the radio. This data can be received while the AF or TA function is being activated. If the unit receives the PTY data from an RDS station during tape playback or CD play, the "AF" indication on the display window will start flashing and the tape playback or CD play will stop. The radio will be automatically turned on to receive the emergency announcement from the station.

34

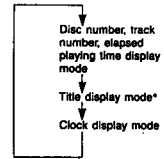
Listening to the CD Play
—When Optional Sony CD Changers are Connected



- 1 Press the CD button. CD play will start. CD changer number, Track number, Disc number, Elapsed playing time
- 2 Adjust the volume with the or button.

If it is set in the normal playing mode, after the end of a disc, the disc with the next number shown will be automatically played. If two or more CD changers are connected, after the end of the last disc, the first disc in the CD changer with the next number shown will be played. The order of the CD play can be rearranged by changing the playing modes. For details, see "Playing in Other Modes." (page 39)

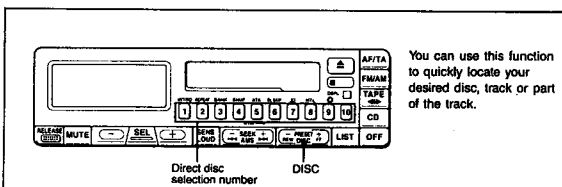
Getting the clock display while listening to a CD Press the DSPL button. Each time you press the button, the display mode will change cyclically as follows:



*It is necessary to put titles onto the discs in advance. See pages 42 and 43 for details.

35

Locating a Desired Disc, Track or Part of a Track



You can use this function to quickly locate your desired disc, track or part of the track.

Searching Your Desired Discs in Turn

—Disc Search

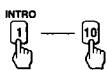
Press the DISC button lightly during CD play.

- To search previous disc numbers →
- To search the disc numbers ahead →

You can search a disc by displaying the titles of the discs registered with the Custom File Function. For details, see page 42.

Locating a Disc Directly

Press the direct disc selection button of your choice for more than two seconds during CD play.

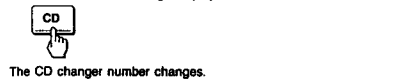


Note Make sure that you press the DISC button lightly. If you keep it pressed, the unit will enter the Manual Search mode.

36

Listening to the Discs in Another CD Changer (when two or more CD changers are connected)

Press the CD button during CD play.

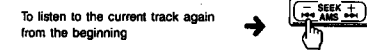


The CD changer number changes.

Locating the Beginning of a Track

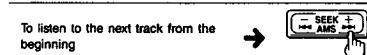
—AMS Function

Press the AMS button during CD play.



To listen to the current track again from the beginning

If the button is kept pressed, the beginnings of the previous tracks will be located.



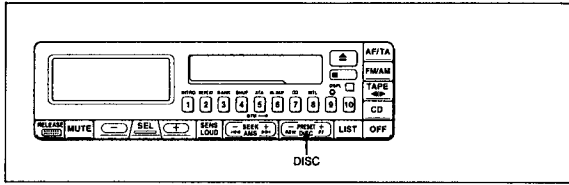
To listen to the next track from the beginning

If the button is kept pressed, the beginnings of the succeeding tracks will be located.

Note When you keep pressing the AMS button and come to either the beginning or end of a disc, you will not be able to go any further.

37

Locating a Desired Disc, Track or Part of a Track



Searching for a Desired Part of Track
—Manual Search

Keep the DISC button pressed during CD play.

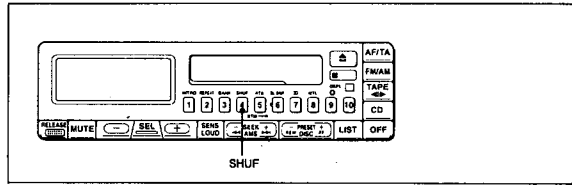
To go ahead → (Keep on pressing)

To go back → (Keep on pressing)

The elapsed playing time of the track will be displayed on the display window during the manual search.

Note
You cannot use the Manual Search with the optional remote commander.

Playing in Other Modes



Playing the Discs Randomly
—Shuffle Play Functions

Playing the tracks on the currently selected disc randomly —Disc shuffle play

Press the button to get the "SHUF 1" indication during CD play.

When all the tracks on a disc have been played, it goes on to the next disc.

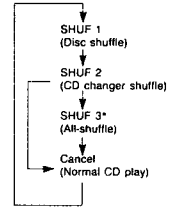
Playing every track on every disc in the currently selected CD changer randomly —CD changer shuffle play

Press the button to get the "SHUF 2" indication during CD play.

Playing every track on every disc in all CD changers connected randomly —All shuffle play (when two or more CD changers are connected)

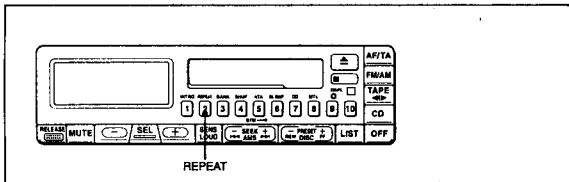
Press the button to get the "SHUF 3" indication during CD play.

The function of the SHUF button changes cyclically as follows:



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

Playing in Other Modes



Playing a Disc Repeatedly —Repeat Play Functions

Playing the currently selected track repeatedly —Track repeat

Press the button to get the "REP 1" indication during CD play.

When the track is over, the CD play will be repeated from the beginning of that track.

Playing the currently selected disc repeatedly —Disc repeat

Press the button to get the "REP 2" indication during CD play.

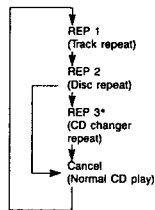
When the last track of the currently selected disc is over, the CD play will be repeated from the beginning of that disc.

Playing the discs in the currently selected CD changer repeatedly —CD changer repeat (when two or more CD changers are connected)

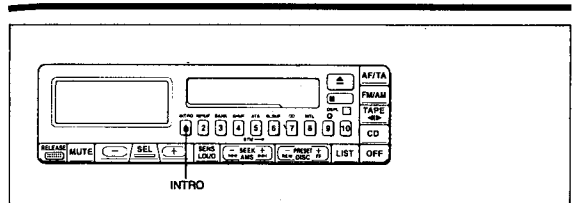
Press the button to get the "REP 3" indication during CD play.

When the last disc of the currently selected CD changer is over, the CD play will be repeated from the first disc in the currently selected CD changer.

The function of the REPEAT button changes cyclically as follows:



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



Searching for a Desired Track by Listening to the First 10 Seconds of Each Track
—Intro Scan Function

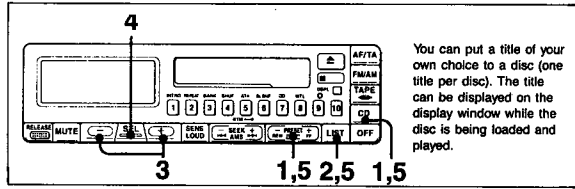
Press the button during CD play.

The first 10 seconds of all the tracks on the currently selected disc will be played in order. When the first 10 seconds of the last track on a disc is played, it will move on to the next disc. When the first 10 seconds of the last disc in the first CD changer has been played, the first disc in the next CD changer will be played (only when two or more CD changers are connected).

When you find the desired track Press the INTRO button once more. The Intro scan function will be canceled and you can continue to listen to the track.

Displaying the Title of Each Disc

—Disc Memo Function



You can put a title of your own choice to a disc (one title per disc). The title can be displayed on the display window while the disc is being loaded and played.

Putting Your Personalized Titles onto the Discs

- 1** Play the disc that you wish to title.
- 2** Press the LIST button for more than two seconds to enter the name edit mode.
- 3** Press either the \leftarrow or \rightarrow button to select the desired letters and numbers.

Each time you press the \leftarrow or \rightarrow button, characters will come on in the following order:

\leftarrow → A → B → C → ... → X → Y → Z → 0 → 1 → 2 → 3 → ...

\rightarrow → \ → (→) → \ → / → * → - → + → 9 → ...
- 4** Press the SEL button after locating the desired letter or number.

The flashing part will move to the next space on the right. Repeat steps 3 and 4 to enter the entire titles. Up to eight characters can be used per disc.

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Displaying the Title of Each Disc

Where are the contents of the custom file stored?
The information registered in the custom file will be stored in the memory of currently selected CD changer. You can play a custom-filed disc in another CD changer and use the custom file function as long as they are connected to the currently selected CD changer with the UNILINK system.

You can register the maximum of 110 discs on one CD changer
If you try to register more than 110 discs, the unit will display "FULL" on the display window and will not accept the command for custom-filing. In this case, you will have to erase the memory of the other discs before you enter the new ones. See page 50 for details on erasing the memory.

When two or more CD changers are connected
The information registered in the custom file can be retrieved by other CD changers using the communication signals sent between the CD changers provided that they are connected by UNILINK cables.

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- 5** To register the title, use one of the following methods ① through ④.
 - ①** Press the LIST button for more than two seconds.

The unit will go back to the normal CD playing mode.
 - ②** Press the LIST button lightly.

The unit enters the PLAY/SKIP mode in which the play and skip modes can be set. (Continue to step 4 in "Setting the Play and Skip Modes on the Discs" of page 46)
 - ③** Press the DISC button lightly.

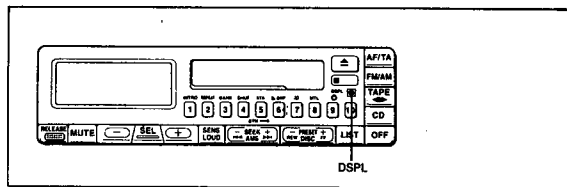
You can change the disc and continue to put the titles to the discs. (Press lightly)
 - ④** Press the CD button. (only when two or more CD changers are connected)

You can go to the next CD changer and the unit will go back to the normal playing mode.

Notes

- If you press the SEL button when the eighth letter (farthest right letter) is flashing, the flashing part goes back to the first letter (farthest left letter).
- If you wish to put a blank space after a character, select " " (under-bar).

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Displaying the Title

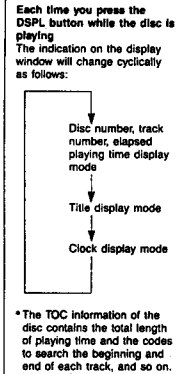
While the disc is playing, press the DSPL button to enter the title display mode.

If the title of a disc is not registered, "....." will come on the display window.

While loading the discs
Whatever the display mode is, the indication automatically changes as follows:

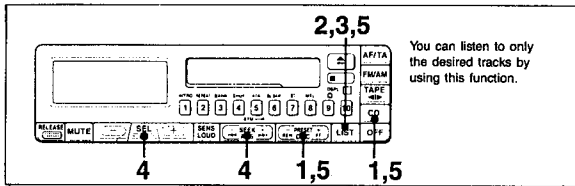
Title of the disc (2 seconds) → Disc and track number (2 seconds) → Currently selected display mode

The registered titles of the discs may not come on the display window immediately during loading. This occurs because the unit displays the title after identifying the disc by reading the TOC* (Table of Contents) information of the disc. Therefore, while the CD changer is loading the disc for the first time, the registered title of the disc cannot be displayed. Once the disc has been loaded and played, the TOC information would have been read and the title will be displayed even while the disc is being loaded.



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Playing Selected Tracks on a Disc —Bank Function



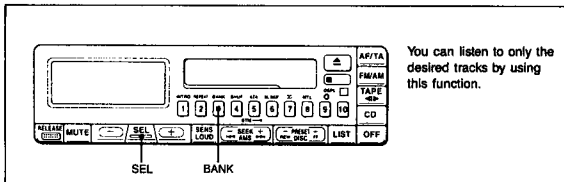
Setting the Play and Skip Modes on the Discs

- 1 Play the disc to which you wish to set these modes.
- 2 Press the LIST button for more than two seconds and put the titles onto the discs.
 See page 42 for details about putting on a title. If the title has already been registered, go to step 3.
- 3 Press the LIST button lightly to enter the PLAY/SKIP edit mode.
When the unit enters the PLAY/SKIP edit mode, the indication on the display window will look like the illustration below.
 PLAY
PLAY/SKIP edit mode
- 4 Press the AMS button to select the track number you wish to skip and press the SEL button.
 → SKIP
The indication changes from "PLAY" to "SKIP". If you wish to return to "PLAY", press the SEL button again.
Repeat the operation in this step to set either the "PLAY" or "SKIP" mode on all the tracks.

Notes

- When the title is not registered, you cannot enter the PLAY/SKIP edit mode even if you press the LIST button.
- You can only set the "SKIP" mode onto up to 24 tracks. If a disc has more than 24 tracks, you will not be able to set the SKIP mode on the tracks after the 24th track.
- You cannot set the SKIP mode onto all of the tracks on a disc.

Playing Selected Tracks on a Disc



Playing with the Bank Function

To play the tracks with "PLAY" settings

Press the BANK button during CD play.



The "BANK" indication will come on the display window. The unit will start playing the tracks with "PLAY" settings which have been set by the PLAY/SKIP mode.

To play the tracks with "SKIP" settings

Press the BANK button while pressing the SEL button.



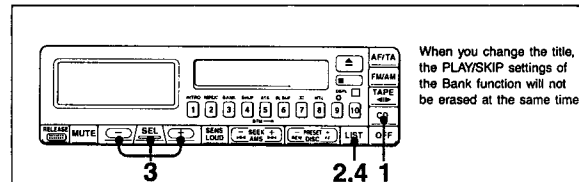
The "BANK" indication will flash on the display window. The unit starts playing the tracks with "SKIP" settings which have been set by the PLAY/SKIP mode.

To go back to the normal playing mode
Press the BANK button again.

To go back to the normal playing mode
Press the BANK button while pressing the SEL button.

- 5 To register the settings, use one of the following methods ① through ④.
 - ① Press the LIST button for more than two seconds.
 The unit will go back to the normal CD playing mode.
 - ② Press the LIST button lightly.
 The unit re-enters the name edit mode. See page 42.
(Press lightly.)
 - ③ Press the DISC button lightly.
 You can change the disc and continue to put the titles to the discs.
(Press lightly.)
 - ④ Press the CD button (only when two or more CD changers are connected).
 You can go to the next CD changer and the unit will go back to the normal playing mode.

Editing a Custom File

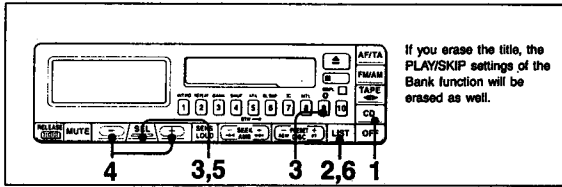


Changing the Title and the PLAY/SKIP Settings

- 1 Play the disc you wish to edit.
- 2 Press the LIST button for more than two seconds to enter the name edit mode.
 The title of the currently played disc will appear on the display window.
- 3 Press the SEL button to make the part you wish to edit flashing. Select the letters and numbers using the ◀ or ▶ button.
 → or If you wish to change the titles of other discs, repeat steps 1 through 3 on the discs after changing them with the DISC or CD button.
- 4 Press the LIST button for more than two seconds.
 Now the new title is registered.

Note
If you wish to change the PLAY/SKIP settings of the Bank function, press the LIST button lightly to enter the PLAY/SKIP mode while the unit is in the name edit mode in step 2. While checking the disc and track numbers on the display window, change the setting by the AMS and SEL buttons. Press the LIST button lightly again and the unit will enter the name edit mode again.

Editing a Custom File



If you erase the title, the PLAY/SKIP settings of the Bank function will be erased as well.

Erasing a Title

- 1 Select the CD changer and play any disc.
- 2 Press the LIST button for more than two seconds to enter the name edit mode.
The title of the currently played disc will appear on the display window.
- 3 Press the preset number button 9 while pressing the SEL button.
- 4 Press the left or right arrow button to search for the title you wish to erase.
The titles stored in the CD changer currently selected will appear on the display window in the same order as they were registered*.
- 5 Press the SEL button for more than two seconds after the title you wish to erase is displayed.
Repeat steps 4 and 5 on other titles, if necessary.
- 6 Press the LIST button for more than two seconds.
Now the title and the PLAY/SKIP settings are erased. The unit goes back to the normal CD playing mode.

The alternative method to erase a title
You can erase a title by selecting eight " "s (underbars) as described in step 3 of "Changing the Title and the PLAY/SKIP Settings". (page 49)

* If you have erased some of the titles before, they will not come on in the same order as they were registered.

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Troubleshooting Guide

The following check will assist in the correction of most problems which you may encounter with your unit. Before going through the check list below, refer back to the connection and operating procedures.

Radio reception

Trouble	Cause/Solution
Preset tuning is not possible.	<ul style="list-style-type: none"> Memorize the correct frequency. The broadcast is weak. → Use manual tuning.
Automatic tuning is not possible.	The broadcast is weak. → Use manual tuning.
The "ST" indication flashes.	<ul style="list-style-type: none"> Tune in precisely. The broadcast is weak. → Press the SENS button to enter the MONO mode.

Tape playback

Playback sound is distorted.	Contamination of the tape head. → Clean the head.
The AMS does not operate correctly.	<ul style="list-style-type: none"> There is a noise in the space between selections. A blank space is too short (less than four seconds). FF is pressed immediately before the following selection. REW is pressed immediately after the selection starts. A long pause, or a passage of low frequencies or very low sound level is treated as a blank space.

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Maintenance

Fuse Replacement

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In this case, consult your nearest Sony dealer.

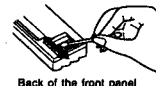
Warning
Use the specified amperage fuse. Use of a higher amperage fuse may cause serious damage.

Cleaning the Head and the Tape Path

Prolonged use may contaminate the tape head and the tape path. Contamination causes sound drop-outs in playback. Clean the tape head and the tape path every two weeks to enjoy optimum hi-fi stereo sound. Use a commercially available cleaning cassette.

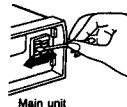
Cleaning the Connectors

The unit may not function properly if the connectors between the unit and the front panel get contaminated with dirt. In order to prevent this from happening, open up the front panel by pressing the RELEASE button then detach it and clean the connectors from time to time.



Back of the front panel

Clean the connectors with a cotton swab as illustrated. Be sure to clean them in the direction of the arrow.



Main unit

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Troubleshooting Guide

Disc Play

Playback sound is skipped.	Dusty or defective disc.
----------------------------	--------------------------

General

No sound	<ul style="list-style-type: none"> Control the volume with the left or right arrow button. Set the fader control to the center position on the 2-speaker system.
----------	--

Front panel

Indications do not appear on the display window.	Contamination of the connectors between the unit and the front panel.	Remove the front panel and clean the connectors. See "Cleaning the Connectors" of "Maintenance" chapter for the details.
--	---	--

Error displays (when the optional Sony CD changers are connected)

The following indication will flash for about five seconds and an alarm sound will be heard.

Display	Cause	Solution
NO MAG	The disc magazine is not inserted in the CD changer.	Insert the disc magazine with discs into the CD changer.
NO DISC	No disc is inserted in the disc magazine.	Take out the disc magazine and insert the discs.
ERROR	The disc is dirty. The disc is inserted upside down.	Clean the disc. Insert the disc correctly.
RESET	The CD changer cannot be operated because of some trouble.	Press the reset button of the unit.

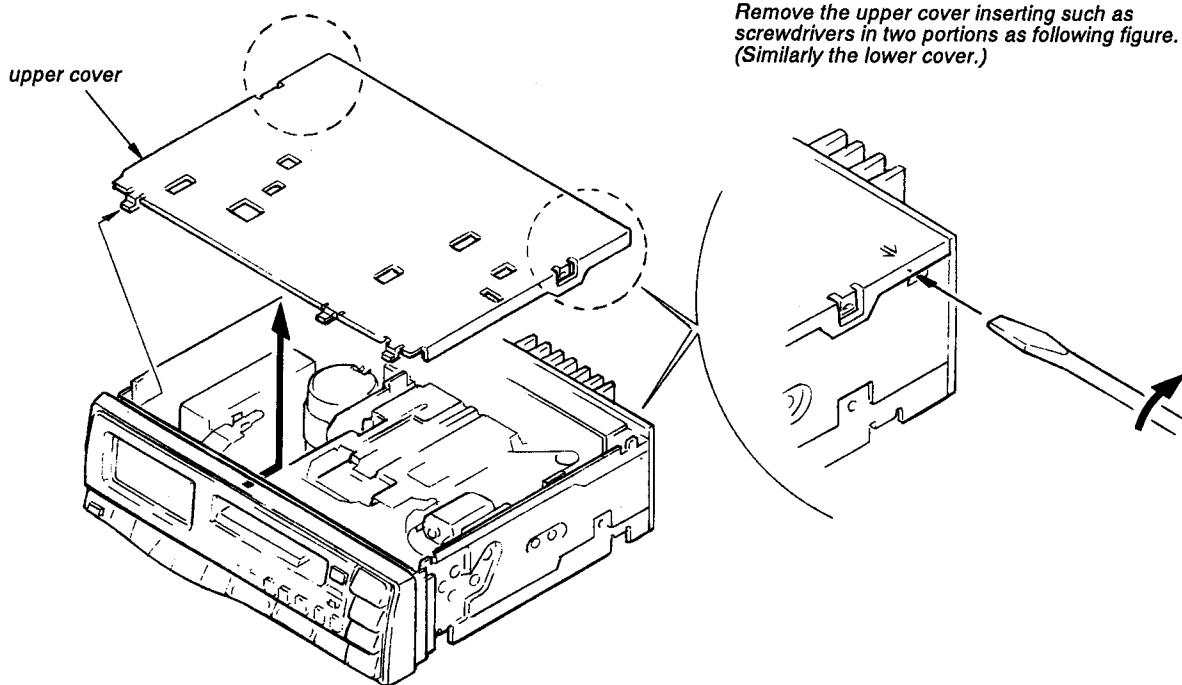
If the above mentioned solutions do not help to improve the situation, consult your nearest Sony dealer.

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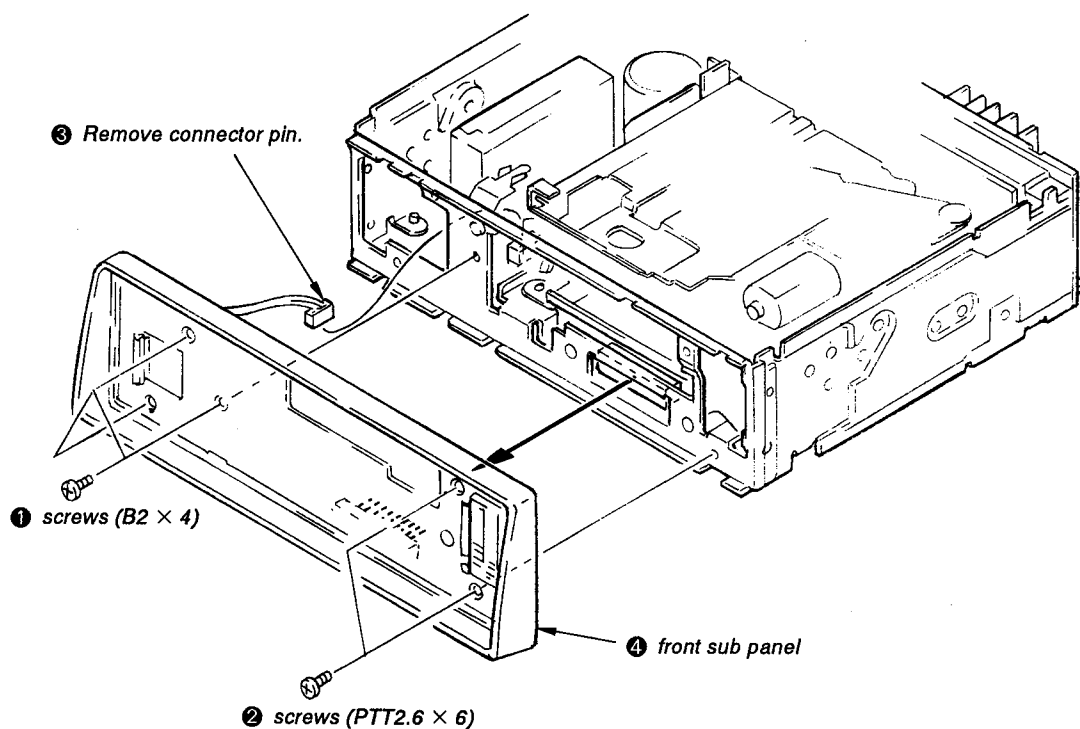
SECTION 2 DISASSEMBLY

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

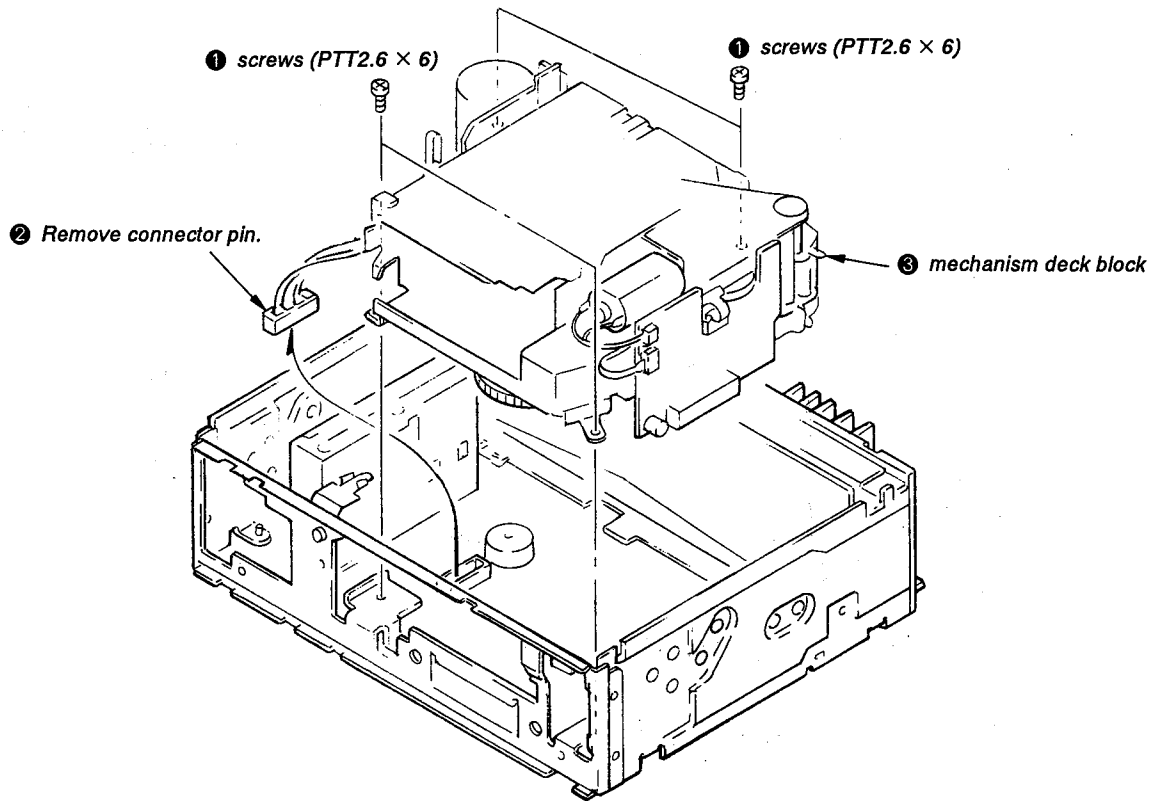
2-1. COVER



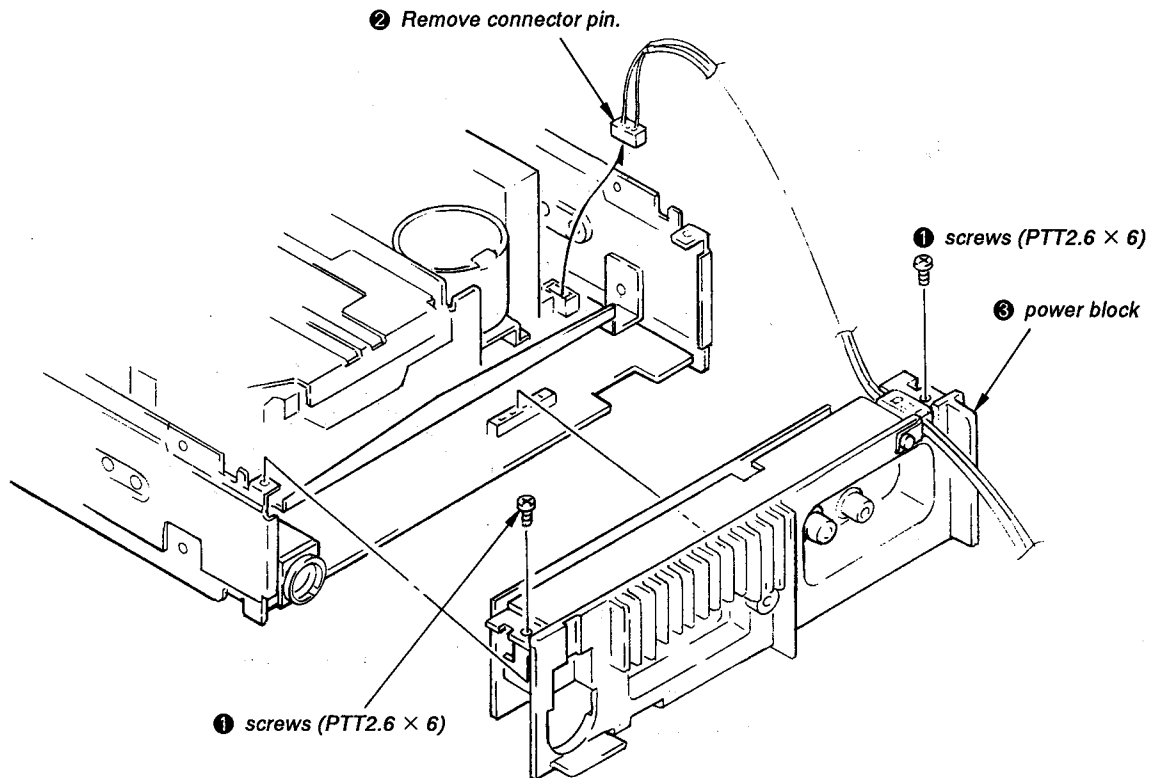
2-2. FRONT PANEL ASSY



2-3. MECHANISM DECK BLOCK



2-4. POWER BOARD



SECTION 3 ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENT

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 (14.4 V).

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	35 – 55 g•cm (0.49 – 0.76 oz•inch)
FWD Back Tension		1.5 – 4.5 g•cm (0.02 – 0.06 oz•inch)
REV	CQ-102RC	35 – 55 g•cm (0.49 – 0.76 oz•inch)
REV Back Tension		1.5 – 4.5 g•cm (0.02 – 0.06 oz•inch)
FF, REW	CQ-201B	80 – 170 g•cm (1.11 – 2.36 oz•inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 100 g (more than 3.53 oz)
REV	CQ-403R	

3-2. TEST MODE

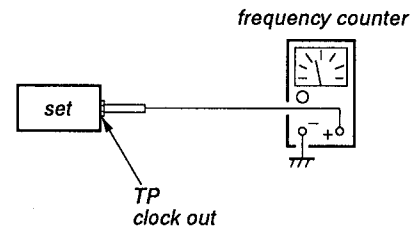
XR-U550/U660 series have the test mode function. In the test mode, FM Auto Scan/Stop Level, AM Auto Scan/Stop level and FM IF (0 V) adjustments can be performed easier than it in ordinary procedure.

Make the Test Mode.

1. Set the "OFF" condition.
2. Push 7 button.
3. Push 9 button.
4. Press 1 button for two seconds.
Then the display indicates 5 patterns and stops,
The test mode is set.

Microcomputer Clock Adjustment

Setting:



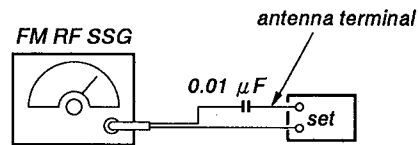
Procedure:

1. Set to the test mode. (See left.)
2. Adjust with CT501 for 16,384.0 ± 0.1 Hz reading on frequency counter.

FM Auto Scan/Stop Level Adjustment

Setting:

BAND switch : FM

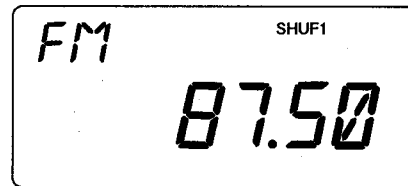


Carrier frequency: 97.9 MHz (US/Canadian)
98.0 MHz (AEP/UK/E/G)
Output level: 25 dB (18 μV) (Except RDS model)
22 dB (13 μV) (RDS model)
Mode: mono, unmodulated

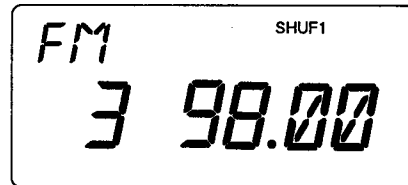
Procedure:

1. Set to the test mode. (See page left.)
2. Push the tuner button and set to FM.

Display window (EX.: AEP, UK, E, G model.
US, Canadian model; 87.90)



3. Push the preset 3 button.



(EX.: AEP, UK, E, G model.
US, Canadian model; 97.9)

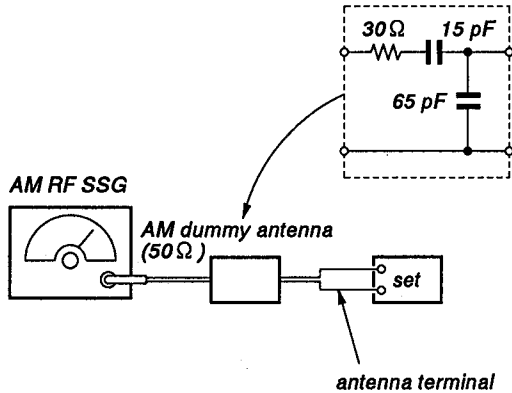
4. Adjust with the volume on TU10 so that the "FM" indication turns to "FM0" indication on the display window.

AM (MW) Auto Scan/Stop Level Adjustment

Note: This adjustment should be made after FM auto scan stop level adjustment is completed.

Setting:

BAND switch : MW

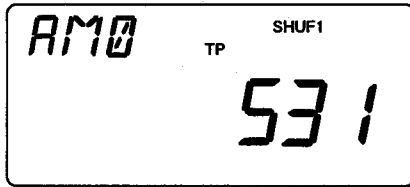


Frequency: 1,000 kHz (US/Canadian/E)
 999 kHz (AEP/UK/E/G)
 Output level: 30 dB μ V (31.8 μ V)

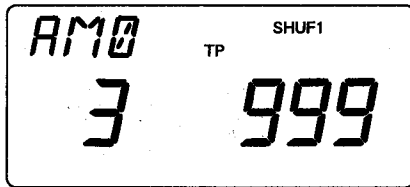
Procedure:

1. Set to the test mode. (See page 21.)
2. Push the tuner button and set to AM (MW).

Display window (EX.: 2 band model 9 kHz step when 10 kHz step; 530)



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



(EX.: 2 band model 9 kHz step, when 10 kHz step; 1000)

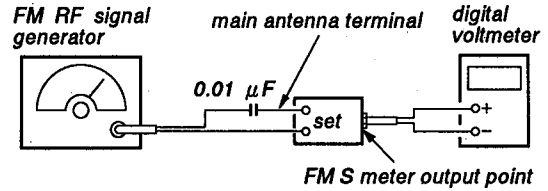
4. Adjust with the volume on TU10 so that the "AM (or MW)" indication turns to "AM0 (or MW0)" indication on the display window.

FM IF (0 V) Adjustment

(): XR-550RDS/551RDS/660RDS/661RDS

Setting:

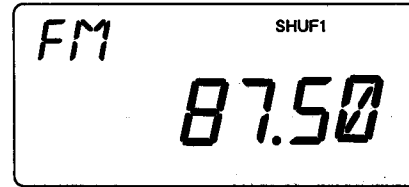
BAND switch : FM
 FM DIVERSITY switch: OFF
 antenna select switch: MAIN



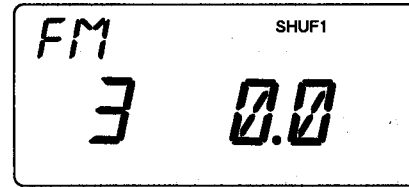
Carrier frequency: 97.9 MHz (US/Canadian)
 98.0 MHz (AEP/UK/E)
 Output level: 70 dB (3.2 mV) (35 dB (56.2 μ V))
 Mode: mono
 Modulation: 1 kHz, 75 kHz deviation

1. Set to the test mode. (See page 21.)
2. Push the tuner button and set to FM.

Display window (EX.: AEP, UK, E, G model.
 US, Canadian model; 87.90)



3. Push the preset **10** button.



4. Adjust with RV4 so that the "0.0" indication turns to "0.6" indication on the display window.

3-3. ELECTRICAL ADJUSTMENTS

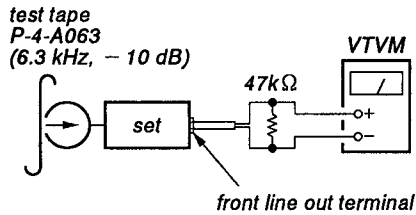
See the adjusting location and measurement location from on page 26 for the adjustment.

DECK SECTION

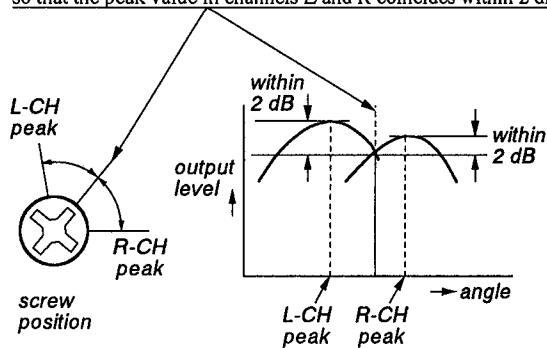
PB Head Azimuth Adjustment

Procedure:

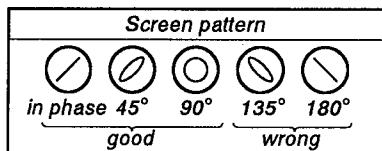
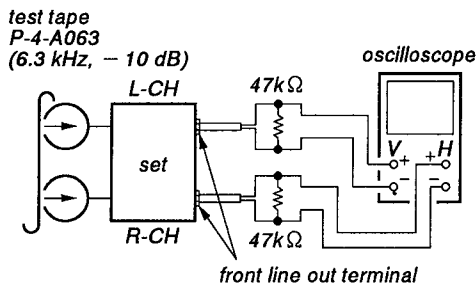
- Put the set into the FWD PB mode.



- Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 2 dB.



- Check the phase in the PB mode.

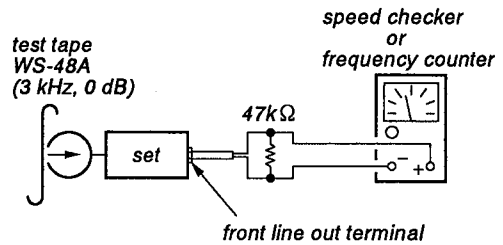


- Repeat the above adjustment for the REV PB mode.

Capstan Motor Tape Speed Adjustment

Procedure:

- Put the set into the FWD PB mode.



Specification: Constant speed

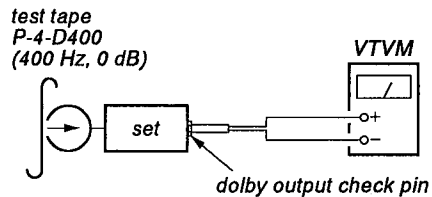
Speed checker	Frequency counter
- 1.5 to +1.5%	2,955 to 3,045 Hz

Adjustment Location: Capstan Motor Volume

DOLBY Level Adjustment

Setting:

- DOLBY NR switch: OFF
- VOLUME control: Maximum
- BALANCE control: Mechanical Center
- BASS control: Mechanical Center
- TREBLE control: Mechanical Center



Procedure:

- Put the set into the FWD PB mode.
- Adjust RV101 (L-CH) and RV201 (R-CH) so that VTVM reading is -6 ± 0.2 dB (0.38 to 0.39 V).

Adjustment Location: EQ board

TUNER SECTION

Cautions during repair

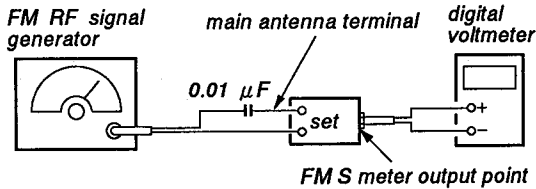
When the front end is defective, replace it by a new one because its internal block is difficult to repair.

FM IF (0 V) Adjustment

(): XR-550RDS/551RDS/660RDS/661RDS

Setting:

BAND switch : FM
 FM DIVERSITY switch: OFF
 antenna select switch: MAIN



Carrier frequency: 97.9 MHz (US/Canadian)
 98.0 MHz (AEP/UK/E/G)
 Output level: 70 dB (3.2 mV) (35 dB (56.2 μV))
 Mode: mono
 Modulation: 1 kHz, 75 kHz deviation

Procedure:

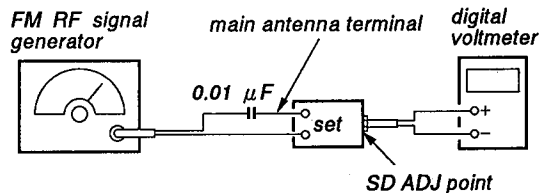
1. Tune the set to 98.0 MHz.
2. Adjust RV4 for 4.5 ± 0.1 V (adjustment value ± 0.1 V) reading on the digital voltmeter.

Adjustment Location: MAIN board

FM Auto Scan/Stop Level Adjustment

Setting:

BAND switch : FM
 FM DIVERSITY switch: OFF
 antenna select switch: MAIN



Carrier frequency: 97.9 MHz (US/Canadian)
 98.0 MHz (AEP/UK/E/G)
 Output level: 22 dB (12.6 μV)
 Mode: mono
 Modulation: 1 kHz, 75 kHz deviation

Procedure:

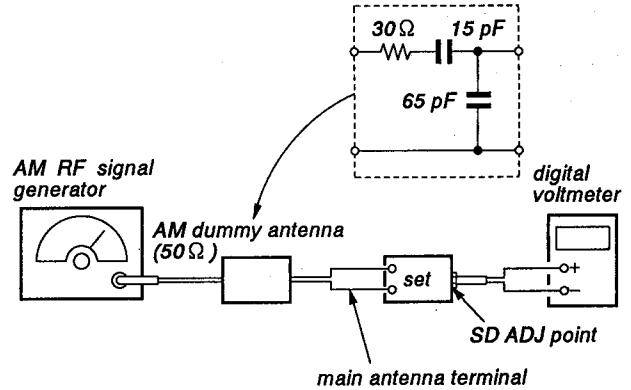
1. Tune the set to 98.0 (97.9) MHz.
2. Adjust trimmer resistor for FM of inside FM/AM tuner for changes from low to high reading on the digital voltmeter.
3. When the FM RF signal generator output level is 24 dB (15.8 μV), check that the auto scan stopped.

Adjustment Location: MAIN board

AM Auto Scan/Stop Level Adjustment

Setting:

BAND switch : MW
 FM DIVERSITY switch: OFF
 antenna select switch: MAIN



Carrier frequency: 1,000 kHz (US/Canadian/E)
 999 kHz (AEP/UK/E/G)
 30% amplitude modulation by 400 Hz signal
 Output level: 30 dB (31.6 μV)

Procedure:

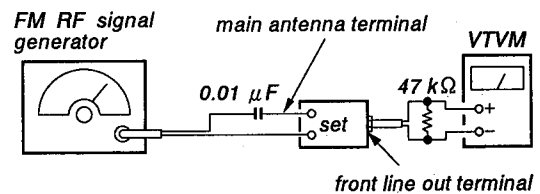
1. Tune the set to 999 (1,000) kHz.
2. Adjust trimmer resistor of inside the AM tuner unit for changes from low to high reading on the digital voltmeter.
3. When the AM RF signal generator output level is 48 dB (251.2 μV), check that the auto scan stopped.

Adjustment Location: AM tuner unit

FM Stereo Separation Adjustment

Setting:

BAND switch : FM
 FM DIVERSITY switch: OFF
 antenna select switch: MAIN



Carrier frequency: 97.9 MHz (US/Canadian)
 98.0 MHz (AEP/UK/E/G)
 Output level: 70 dB (3.2 mV)
 Mode: stereo
 Modulation: main; 1 kHz, 33.75 kHz deviation (45%)
 sub; 1 kHz, 33.75 kHz deviation (45%)
 19 kHz pilot; 7.5 kHz deviation (10%)

Procedure:

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV2 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV2 for minimum reading.

L-CH Stereo separation: Ⓐ - Ⓑ

R-CH Stereo separation: Ⓒ - Ⓓ

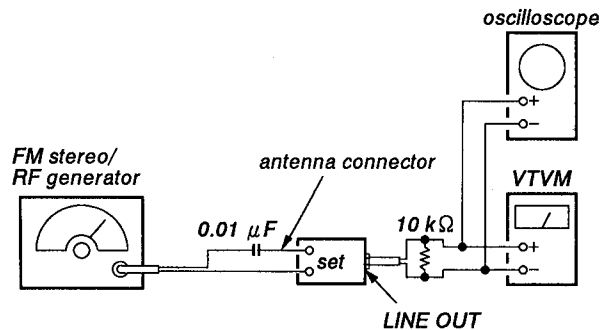
The separations of both channels should be equal.

Adjustment Location: MAIN board

FM Carrier Leak Adjustment

Setting:

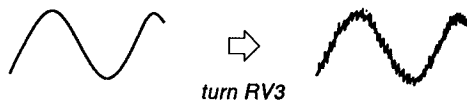
BAND switch : FM
 FM DIVERSITY switch: OFF
 antenna select switch: MAIN



Carrier frequency: 97.9 MHz (US/Canadian)
 98.0 MHz (AEP/UK/E/G)
Output level: 60 dB μ V (1 mV)
Modulation: main; 1 kHz, 33.75 kHz deviation
 sub; 1 kHz, 33.75 kHz deviation
 19 kHz pilot; 7.5 kHz deviation

Procedure:

1. Check the waveform on the oscilloscope screen becomes as follows when turning RV3.



2. Set the modulation 19 kHz pilot only.
3. Adjust with RV3 so that the 19 kHz signal becomes minimum on both channels L and R.

Adjustment Location:

— Top View —

tape speed adjustment

RV2
FM stereo separation
adjustment

RV3
FM carrier leak
adjustment

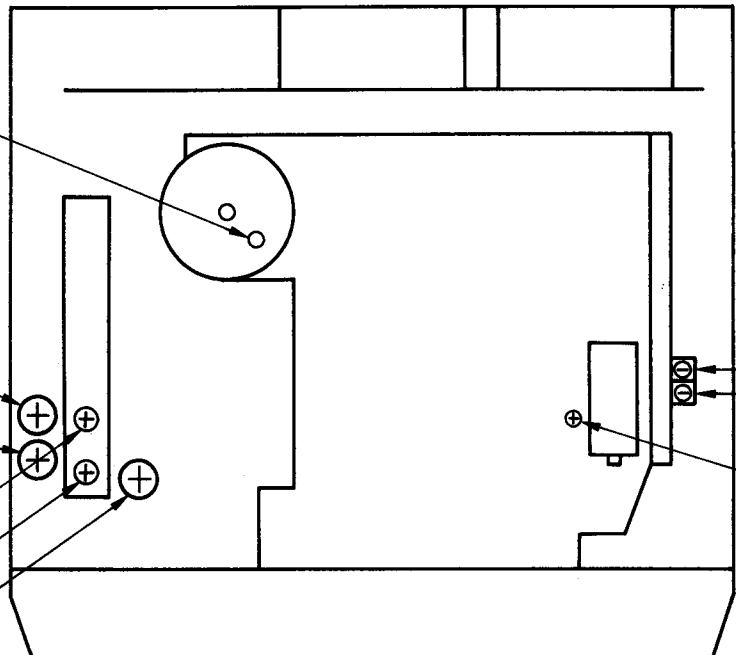
AM auto scan/stop level
adjustment

FM auto scan/stop level
adjustment

RV4
FM signal meter
adjustment

RV201 } dolby level
RV101 } adjustment

azimuth adjustment screw



dolby output
check { L-CH
R-CH

main antenna
terminal

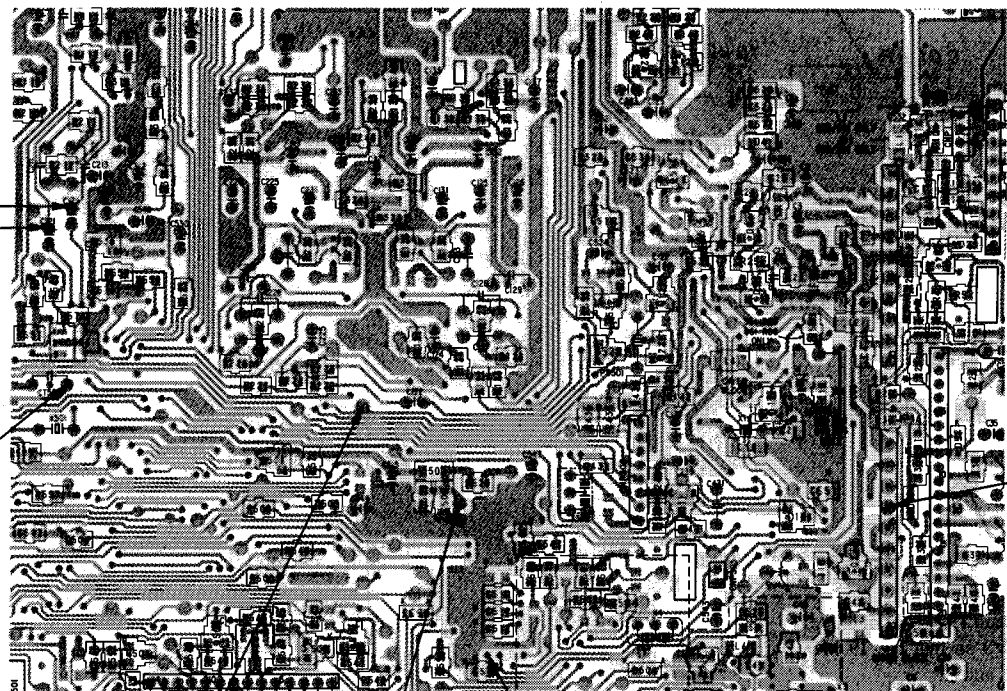
SD ADJ

CT501
Microcomputer
clock
adjustment

Clock out

IC502
VDD

FM signal meter
output



SECTION 4 DIAGRAMS

4-1. PIN DESCRIPTIONS

Master Microcomputer IC501 (μ PD75116GF-F41-3BE)

Pin No.	Name	I/O	Description																																													
63	POS 3	I	Mechanism Deck Position Detection pin. (See the table below.) *(With tape rotation in normal direction)																																													
64	POS 2	I																																														
1	POS 1	I																																														
2	POS 0	I																																														
			<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th>EJECT</th> <th>STOP</th> <th>↔</th> <th>FF</th> <th>↔</th> <th>REW</th> <th>↔</th> <th>PLAY</th> </tr> </thead> <tbody> <tr> <td>POS 0</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> </tr> <tr> <td>POS 1</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td>H</td> </tr> <tr> <td>POS 2</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> </tr> <tr> <td>POS 3</td> <td>L</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> </tr> </tbody> </table> <p>H : High input, L : Low input</p>		EJECT	STOP	↔	FF	↔	REW	↔	PLAY	POS 0	L	L	L	H	H	H	H	H	POS 1	H	H	L	L	L	H	H	H	POS 2	H	H	H	H	L	L	L	H	POS 3	L	H	H	H	H	H	L	L
	EJECT	STOP	↔	FF	↔	REW	↔	PLAY																																								
POS 0	L	L	L	H	H	H	H	H																																								
POS 1	H	H	L	L	L	H	H	H																																								
POS 2	H	H	H	H	L	L	L	H																																								
POS 3	L	H	H	H	H	H	L	L																																								
3	LINK OFF	O	Not used.																																													
4	AMP ON	O	Not used.																																													
5	POWER-ON	O	Power ON/OFF Output pin. Set this output "High" to turn power on. Set it "Low" to turn all power off.																																													
6	ACC-ON	O	Button Illumination Power ON/OFF Output pin. Set this output "High" to turn the power on.																																													
7	RESET	I	Reset pin.																																													
8	X2	—	Connection pin for System Clock Oscillation. 4.19MHz connection.																																													
9	X1	I																																														
10	DM CLOSE	O	Not used.																																													
11	DM OPEN	O																																														
12	SYSTEM RESET	O	Pin which resets all of slave microcomputers that are connected and are communicating on the UNILINK BUS. Switching this output from "Low" to "High" level causes resetting. Usually it is kept "High".																																													
13	SYNC	O	Pin which outputs the pulse for determining timing of communication to data line. (UNILINK BUS interface SYNC pin)																																													
14	MUTE	O	Output pin used to enable Audio Muting. This output is kept "High" during audio muting.																																													
15	CLK VOL	O	Pin for Clock Output to the electronics VOL IC (IC 321: LC7537AN).																																													
16	DATA VOL	O	Pin for Data Output to the electronics VOL IC.																																													
17	CE VOL	O	Pin for CE Output to the electronics VOL IC. This output is used as the latch signal to send data.																																													
18	NOSE	I	Initialization pin which determines whether the nose is removed or not. When this input is "High", there are no nose removal failure caution alarm, no cassette EJECT and no nose open function (by means of pressing OPEN button for two sec).																																													
19	B/C (INT)	I	Initialization pin which determines whether Dolby B NR only or Dolby B and C NR. When "Low", this input sets both B and C. When "High", it sets B only.																																													

Pin No.	Name	I/O	Description									
20	CLOCK	I	Initialization pin which determines whether the internal clock is present or not. When "Low", this input initializes the system with the clock present.									
21	POWER SELECT	I	Power Select switch (initialization). Set this input "Low" to select Power select OFF setting (to cope with cars without accessory position).									
22	PL	O	MD Plunger Control pin.									
23	CM	O	MD Capstan Motor Control pin.									
24	LM-	O	MD Loading Motor Control pin									
25	LM+	O										
			<table border="1"> <tr> <td>LM- / LM+</td> <td>High</td> <td>Low</td> </tr> <tr> <td>High</td> <td>Brake</td> <td>Loading Direction</td> </tr> <tr> <td>Low</td> <td>Eject Direction</td> <td>Stopped</td> </tr> </table>	LM- / LM+	High	Low	High	Brake	Loading Direction	Low	Eject Direction	Stopped
LM- / LM+	High	Low										
High	Brake	Loading Direction										
Low	Eject Direction	Stopped										
26	Vss	-	Vss pin.									
27	DP 0	I	Not used. Pullup H.									
28	DP 1	I										
29	NSW	I	Nose Presence Detection pin. When "Low", this input indicates that the nose is removed.									
30	CSW	I	Cassette Tape Presence Detection pin. When "High", this input indicates that cassette tape is present.									
31	REEL 1	I	Cassette Tape Rotation Detection pin (this input indicates Take up side when tape is being rotated in normal direction).									
32	REEL 2	I	Cassette Tape Rotation Detection pin (this input indicates Supply side when tape is being rotated in normal direction).									
33	F/R	I	Cassette Tape Run Direction Detection pin. When "Low", this input indicates REVERSE.									
34	—	—	Not used. (Connected to GND.)									
35	—	—	Not used. (Connected to GND.)									
36	—	—	Not used. (Connected to GND.)									
37	CLK OUT	O	Serial Communication Clock Output pin. (UNILINK BUS Interface Clock Output pin)									
38	BUS ON	O	UNILINK BUS Interface Bus ON Output terminal. Set this output "Low" to enable communication on the bus.									
39	KEY RESET	O	Pin which resets the KEY DISPLAY microcomputer (IC 702).									
40	BEEP	O	BEEP Output pin.									
41	SI	I	Serves as both Serial Data Input pin and Detection pin for Communication Request from slave. (UNILINK BUS Interface Data Input pin)									

Pin No.	Name	I/O	Description
42	SO	O	Serial Data Output pin. (UNILINK BUS Interface Data Output pin)
43	CLK IN	I	Serial Communication Clock Input pin.
44	BU CHECK	I	Power Voltage Detection pin.
45	ACC CHECK	I	Accessory Voltage Detection pin. When "High", this input indicates ACC OFF.
46	TEL MUTE	I	Pins which detects a telephone call. This input becomes "Low" to mute -20dB audio signal. It becomes "High" to return the signal to its original VOL level.
47	—	—	Not used. (Connected to GND.)
48	TV/TV1,2	I	Intialization pin for the number of bands (preset count) for TV when the Hide-away TV tuner is connected. When "Low", this input sets 1 band (preset count to 10). When "High", it sets 2 bands for TV1,TV2 (preset count to 20).
49	KEY 5V	O	Power Control pin for the KEY DISPALY microcomputer. Set this output "Low" to turn the power on.
50	AUX ON	O	This output is "Low" when supplied as an external input of UNILINK IN AUDIO to CD, TV, etc. It supplies high impedance to other destinations.
51	D ON	O	This output is "Low" when sound is being produced from cassette tape. Ohterwise, it supplies high impedance.
52	—	—	Not used.
53	—	—	Not used.
54	ANT ON	O	This output supplies high impedance when the tuner or TV is on. It is "Low" when any other source is on.
55	—	—	Not used.
56	—	—	Not used.
57	NC	—	Connected to VDD.
58	V _{DD}	—	V _{DD} pin.
59	B/C	O	This output is "High" when Dolby B NR is on. It is "Low" output when C NR is on.
60	DNR ON	O	This output is "Low" when Dolby NR is on. It is "High" when Dolby NR is off.
61	AMS IN	I	Detection pin which determines whether tape sound is present or not. This input is "Low" when tape sound is present.
62	MTL	I	Tape NORMAL/METAL Detection pin. This input is "Low" when normal tape is used.

Key Display Microcomputer IC702 (μ PD75008GB-676-3B4)

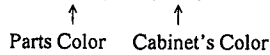
Pin No.	Name	I/O	Description
44	KI7	I	KEY SCAN Input pin.
1	KI6	I	
2	KI5	I	
3	KI4	I	
4	KI3	I	
5	KI2	I	
6	KI1	I	
7	KI0	I	
8	KO3	O	KEY SCAN Output pin.
9	KO2	O	
10	KO1	O	
11	KO0	O	
12	NC	—	(Connected to VDD.)
13	—	—	Not used.
14	—	—	
15	—	—	
16	—	—	
17	V _{ss}	—	V _{ss} pin.
18	XT1	—	(Connected to GND.)
19	XT2	—	Not used.
20	RESET	I	Reset pin.
21	X1	I	Connection pin for System Clock oscillation. 4.19MHz connection.
22	X2	—	
23	LCD CLK	O	Pin for Clock Output to LCD DRIVER IC (IC 703: TC9240F)
24	LCD DATA	O	Pin for Data Output to LCD DRIVER IC.
25	LCD CE	O	Pin for CE Output to LCD DRIVER IC. This output is used as the latch signal to send data.
26	LCD INH	O	Pin for INH Output to LCD DRIVER IC.
27	LINK OFF	O	Not used.
28	REQ	O	UNILINK BUS Interface Request pin. This pin is "High" to request communication from the master microcomputer (IC 501).
29	DATA IN	I	Serves as both Serial Data Input pin and Detection pin for Communication Request from slave. (UNILINK BUS Interface Data Input pin)
30	DATA OUT	O	Serial Data Output pin. (UNILINK BUS Interface Data Output pin)
31	CLK IN	I	Serial Communication Clock Input pin. (UNILINK BUS Interface Clock Input pin)
32	BU CHECK	I	Power Voltage Detection pin.
33	—	—	(Connected to GND.)
34	NC	—	(Connected to VDD.)
35	TV CONT	I	Not used.
36	BUS ON	I	UNILINK BUS Interface Bus ON Terminal. When this output is "Low", communication on the bus is enabled.

SECTION 5 EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) ... (RED)



- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

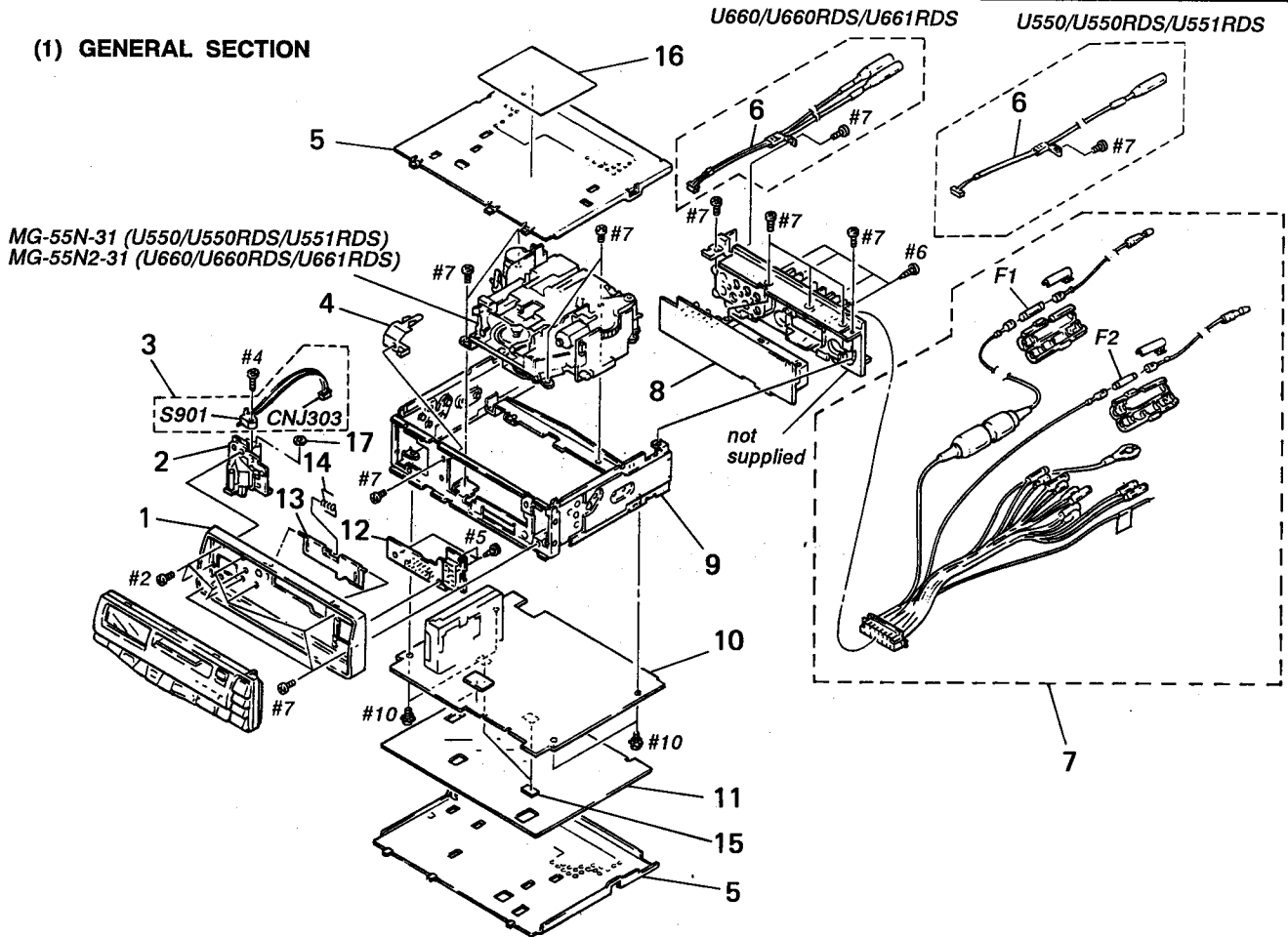
- The mechanical parts with no reference number in the exploded views are not supplied.

- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

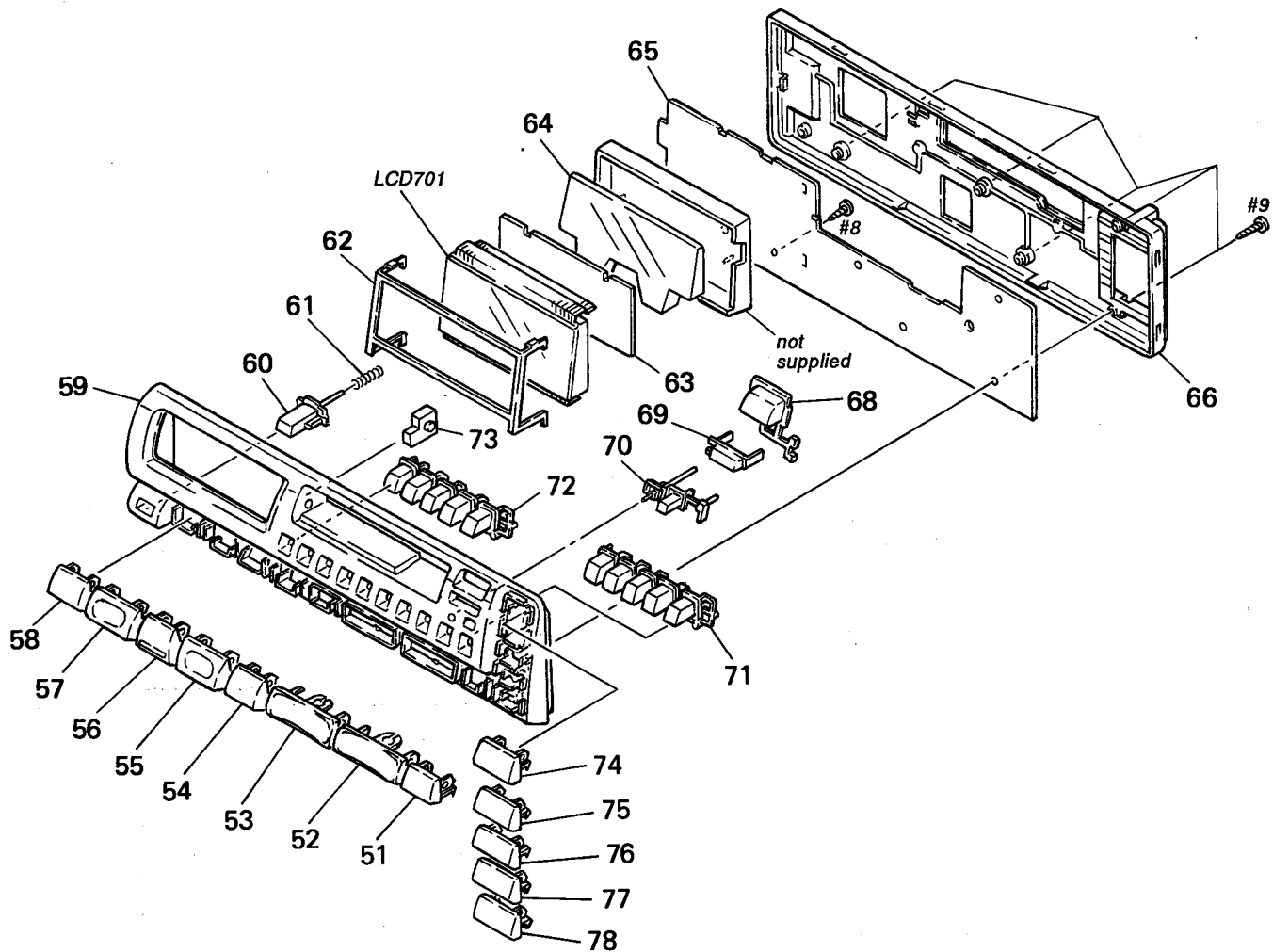
(1) GENERAL SECTION



Ref. No.	Part No.	Description	Remark
* 1	3-377-586-01	PANEL, SUB (EXCEPT U550)	
* 1	3-377-596-01	PANEL, SUB (U550)	
2	X-3364-564-1	LOCK ASSY	
3	X-3365-035-1	SWITCH ASSY	
* 4	3-377-825-01	PLATE, LOCK (EXCEPT U550RDS/U551RDS)	
* 4	3-381-198-01	PLATE, LOCK (U550RDS/U551RDS)	
* 5	3-377-591-01	COVER	
6	1-574-339-11	CORD (WITH CONNECTOR) (U550/U550RDS/U551RDS)	
6	1-690-212-21	CORD (WITH CONNECTOR) (ANT) (U660/U660RDS/U661RDS)	
6	1-690-944-11	CORD (WITH CONNECTOR) (ANT) (U660/U660RDS/U661RDS)	
7	1-690-741-11	CORD (WITH CONNECTOR) (U550)	
7	1-690-742-11	CORD (WITH CONNECTOR) (EXCEPT U550)	
* 8	A-3273-841-A	AMPLIFIER BOARD, COMPLETE (U660RDS/U661RDS)	
* 8	A-3295-042-A	AMPLIFIER BOARD, COMPLETE (U550, U660)	
* 8	A-3295-075-A	AMPLIFIER BOARD, COMPLETE (U550RDS/U551RDS)	
* 9	X-3364-781-1	CHASSIS ASSY	
* 10	A-3273-832-A	MAIN BOARD, COMPLETE (U660RDS) (AEP)	
* 10	A-3273-833-A	MAIN BOARD, COMPLETE (U660RDS; G)	
* 10	A-3273-834-A	MAIN BOARD, COMPLETE (U661RDS)	
* 10	A-3273-835-A	MAIN BOARD, COMPLETE (U660)	

Ref. No.	Part No.	Description	Remark
* 10	A-3273-883-A	MAIN BOARD, COMPLETE (U550)	
* 10	A-3295-076-A	MAIN BOARD, COMPLETE (U550RDS; AEP)	
* 10	A-3295-080-A	MAIN BOARD, COMPLETE (U551RDS)	
* 10	A-3295-082-A	MAIN BOARD, COMPLETE (U550RDS; G)	
* 11	3-377-593-01	INSULATOR	
* 12	1-642-927-11	RESET BOARD	
13	3-377-598-01	DOOR, CASSETTE (U550)	
13	3-377-598-11	DOOR, CASSETTE (U660RDS)	
13	3-377-598-21	DOOR, CASSETTE (U661RDS)	
13	3-377-598-31	DOOR, CASSETTE (U551RDS)	
13	3-377-598-41	DOOR, CASSETTE (U550RDS)	
13	3-377-598-51	DOOR, CASSETTE (U660)	
14	3-377-892-01	SPRING (C DOOR), TORSION COIL	
15	9-911-841-XX	CUSHION, CASSETTE LID (EXCEPT U550)	
* 16	3-377-819-01	LABEL, MODEL NUMBER (U661RDS)	
* 16	3-377-820-02	LABEL, MODEL NUMBER (U660RDS; AEP)	
* 16	3-377-821-01	LABEL, MODEL NUMBER (U660RDS)	
* 16	3-377-822-01	LABEL, MODEL NUMBER (U550)	
* 16	3-378-739-01	LABEL, MODEL NUMBER (U660)	
* 16	3-378-740-01	LABEL, MODEL NUMBER (U551RDS)	
* 16	3-378-741-01	LABEL, MODEL NUMBER (U550RDS)	
17	3-701-436-11	WASHER, STOPPER	
* CNJ303	1-563-470-11	HOUSING, CONNECTOR 2P	
Δ F1	1-532-678-11	FUSE 12A	
Δ F2	1-532-414-11	FUSE 1A	
S901	1-570-771-11	SWITCH	

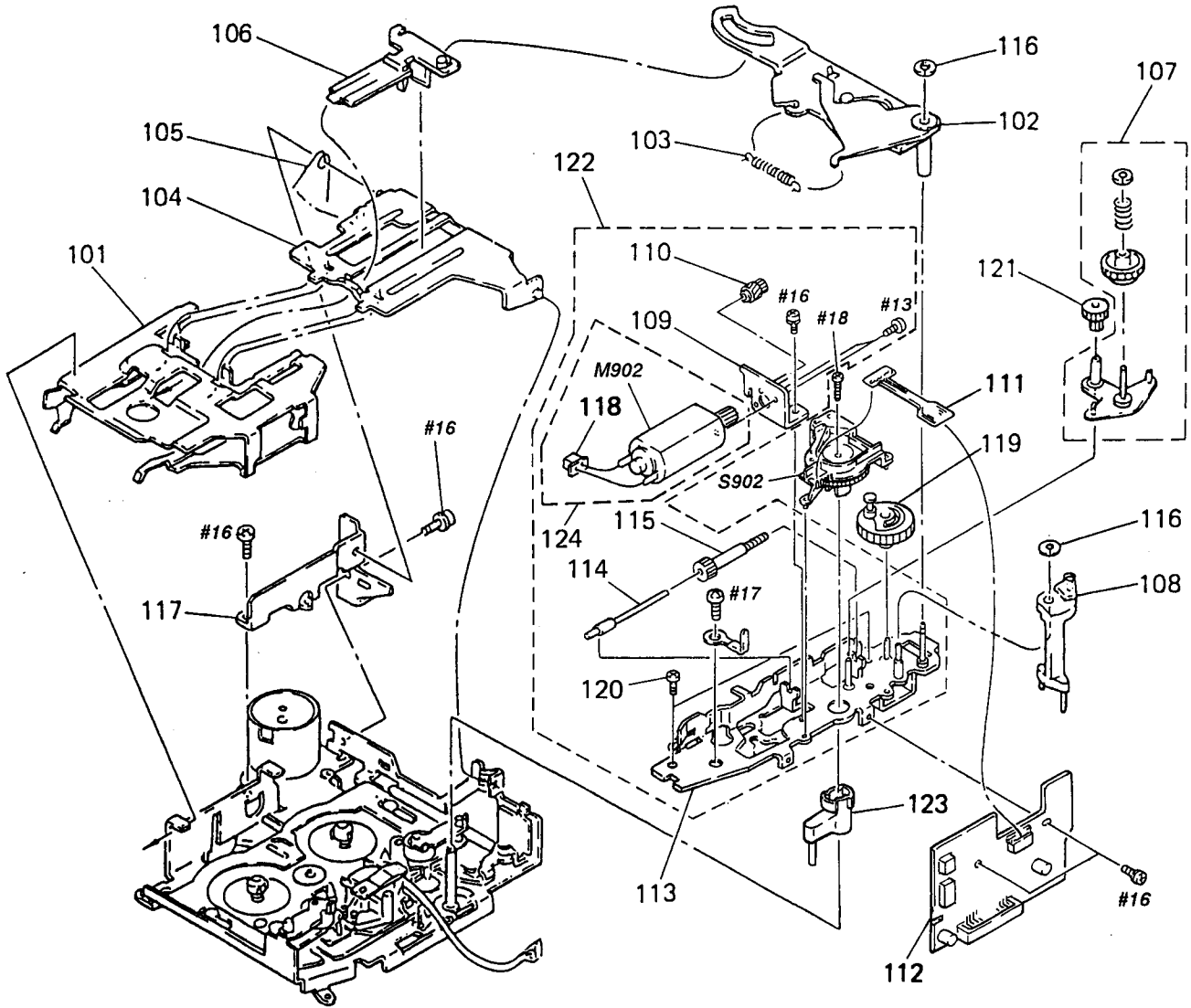
(2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-377-564-01	BUTTON (LIST)	
52	3-377-571-01	BUTTON (DISC)	
53	3-377-572-01	BUTTON (SEEK)	
54	3-377-567-01	BUTTON (LOUD)	
55	3-377-570-01	BUTTON (+)	
56	3-377-568-01	BUTTON (SELECT)	
57	3-377-569-01	BUTTON (-)	
58	3-377-573-01	BUTTON (MUTE)	
59	3-377-580-01	PANEL, FRONT (U661RDS)	
59	3-377-580-11	PANEL, FRONT (U660RDS)	
59	3-377-580-21	PANEL, FRONT (U550)	
59	3-377-580-32	PANEL, FRONT (U551RDS)	
59	3-377-580-42	PANEL, FRONT (U550RDS)	
59	3-377-580-51	PANEL, FRONT (U660)	
60	3-377-577-01	BUTTON (RELEASE)	
61	3-375-373-01	SPRING (RELEASE)	
* 62	3-377-576-01	COVER (LCD)	
* 63	3-377-597-01	SHEET (REFLECTOR)	
* 64	3-377-581-01	PLATE (LCD), LIGHT GUIDE	
* 65	A-3222-383-A	PC BOARD ASSY, KEY (U660RDS/U661RDS)	
* 65	A-3222-394-A	PC BOARD ASSY, KEY (U550/U660)	
* 65	A-3222-446-A	PC BOARD ASSY, KEY (U550RDS/U551RDS)	

Ref. No.	Part No.	Description	Remark
* 66	3-377-585-01	PANEL, FRONT BACK	
68	3-377-560-01	BUTTON (EJECT)	
69	3-377-579-01	CATCHER, RAY, FILTER (EXCEPT U550RDS, U551RDS)	
69	3-381-491-01	COVER (FILTER) (U550RDS, U551RDS)	
70	3-377-582-01	BUTTON (RESET)	
71	3-377-575-01	BUTTON (PRESET 6-10)	
72	3-377-574-01	BUTTON (PRESET 1-5)	
73	3-377-588-01	PLATE (C DOOR), LIGHT GUIDE	
74	3-377-561-11	BUTTON (AF/TA) (U550RDS/U551RDS/U660/U660RDS/U661RDS)	
74	3-377-561-21	BUTTON (FM) (U550/U660)	
75	3-377-563-01	BUTTON (FM/AM) (U550RDS/U660RDS)	
75	3-377-563-11	BUTTON (FM/AM) (U551RDS/U661RDS)	
75	3-377-563-21	BUTTON (AM) (U550/U660)	
76	3-377-566-01	BUTTON (TAPE)	
77	3-377-565-01	BUTTON (CD)	
78	3-377-562-01	BUTTON (OFF)	
LCD701	1-809-595-11	DISPLAY PANEL, LIQUID CRYSTAL	

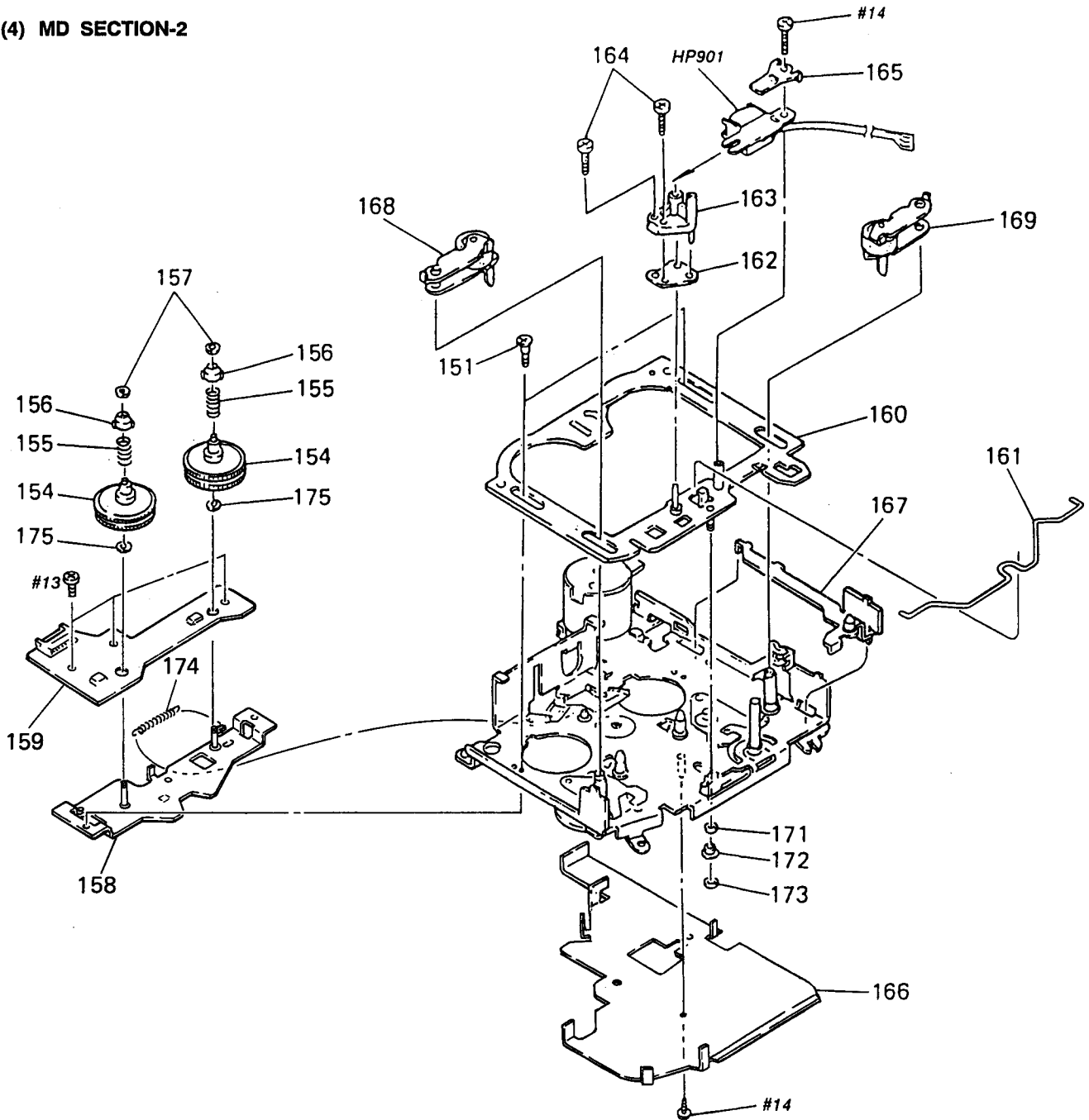
(3) MD SECTION-1



Ref. No.	Part No.	Description	Remark
* 101	3-344-103-21	HOUSING, CASSETTE	
* 102	X-3344-121-1	ARM ASSY, SUCTION	
103	3-344-216-01	SPRING (SUCTION ARM), TENSION	
* 104	X-3362-262-1	HANGER (F) ASSY, HOUSING	
105	3-344-113-03	SPRING	
* 106	3-344-118-01	CATCHER	
107	A-3239-954-A	GEAR ASSY, DRIVING ARM	
* 108	3-344-260-01	ARM, REVERSE	
* 109	X-3344-142-2	BRACKET (F) ASSY, MOTOR	
110	3-344-281-01	GEAR (A), DRIVING	
111	1-635-519-12	PC BOARD, FLEXIBLE	
* 112	A-3222-377-A	EQ BOARD, COMPLETE (MG-55N2-31)	
* 112	A-3222-398-A	EQ BOARD, COMPLETE (MG-55N-31)	
* 113	X-3362-260-3	CHASSIS (F) ASSY, MCU	

Ref. No.	Part No.	Description	Remark
114	3-344-157-01	SEAFT, DRIVING GEAR (B)	
115	3-344-156-01	GEAR (A), DRIVING	
116	3-344-222-01	WASHER	
117	3-368-239-13	BRACKET (U), HANGER	
* 118	1-565-121-11	HOUSING, CONNECTOR 2P	
119	X-3344-119-1	GEAR ASSY, LOADING CAM	
120	3-703-502-21	SCREW	
121	3-344-108-01	GEAR (A), FRICTION	
* 122	A-3252-378-A	PC BOARD SUB ASSY (N), MCU	
123	X-3344-117-1	ARM ASSY, MODE	
124	A-3252-174-A	MOTOR SUB ASSY, L	
M902	X-3362-826-1	GEAR ASSY, MOTOR	
S902	1-572-397-11	SWITCH, ROTARY SLIDE	

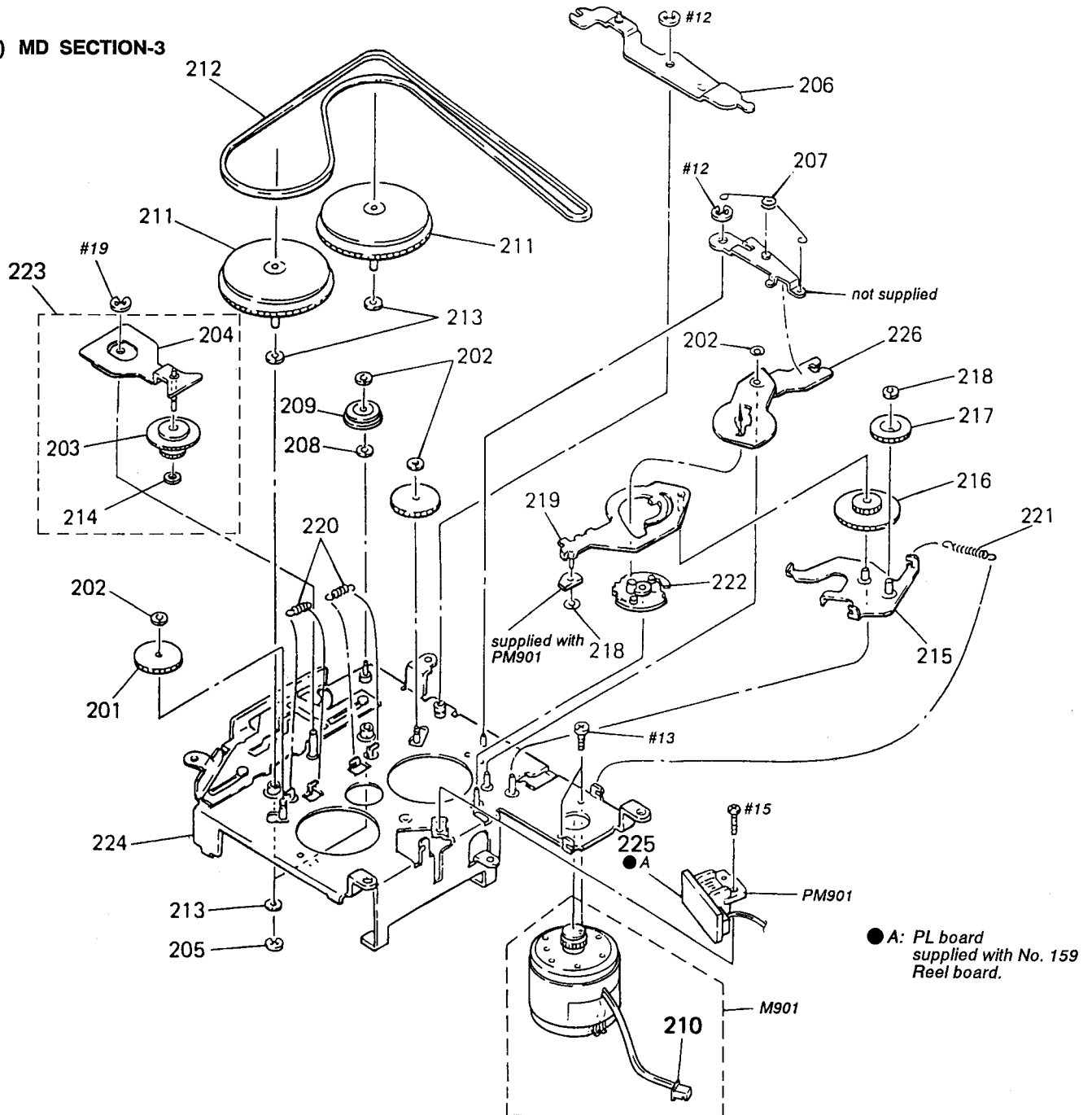
(4) MD SECTION-2



Ref. No.	Part No.	Description	Remark
151	3-344-110-01	SCREW (HB), STEP	
154	X-3362-214-1	TABLE (F) ASSY, REEL	
155	3-344-143-01	SPRING (BT), COMPRESSION	
156	3-365-725-01	CAP (F), REEL	
157	3-364-151-01	WASHER	
* 158	X-3344-144-2	BRACKET (F) ASSY, REEL TABLE	
* 159	1-642-879-11	REEL BOARD	
160	X-3362-261-1	BASE ASSY (R), HEAD (MG-55N2-31)	
160	X-3362-261-2	BASE ASSY (R), HEAD (MG-55N-31)	
* 161	3-363-909-01	SPRING (R), PINCH PRESS	
162	3-344-128-01	SHIM, DAH	
163	3-372-170-01	ARM, DAH	
164	3-364-122-01	SCREW (M1.4X5.5), ADJ	

Ref. No.	Part No.	Description	Remark
165	3-344-130-01	RETAINER, HEAD	
* 166	3-344-220-01	COVER, MD	
* 167	X-3344-118-1	LEVER ASSY, RVS CONVERSION	
168	X-3344-115-1	ARM (R) ASSY, PINCH	
169	X-3344-116-1	ARM (F) ASSY, PINCH	
171	3-344-117-01	ROLLER (B), H/B	
172	3-344-116-01	ROLLER (A), H/B	
173	3-344-222-01	WASHER	
174	3-344-217-01	SPRING (CAM LOCK LEVER), TENTION	
175	3-701-437-01	POLY-SLIDER (A)	
HP901	1-543-726-21	HEAD, MAGNETIC (PLAYBACK) (MG-55N-31)	
HP901	1-543-800-21	HEAD, MAGNETIC (PLAYBACK) (MG-55N2-31)	

(5) MD SECTION-3



Ref. No.	Part No.	Description	Remark
201	3-344-104-01	GEAR, PLAY	
202	3-344-222-01	WASHER	
203	X-3344-102-1	GEAR ASSY, FR	
* 204	X-3344-101-1	ARM ASSY, FR	
205	3-364-151-01	WASHER	
* 206	X-3344-139-1	ARM ASSY, POWER	
207	3-344-279-01	SPRING, BUFFER	
208	3-701-436-01	WASHER, 1.6	
209	3-371-905-01	PULLEY (M), MIDWAY	
* 210	1-563-470-11	HOUSING, CONNECTOR 2P	
211	3-344-261-01	FLYWHEEL (M)	
212	3-344-115-01	BELT	
213	3-701-437-01	POLY-SLIDER (A)	
214	3-344-224-01	WASHER	

Ref. No.	Part No.	Description	Remark
* 215	X-3344-106-1	LEVER ASSY, RVS GEAR (B)	
216	3-344-146-01	GEAR (B), RVS	
217	3-344-147-01	GEAR (A), RVS	
218	3-344-223-01	WASHER	
219	X-3344-107-1	LEVER ASSY, CAM LOCK	
220	3-344-218-02	SPRING (PLAY ARM), TENSION	
221	3-344-215-01	SPRING, TENSION	
222	3-344-119-01	GEAR, RVS CAM	
223	A-3239-947-A	GEAR SUB ASSY, FR	
* 224	X-3362-215-6	CHASSIS (L) ASSY, MECHANICAL	
* 225	1-642-880-11	PL BOARD	
* 226	X-3344-114-1	LEVER ASSY, RVS	
M901	X-3344-136-3	MOTOR SUB ASSY, CAPSTAN	
PM901	1-454-461-11	SOLENOID, PLUNGER	

SECTION 6

AMPLIFITER

ELECTRICAL PARTS LIST

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

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When including parts by reference number, please include the board name.

Ref. No.	Part No.	Description	Remark
*	A-3273-841-A	AMPLIFIER BOARD, COMPLETE ***** (EXCEPT U550RDS, U551RDS)	
*	A-3295-075-A	AMPLIFIER BOARD, COMPLETE ***** (U550RDS/U551RDS)	
< CAPACITOR >			
C801	1-128-113-11	ELECT 3.3uF	20% 50V
C802	1-128-113-11	ELECT 3.3uF	20% 50V
C803	1-163-275-11	CERAMIC CHIP 0.001uF	5% 50V
C804	1-163-275-11	CERAMIC CHIP 0.001uF	5% 50V
C805	1-128-112-11	ELECT 33uF	20% 10V
C806	1-128-112-11	ELECT 33uF	20% 10V
C807	1-126-335-11	ELECT 220uF	20% 10V
C808	1-106-224-00	MYLAR 0.15uF	5% 100V
C809	1-106-224-00	MYLAR 0.15uF	5% 100V
C810	1-106-224-00	MYLAR 0.15uF	5% 100V
C811	1-106-224-00	MYLAR 0.15uF	5% 100V
C812	1-128-355-91	ELECT 2200uF	20% 16V
C903	1-163-275-11	CERAMIC CHIP 0.001uF	5% 50V
C904	1-163-275-11	CERAMIC CHIP 0.001uF	5% 50V
C905	1-128-112-11	ELECT 33uF	20% 10V
C906	1-128-112-11	ELECT 33uF	20% 10V
C907	1-126-335-11	ELECT 220uF	20% 10V
C908	1-106-224-00	MYLAR 0.15uF	5% 100V
C909	1-106-224-00	MYLAR 0.15uF	5% 100V
C910	1-106-224-00	MYLAR 0.15uF	5% 100V
C911	1-106-224-00	MYLAR 0.15uF	5% 100V
C912	1-128-355-91	ELECT 2200uF	20% 16V
C915	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C916	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C917	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C918	1-162-282-31	CAP, CERAMIC 100PF	
< JACK >			
CNJ901	1-691-683-11	JACK, PIN 4P (LINE OUT/UNILINK IN) (U550RDS/U551RDS)	
CNJ901	1-691-684-11	JACK, PIN 6P (LINE OUT/UNILINK IN) (EXCEPT U550RDS, U551RDS)	

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
CNP901	1-691-745-21	PLUG, CONNECTOR 18P	
CNP902	1-691-685-11	CONNECTOR 17P	
< DIODE >			
D809	8-719-313-73	DIODE SFPB-52V	
D810	8-719-313-73	DIODE SFPB-52V	
D811	8-719-313-73	DIODE SFPB-52V	
D812	8-719-313-73	DIODE SFPB-52V	
D901	8-719-422-77	DIODE MA8075-M-TX	
D901	8-719-977-16	DIODE DTZ7.5B	
D904	8-719-027-24	DIODE DSA3A4-F	
D908	8-719-313-73	DIODE SFPB-52V	
D909	8-719-313-73	DIODE SFPB-52V	
D910	8-719-313-73	DIODE SFPB-52V	
D911	8-719-313-73	DIODE SFPB-52V	
< IC >			
IC801	8-759-243-27	IC TA8215H	
IC901	8-759-243-27	IC TA8215H	
< JUMPER RESISTOR >			
JR801	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR802	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR901	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR902	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR999	1-216-295-00	METAL CHIP 0 5% 1/10W	
< TRANSISTOR >			
Q801	8-729-920-21	TRANSISTOR DTC314TKH04	
Q802	8-729-920-21	TRANSISTOR DTC314TKH04	
Q901	8-729-920-21	TRANSISTOR DTC314TKH04	
Q902	8-729-920-21	TRANSISTOR DTC314TKH04	
< RESISTOR >			
R801	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R802	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R803	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R804	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	

AMPLIFITER

EQ

Ref. No.	Part No.	Description	Remark		
R805	1-216-097-00	METAL CHIP	100K	5%	1/10W
R806	1-216-041-00	METAL CHIP	470	5%	1/10W
R807	1-216-041-00	METAL CHIP	470	5%	1/10W
R808	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R809	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R810	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R811	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R812	1-216-081-00	METAL CHIP	22K	5%	1/10W
R813	1-216-081-00	METAL CHIP	22K	5%	1/10W
R814	1-216-047-00	METAL CHIP	820	5%	1/10W
R815	1-216-047-00	METAL CHIP	820	5%	1/10W
R901	1-216-081-00	METAL CHIP	22K	5%	1/10W
R902	1-216-081-00	METAL CHIP	22K	5%	1/10W
R903	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R904	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R905	1-216-097-00	METAL CHIP	100K	5%	1/10W
R906	1-216-041-00	METAL CHIP	470	5%	1/10W
R907	1-216-041-00	METAL CHIP	470	5%	1/10W
R908	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R909	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R910	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R911	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R912	1-216-081-00	METAL CHIP	22K	5%	1/10W
R913	1-216-081-00	METAL CHIP	22K	5%	1/10W
R914	1-216-047-00	METAL CHIP	820	5%	1/10W
R915	1-216-047-00	METAL CHIP	820	5%	1/10W
< THERMISTOR(POSITIVE) >					
THP901	1-809-148-11	THERMISTOR, POSITIVE			
THP902	1-809-148-11	THERMISTOR, POSITIVE			

*	A-3222-377-A	EQ BOARD, COMPLETE			

< CAPACITOR >					
C101	1-137-278-11	FILM CHIP	470PF	5%	16V
C102	1-137-278-11	FILM CHIP	470PF	5%	16V
C103	1-126-607-11	ELECT CHIP	47uF	20%	4V
C104	1-137-294-11	FILM CHIP	0.01uF	5%	16V
C201	1-137-278-11	FILM CHIP	470PF	5%	16V
C202	1-137-278-11	FILM CHIP	470PF	5%	16V
C203	1-126-607-11	ELECT CHIP	47uF	20%	4V
C204	1-137-294-11	FILM CHIP	0.01uF	5%	16V
C302	1-128-010-11	ELECT CHIP	0.22uF	20%	50V
C303	1-128-004-11	ELECT CHIP	10uF	20%	16V
C304	1-128-004-11	ELECT CHIP	10uF	20%	16V
C305	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C306	1-128-065-11	ELECT CHIP	68uF	20%	10V

Ref. No.	Part No.	Description	Remark		
C307	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C308	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C309	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C401	1-164-222-11	CERAMIC CHIP	0.22uF		25V
< CONNECTOR >					
CNP301	1-569-806-21	CONNECTOR, FPC 5P			
* CNP302	1-691-686-21	PLUG, CONNECTOR1R17P			
CNP401	1-691-741-21	PIN, CONNECTOR (PC BOARD) 2P			
CNP402	1-569-806-21	CONNECTOR, FPC 5P			
< DIODE >					
D301	8-719-404-46	DIODE	MA110		
D302	8-719-404-35	DIODE	MA141WK		
< IC >					
IC301	8-759-988-33	IC	BA3430FS		
< RESISTOR >					
R103	1-216-851-11	METAL CHIP	330K	5%	1/16W
R104	1-216-834-11	METAL CHIP	12K	5%	1/16W
R105	1-216-836-11	METAL CHIP	18K	5%	1/16W
R203	1-216-851-11	METAL CHIP	330K	5%	1/16W
R204	1-216-834-11	METAL CHIP	12K	5%	1/16W
R205	1-216-836-11	METAL CHIP	18K	5%	1/16W
R301	1-216-833-11	METAL CHIP	10K	5%	1/16W
R302	1-216-845-11	METAL CHIP	100K	5%	1/16W
R303	1-216-864-11	METAL CHIP	0	5%	1/16W
R304	1-216-811-11	METAL CHIP	150	5%	1/16W
< NETWORK RESISTOR >					
RB301	1-239-286-91	RESISTOR, NETWORK (CHIP TYPE)			
< VARIABLE RESISTOR >					
RV101	1-241-552-11	RES, ADJ CERMET	470		
RV201	1-241-552-11	RES, ADJ CERMET	470		
< SWITCH >					
S401	1-570-953-11	SWITCH, PUSH (1 KEY)			
S402	1-570-953-11	SWITCH, PUSH (1 KEY)			

MAIN

Ref. No.	Part No.	Description	Remark
*	A-3273-832-A	MAIN BOARD, COMPLETE (U660RDS;AEP) *****	
*	A-3273-833-A	MAIN BOARD, COMPLETE (U660RDS;G) *****	
*	A-3273-834-A	MAIN BOARD, COMPLETE (U661RDS) *****	
*	A-3273-835-A	MAIN BOARD, COMPLETE (U660) *****	
*	A-3273-883-A	MAIN BOARD, COMPLETE (U550) *****	
*	A-3295-076-A	MAIN BOARD, COMPLETE (U550RDS) *****	
*	A-3295-080-A	MAIN BOARD, COMPLETE (U551RDS) *****	
< CAPACITOR >			
C1	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (U660/U660RDS/U661RDS)
C2	1-126-161-11	ELECT	2.2uF 20% 35V
C3	1-124-589-11	ELECT	47uF 20% 16V
C4	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C5	1-126-157-11	ELECT	10uF 20% 16V
C6	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (U660/U660RDS/U661RDS)
C7	1-163-117-00	CERAMIC CHIP	100PF 5% 50V (U660/U660RDS/U661RDS)
C8	1-164-232-11	CERAMIC CHIP	0.01uF 50V (U660/U660RDS/U661RDS)
C9	1-130-475-00	MYLAR	0.0022uF 5% 50V (U660/U660RDS/U661RDS)
C10	1-163-117-00	CERAMIC CHIP	100PF 5% 50V (U660/U660RDS/U661RDS)
C11	1-163-017-00	CERAMIC CHIP	0.0047uF 5% 50V (U660/U660RDS/U661RDS)
C12	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V (U660/U660RDS/U661RDS)
C13	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (U660/U660RDS/U661RDS)
C14	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (U660/U660RDS/U661RDS)
C15	1-164-232-11	CERAMIC CHIP	0.01uF 50V (U660/U660RDS/U661RDS)
C16	1-126-157-11	ELECT	10uF 20% 16V (U660/U660RDS/U661RDS)
C17	1-163-017-00	CERAMIC CHIP	0.0047uF 5% 50V (U660/U660RDS/U661RDS)
C18	1-163-161-00	CERAMIC CHIP	15PF 5% 50V
C19	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
C20	1-126-154-11	ELECT	47uF 20% 6.3V
C21	1-163-097-00	CERAMIC CHIP	15PF 5% 50V
C22	1-130-479-00	MYLAR	0.0047uF 5% 50V

Ref. No.	Part No.	Description	Remark
C23	1-136-169-00	FILM	0.22uF 5% 50V
C24	1-124-584-00	ELECT	100uF 20% 10V
C25	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C26	1-124-464-11	ELECT	0.22uF 20% 50V
C27	1-126-301-11	ELECT	1uF 20% 50V
C28	1-126-301-11	ELECT	1uF 20% 50V
C29	1-163-022-00	CERAMIC CHIP	0.012uF 10% 50V
C30	1-163-022-00	CERAMIC CHIP	0.012uF 10% 50V
C31	1-130-479-00	MYLAR	0.0047uF 5% 50V
C32	1-163-001-11	CERAMIC CHIP	220PF 10% 50V
C33	1-130-473-00	MYLAR	0.0015uF 5% 50V
C34	1-163-157-00	FILM	0.022uF 5% 50V
C35	1-126-288-11	ELECT	4.7uF 20% 16V
C36	1-124-584-00	ELECT	100uF 20% 10V
C37	1-164-182-11	CERAMIC CHIP	0.0033uF 10% 50V
C38	1-126-153-11	ELECT	22uF 20% 6.3V
C39	1-163-002-11	CERAMIC CHIP	270PF 10% 50V (U550RDS/U551RDS/U660RDS/U661RDS)
C40	1-126-157-11	ELECT	10uF 20% 16V (U550RDS/U551RDS/U660RDS/U661RDS)
C41	1-164-232-11	CERAMIC CHIP	0.01uF 50V (U550RDS/U551RDS/U660RDS/U661RDS)
C42	1-163-237-11	CERAMIC CHIP	27PF 5% 50V (U550RDS/U551RDS/U660RDS/U661RDS)
C43	1-163-237-11	CERAMIC CHIP	27PF 5% 50V (U550RDS/U551RDS/U660RDS/U661RDS)
C45	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V (U550RDS/U551RDS/U660RDS/U661RDS)
C46	1-164-489-11	CERAMIC CHIP	0.22uF 10% 16V
C47	1-164-489-11	CERAMIC CHIP	0.22uF 10% 16V
C48	1-163-024-00	CERAMIC CHIP	0.018uF 10% 50V
C49	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V (U550RDS/U551RDS/U660RDS/U661RDS)
C50	1-163-257-11	CERAMIC CHIP	180PF 5% 50V
C51	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C53	1-161-379-00	CERAMIC	0.01uF 20% 25V (U550RDS/U660RDS)
C110	1-126-301-11	ELECT	1uF 20% 50V
C111	1-130-475-00	MYLAR	0.0022uF 5% 50V
C112	1-130-475-00	MYLAR	0.0022uF 5% 50V
C113	1-128-341-11	ELECT	0.56uF 20% 50V
C114	1-124-252-00	ELECT	0.33uF 20% 50V
C121	1-126-288-11	ELECT	4.7uF 20% 16V
C122	1-126-288-11	ELECT	4.7uF 20% 16V
C123	1-126-288-11	ELECT	4.7uF 20% 16V
C124	1-126-157-11	ELECT	10uF 20% 16V
C125	1-126-157-11	ELECT	10uF 20% 16V
C126	1-126-157-11	ELECT	10uF 20% 16V
C127	1-130-476-00	MYLAR	0.0027uF 5% 50V

MAIN

Ref. No.	Part No.	Description	Remark		
C128	1-136-162-00	FILM	0.056uF	5%	50V
C129	1-136-162-00	FILM	0.056uF	5%	50V
C130	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C131	1-126-157-11	ELECT	10uF	20%	16V
C132	1-126-159-11	ELECT	0.47uF	20%	50V
C133	1-130-476-00	MYLAR	0.0027uF	5%	50V
C134	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C135	1-126-288-11	ELECT	4.7uF	20%	16V
C136	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C137	1-126-288-11	ELECT	4.7uF	20%	16V
C138	1-124-584-00	ELECT	100uF	20%	10V
C139	1-126-288-11	ELECT	4.7uF	20%	16V
C210	1-126-301-11	ELECT	1uF	20%	50V
C211	1-130-475-00	MYLAR	0.0022uF	5%	50V
C212	1-130-475-00	MYLAR	0.0022uF	5%	50V
C213	1-128-341-11	ELECT	0.56uF	20%	50V
C214	1-124-252-00	ELECT	0.33uF	20%	50V
C221	1-126-288-11	ELECT	4.7uF	20%	16V
C222	1-126-288-11	ELECT	4.7uF	20%	16V
C223	1-126-288-11	ELECT	4.7uF	20%	16V
C224	1-126-157-11	ELECT	10uF	20%	16V
C225	1-126-157-11	ELECT	10uF	20%	16V
C226	1-126-157-11	ELECT	10uF	20%	16V
C227	1-130-476-00	MYLAR	0.0027uF	5%	50V
C228	1-136-162-00	FILM	0.056uF	5%	50V
C229	1-136-162-00	FILM	0.056uF	5%	50V
C230	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C231	1-126-157-11	ELECT	10uF	20%	16V
C232	1-126-159-11	ELECT	0.47uF	20%	50V
C233	1-130-476-00	MYLAR	0.0027uF	5%	50V
C234	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C235	1-126-288-11	ELECT	4.7uF	20%	16V
C236	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C237	1-126-288-11	ELECT	4.7uF	20%	16V
C238	1-124-584-00	ELECT	100uF	20%	10V
C239	1-126-288-11	ELECT	4.7uF	20%	16V
C310	1-124-584-00	ELECT	100uF	20%	10V
C311	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C312	1-126-157-11	ELECT	10uF	20%	16V
C313	1-126-157-11	ELECT	10uF	20%	16V
C321	1-126-301-11	ELECT	1uF	20%	50V
C324	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C325	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C326	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C431	1-126-103-11	ELECT	470uF	20%	16V
C432	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C433	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C501	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C502	1-163-227-11	CERAMIC CHIP	10PF	5%	50V

Ref. No.	Part No.	Description	Remark		
C504	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C505	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C507	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C508	1-162-638-11	CERAMIC CHIP	1uF		16V
C509	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C510	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C511	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C512	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C515	1-124-584-00	ELECT	100uF	20%	10V
C516	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C517	1-124-589-11	ELECT	47uF	20%	16V
C518	1-126-301-11	ELECT	1uF	20%	50V
C519	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C520	1-124-234-00	ELECT	22uF	20%	16V
C521	1-124-584-00	ELECT	100uF	20%	10V
C522	1-124-584-00	ELECT	100uF	20%	10V
C523	1-124-584-00	ELECT	100uF	20%	10V
C524	1-124-584-00	ELECT	100uF	20%	10V
C525	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C526	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C527	1-126-157-11	ELECT	10uF	20%	16V
C528	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C529	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C530	1-126-288-11	ELECT	4.7uF	20%	16V
C531	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C532	1-125-701-11	CAP, DOUBLE LAYER			0.047F
C533	1-124-584-00	ELECT	100uF	20%	10V
C534	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C535	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C536	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C537	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C539	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C540	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C541	1-163-010-11	CERAMIC CHIP	0.0012uF	10%	50V
C542	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C543	1-126-157-11	ELECT	10uF	20%	16V
C544	1-126-162-11	ELECT	3.3uF	20%	50V
C545	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C546	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C547	1-126-301-11	ELECT	1uF	20%	50V
C548	1-126-301-11	ELECT	1uF	20%	50V
C549	1-126-288-11	ELECT	4.7uF	20%	16V
C550	1-126-153-11	ELECT	22uF	20%	6.3V
C551	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C553	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V

MAIN

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
* CNP1	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P (U660/U660RDS/U661RDS)	
* CNP301	1-691-743-21	SOCKET, CONNECTOR 17P	
* CNP302	1-506-990-11	PIN, CONNECTOR (PC BOARD) 8P	
* CNP303	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P	
* CNP401	1-691-739-11	CONNECTOR, BOARD TO BOARD 14P	
* CNP501	1-691-744-11	SOCKET, CONNECTOR 18P	
CNP502	1-580-907-11	PLUG, CONNECTOR	
< TRIMMER >			
CT501	1-141-276-00	CAP, TRIMMER	
< DIODE >			
D1	8-719-971-18	DIODE 1SS318 (U660/U660RDS/U661RDS)	
D2	8-719-988-62	DIODE 1SS355 (U660/U660RDS/U661RDS)	
D3	8-719-977-25	DIODE DTZ9. 1C-TT11	
D4	8-719-977-28	DIODE DTZ10B	
D5	8-719-988-62	DIODE 1SS355	
D9	8-719-988-62	DIODE 1SS355	
D10	8-719-400-18	DIODE MA152WK	
D11	8-719-988-62	DIODE 1SS355	
D12	8-719-971-18	DIODE 1SS318 (U660/U660RDS/U661RDS)	
D13	8-719-988-62	DIODE 1SS355	
D321	8-719-800-76	DIODE 1SS226	
D322	8-719-976-85	DIODE DTZ3. 6B	
D323	8-719-988-62	DIODE 1SS355	
D431	8-719-988-62	DIODE 1SS355	
D432	8-719-988-62	DIODE 1SS355	
D433	8-719-400-18	DIODE MA152WK	
D434	8-719-977-25	DIODE DTZ9. 1C-TT11	
D435	8-719-988-62	DIODE 1SS355	
D501	8-719-988-62	DIODE 1SS355	
D502	8-719-988-62	DIODE 1SS355	
D503	8-719-400-18	DIODE MA152WK	
D504	8-719-988-62	DIODE 1SS355 (U550RDS/U551RDS/U660RDS/U661RDS)	
D505	8-719-988-62	DIODE 1SS355	
D506	8-719-988-62	DIODE 1SS355	
D507	8-719-988-62	DIODE 1SS355	
D508	8-719-400-18	DIODE MA152WK	
D509	8-719-977-07	DIODE DTZ6. 2B	
D510	8-719-977-07	DIODE DTZ6. 2B	
D511	8-719-988-62	DIODE 1SS355	
D512	8-719-977-07	DIODE DTZ6. 2B	
D513	8-719-977-07	DIODE DTZ6. 2B	
D514	8-719-978-20	DIODE DTZ5. 1A-TT11	
D515	8-719-104-34	DIODE 1S2836	

Ref. No.	Part No.	Description	Remark
D516	8-719-988-62	DIODE 1SS355	
D517	8-719-977-16	DIODE DTZ7. 5B	
D518	8-719-988-62	DIODE 1SS355	
D519	8-719-976-85	DIODE DTZ3. 6B	
D520	8-719-977-25	DIODE DTZ9. 1C-TT11	
D521	8-719-977-03	DIODE DTZ5. 6B	
D522	8-719-977-32	DIODE DTZ11B	
D523	8-719-988-62	DIODE 1SS355	
D524	8-719-977-16	DIODE DTZ7. 5B	
D525	8-719-988-62	DIODE 1SS355	
D526	8-719-977-25	DIODE DTZ9. 1C-TT11	
D527	8-719-977-07	DIODE DTZ6. 2B	
D528	8-719-977-16	DIODE DTZ7. 5B	
D529	8-719-400-18	DIODE MA152WK	
D530	8-719-400-18	DIODE MA152WK	
D531	8-719-988-62	DIODE 1SS355	
D532	8-719-988-62	DIODE 1SS355	
D533	8-719-988-62	DIODE 1SS355	
< TUNER UNIT >			
FE1	1-693-045-11	TUNER UNIT (FM/AM)	
< IC >			
IC1	8-759-823-70	IC LA1060 (U660/U660RDS/U661RDS)	
IC2	8-759-823-81	IC LC7216M-TP-T1	
IC3	1-808-515-11	IC NMX3S900	
IC4	8-759-057-53	IC TDA7330D-013TR (U550RDS/U551RDS/U660RDS/U661RDS)	
IC5	8-759-823-84	IC LC7071NM-TP-T1 (U550RDS/U551RDS/U660RDS/U661RDS)	
IC121	8-759-909-71	IC BA4558F	
IC122	8-759-909-71	IC BA4558F	
IC123	8-759-909-71	IC BA4558F	
IC221	8-759-909-71	IC BA4558F	
IC222	8-759-909-71	IC BA4558F	
IC223	8-759-909-71	IC BA4558F	
IC311	8-752-055-10	IC CXA1332M	
IC321	8-759-820-15	IC LC7537AN	
IC322	8-759-909-71	IC BA4558F	
IC431	8-759-823-87	IC LB1638MTP-T1	
IC501	8-759-066-25	IC uPD75116GF-F41-3BE	
IC502	8-759-066-24	IC uPD75116GF-F40-3BE	
IC503	8-759-513-42	IC X24C04SI-C7000 (U550/U660)	
IC503	8-759-513-44	IC X24C16SI (U550RDS/U551RDS/U660RDS/U661RDS)	
IC504	8-759-940-45	IC S-8054HN-CB	
IC505	8-759-710-82	IC NJM2406F	

MAIN

Ref. No.	Part No.	Description	Remark
< JUMPER RESISTOR >			
JR1	1-216-296-00	METAL GLAZE 0 5% 1/8W (U550/U550RDS/U551RDS)	
JR50	1-216-295-00	METAL CHIP 0 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)	
JR51	1-216-295-00	METAL CHIP 0 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)	
JR500	1-216-295-00	METAL CHIP 0 5% 1/10W (U550/U550RDS/U660RDS)	
JR501	1-216-295-00	METAL CHIP 0 5% 1/10W (EXCEPT U661RDS)	
JR502	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550/U660)	
JR503	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550)	
JR505	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550/U660)	
JR506	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR509	1-216-295-00	METAL GLAZE 0 5% 1/10W (U551RDS/U661RDS)	
JR510	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550/U660)	
JR511	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550/U660)	
JR512	1-216-295-00	METAL GLAZE 0 5% 1/10W (U550/U660)	
JR513	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR514	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR520	1-216-295-00	METAL CHIP 0 5% 1/10W	
< COIL >			
L1	1-410-201-51	INDUCTOR CHIP 5.6uH (U660/U660RDS/U661RDS)	
L2	1-410-208-41	INDUCTOR CHIP 22uH	
L3	1-410-216-31	INDUCTOR CHIP 100uH (U660/U660RDS/U661RDS)	
L4	1-410-204-31	INDUCTOR CHIP 10uH	
L5	1-410-204-31	INDUCTOR CHIP 10uH (U550RDS/U551RDS/U660RDS/U661RDS)	
L6	1-410-204-31	INDUCTOR CHIP 10uH	
L501	1-410-204-31	INDUCTOR CHIP 10uH	
L502	1-410-204-31	INDUCTOR CHIP 10uH	
< TRANSISTOR >			
Q2	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6 (U660/U660RDS/U661RDS)	
Q5	8-729-120-28	TRANSISTOR 2SC1623-L5L6 (U660/U660RDS/U661RDS)	
Q6	8-729-901-01	TRANSISTOR DTC114EK (U660/U660RDS/U661RDS)	
Q7	8-729-901-01	TRANSISTOR DTC114EK	
Q8	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q9	8-729-901-04	TRANSISTOR DTA114EK	
Q10	8-729-809-71	TRANSISTOR 2SK536-TA	

Ref. No.	Part No.	Description	Remark
Q11	8-729-920-21	TRANSISTOR DTC314TKH04	
Q12	8-729-901-01	TRANSISTOR DTC114EK (U660/U660RDS/U661RDS)	
Q121	8-729-920-21	TRANSISTOR DTC314TKH04	
Q123	8-729-920-21	TRANSISTOR DTC314TKH04	
Q221	8-729-920-21	TRANSISTOR DTC314TKH04	
Q223	8-729-920-21	TRANSISTOR DTC314TKH04	
Q311	8-729-920-56	TRANSISTOR FMG1	
Q322	8-729-920-41	TRANSISTOR FMC3	
Q431	8-729-106-60	TRANSISTOR 2SB1115A	
Q432	8-729-900-53	TRANSISTOR DTC114EK	
Q433	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q434	8-729-920-41	TRANSISTOR FMC3	
Q435	8-729-901-01	TRANSISTOR DTC114EK	
Q501	8-729-216-22	TRANSISTOR 2SA1162	
Q502	8-729-216-22	TRANSISTOR 2SA1162	
Q503	8-729-903-10	TRANSISTOR FMW1	
Q504	8-729-907-26	TRANSISTOR IMX1	
Q505	8-729-903-10	TRANSISTOR FMW1	
Q506	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q507	8-729-216-22	TRANSISTOR 2SA1162	
Q508	8-729-216-22	TRANSISTOR 2SA1162	
Q509	8-729-216-22	TRANSISTOR 2SA1162	
Q510	8-729-216-22	TRANSISTOR 2SA1162	
Q511	8-729-901-01	TRANSISTOR DTC114EK	
Q512	8-729-920-41	TRANSISTOR FMC3	
Q513	8-729-920-41	TRANSISTOR FMC3	
Q514	8-729-904-63	TRANSISTOR DTB123YK	
Q515	8-729-904-63	TRANSISTOR DTB123YK	
Q516	8-729-904-63	TRANSISTOR DTB123YK	
Q517	8-729-904-63	TRANSISTOR DTB123YK (U550RDS/U551RDS/U660RDS/U661RDS)	
Q518	8-729-106-68	TRANSISTOR 2SD1615A-GP	
Q519	8-729-903-10	TRANSISTOR FMW1	
Q520	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q521	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q522	8-729-922-47	TRANSISTOR 2SB1184-TRR	
Q523	8-729-922-47	TRANSISTOR 2SB1184-TRR	
Q524	8-729-920-28	TRANSISTOR FMG9	
Q525	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q526	8-729-106-60	TRANSISTOR 2SB1115A	
Q527	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q528	8-729-922-65	TRANSISTOR 2SD1760F5-Q	
Q530	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q531	8-729-106-60	TRANSISTOR 2SB1115A	
Q532	8-729-900-53	TRANSISTOR DTC114EK	
Q533	8-729-900-53	TRANSISTOR DTC114EK	

MAIN

Ref. No.	Part No.	Description	Remark
< RESISTOR >			
R1	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R2	1-216-073-00	METAL CHIP	10K 5% 1/10W (U660/U660RDS/U661RDS)
R3	1-216-089-00	METAL CHIP	47K 5% 1/10W (U660/U660RDS/U661RDS)
R4	1-216-097-00	METAL CHIP	100K 5% 1/10W (U660/U660RDS/U661RDS)
R5	1-216-097-00	METAL CHIP	100K 5% 1/10W (U660/U660RDS/U661RDS)
R6	1-216-097-00	METAL CHIP	100K 5% 1/10W (U660/U660RDS/U661RDS)
R7	1-216-095-00	METAL CHIP	82K 5% 1/10W (U660/U660RDS/U661RDS)
R8	1-216-049-00	METAL CHIP	1K 5% 1/10W (U660/U660RDS/U661RDS)
R9	1-216-748-11	METAL CHIP	39K 1% 1/10W (U660/U660RDS/U661RDS)
R10	1-216-067-00	METAL CHIP	5.6K 5% 1/10W (U660/U660RDS/U661RDS)
R11	1-216-097-00	METAL CHIP	100K 5% 1/10W (U660/U660RDS/U661RDS)
R12	1-216-089-00	METAL CHIP	47K 5% 1/10W (U660/U660RDS/U661RDS)
R13	1-216-113-00	METAL CHIP	470K 5% 1/10W (U660/U660RDS/U661RDS)
R14	1-216-065-00	METAL CHIP	4.7K 5% 1/10W (U660/U660RDS/U661RDS)
R15	1-216-065-00	METAL CHIP	4.7K 5% 1/10W (U660/U660RDS/U661RDS)
R16	1-216-057-00	METAL CHIP	2.2K 5% 1/10W (U660/U660RDS/U661RDS)
R17	1-216-073-00	METAL CHIP	10K 5% 1/10W
R19	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R20	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R21	1-216-073-00	METAL CHIP	10K 5% 1/10W
R22	1-216-198-00	METAL CHIP	1K 5% 1/8W
R23	1-216-190-00	METAL GLAZE	470 5% 1/8W
R24	1-216-045-00	METAL CHIP	680 5% 1/10W
R25	1-216-198-00	METAL CHIP	1K 5% 1/8W
R26	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R27	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R28	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R29	1-216-045-00	METAL CHIP	680 5% 1/10W
R30	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R31	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R33	1-216-049-00	METAL CHIP	1K 5% 1/10W
R35	1-216-049-00	METAL CHIP	1K 5% 1/10W
R38	1-216-077-00	METAL CHIP	15K 5% 1/10W

Ref. No.	Part No.	Description	Remark
R39	1-216-295-00	METAL CHIP	0 5% 1/10W
R40	1-216-089-00	METAL CHIP	47K 5% 1/10W
R41	1-216-067-00	METAL CHIP	5.6K 5% 1/10W
R43	1-216-129-00	METAL CHIP	2.2M 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)
R44	1-216-097-00	METAL CHIP	100K 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)
R45	1-216-097-00	METAL GLAZE	100K 5% 1/10W (U550/U660)
R47	1-216-073-00	METAL CHIP	10K 5% 1/10W (U660/U660RDS/U661RDS)
R48	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R49	1-216-077-00	METAL CHIP	15K 5% 1/10W
R50	1-216-073-00	METAL CHIP	10K 5% 1/10W
R51	1-216-057-00	METAL CHIP	2.2K 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)
R110	1-216-687-11	METAL CHIP	33K 0.5% 1/10W
R111	1-216-684-11	METAL CHIP	24K 0.5% 1/10W
R112	1-216-645-11	METAL CHIP	560 0.5% 1/10W
R120	1-216-085-00	METAL CHIP	33K 5% 1/10W
R121	1-216-077-00	METAL CHIP	15K 5% 1/10W
R122	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W (U660RDS;G)
R122	1-216-065-00	METAL CHIP	4.7K 5% 1/10W (EXCEPT U550, U660RDS;G)
R122	1-216-073-00	METAL GLAZE	10K 5% 1/10W (U550)
R123	1-216-077-00	METAL CHIP	15K 5% 1/10W
R124	1-216-081-00	METAL CHIP	22K 5% 1/10W
R125	1-216-121-00	METAL CHIP	1M 5% 1/10W
R126	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R127	1-216-077-00	METAL CHIP	15K 5% 1/10W
R128	1-216-121-00	METAL CHIP	1M 5% 1/10W
R129	1-216-073-00	METAL CHIP	10K 5% 1/10W
R130	1-216-121-00	METAL CHIP	1M 5% 1/10W
R131	1-216-077-00	METAL CHIP	15K 5% 1/10W
R132	1-216-081-00	METAL CHIP	22K 5% 1/10W
R133	1-216-075-00	METAL CHIP	12K 5% 1/10W (EXCEPT U550)
R133	1-216-077-00	METAL GLAZE	15K 5% 1/10W (U550)
R135	1-216-077-00	METAL CHIP	15K 5% 1/10W
R136	1-216-081-00	METAL CHIP	22K 5% 1/10W
R139	1-216-049-00	METAL CHIP	1K 5% 1/10W
R140	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R141	1-216-047-00	METAL CHIP	820 5% 1/10W
R142	1-216-097-00	METAL CHIP	100K 5% 1/10W
R210	1-216-687-11	METAL CHIP	33K 0.5% 1/10W
R211	1-216-684-11	METAL CHIP	24K 0.5% 1/10W
R212	1-216-645-11	METAL CHIP	560 0.5% 1/10W
R220	1-216-085-00	METAL CHIP	33K 5% 1/10W
R221	1-216-077-00	METAL CHIP	15K 5% 1/10W
R222	1-216-065-00	METAL CHIP	4.7K 5% 1/10W (EXCEPT U550, U660RDS;G)

MAIN

Ref. No.	Part No.	Description	Remark
R222	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W (U660RDS;G)
R222	1-216-073-00	METAL GLAZE	10K 5% 1/10W (U550)
R223	1-216-077-00	METAL CHIP	15K 5% 1/10W
R224	1-216-081-00	METAL CHIP	22K 5% 1/10W
R225	1-216-121-00	METAL CHIP	1M 5% 1/10W
R226	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R227	1-216-077-00	METAL CHIP	15K 5% 1/10W
R228	1-216-121-00	METAL CHIP	1M 5% 1/10W
R229	1-216-073-00	METAL CHIP	10K 5% 1/10W
R230	1-216-121-00	METAL CHIP	1M 5% 1/10W
R231	1-216-077-00	METAL CHIP	15K 5% 1/10W
R232	1-216-081-00	METAL CHIP	22K 5% 1/10W
R233	1-216-075-00	METAL CHIP	12K 5% 1/10W (EXCEPT U550)
R233	1-216-077-00	METAL GLAZE	15K 5% 1/10W (U550)
R235	1-216-077-00	METAL CHIP	15K 5% 1/10W
R236	1-216-081-00	METAL CHIP	22K 5% 1/10W
R239	1-216-049-00	METAL CHIP	1K 5% 1/10W
R240	1-216-051-00	METAL CHIP	1.2K 5% 1/10W
R241	1-216-047-00	METAL CHIP	820 5% 1/10W
R242	1-216-097-00	METAL CHIP	100K 5% 1/10W
R310	1-216-049-00	METAL CHIP	1K 5% 1/10W
R311	1-216-685-11	METAL CHIP	27K 0.5% 1/10W
R312	1-216-073-00	METAL CHIP	10K 5% 1/10W
R313	1-216-073-00	METAL CHIP	10K 5% 1/10W
R314	1-216-073-00	METAL CHIP	10K 5% 1/10W
R321	1-216-073-00	METAL CHIP	10K 5% 1/10W
R322	1-216-049-00	METAL CHIP	1K 5% 1/10W
R323	1-216-049-00	METAL CHIP	1K 5% 1/10W
R431	1-216-073-00	METAL CHIP	10K 5% 1/10W
R432	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R433	1-220-149-11	METAL GLAZE	2.2 10% 1/2W
R434	1-216-049-00	METAL CHIP	1K 5% 1/10W
R435	1-216-186-00	METAL GLAZE	330 5% 1/8W
R436	1-216-186-00	METAL GLAZE	330 5% 1/8W
R501	1-216-097-00	METAL CHIP	100K 5% 1/10W
R502	1-216-097-00	METAL CHIP	100K 5% 1/10W
R503	1-216-097-00	METAL CHIP	100K 5% 1/10W
R504	1-216-097-00	METAL CHIP	100K 5% 1/10W
R505	1-216-089-00	METAL CHIP	47K 5% 1/10W
R506	1-216-097-00	METAL CHIP	100K 5% 1/10W
R507	1-216-097-00	METAL CHIP	100K 5% 1/10W
R508	1-216-097-00	METAL CHIP	100K 5% 1/10W
R509	1-216-097-00	METAL CHIP	100K 5% 1/10W
R510	1-216-097-00	METAL CHIP	100K 5% 1/10W
R511	1-216-097-00	METAL CHIP	100K 5% 1/10W
R512	1-216-097-00	METAL CHIP	100K 5% 1/10W
R513	1-216-097-00	METAL CHIP	100K 5% 1/10W
R515	1-216-097-00	METAL CHIP	100K 5% 1/10W
R516	1-216-081-00	METAL CHIP	22K 5% 1/10W

Ref. No.	Part No.	Description	Remark
R519	1-216-025-00	METAL CHIP	100 5% 1/10W
R520	1-216-089-00	METAL CHIP	47K 5% 1/10W
R521	1-216-089-00	METAL CHIP	47K 5% 1/10W
R522	1-216-089-00	METAL CHIP	47K 5% 1/10W
R523	1-216-025-00	METAL CHIP	100 5% 1/10W
R524	1-216-089-00	METAL CHIP	47K 5% 1/10W
R525	1-216-089-00	METAL CHIP	47K 5% 1/10W
R526	1-216-025-00	METAL CHIP	100 5% 1/10W
R527	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R528	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R529	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R530	1-216-081-00	METAL CHIP	22K 5% 1/10W
R531	1-216-073-00	METAL CHIP	10K 5% 1/10W
R532	1-216-081-00	METAL CHIP	22K 5% 1/10W
R533	1-216-073-00	METAL CHIP	10K 5% 1/10W
R534	1-216-089-00	METAL CHIP	47K 5% 1/10W
R535	1-216-049-00	METAL CHIP	1K 5% 1/10W
R536	1-216-049-00	METAL CHIP	1K 5% 1/10W
R537	1-216-081-00	METAL CHIP	22K 5% 1/10W
R538	1-216-063-00	METAL CHIP	3.9K 5% 1/10W
R539	1-216-025-00	METAL CHIP	100 5% 1/10W
R540	1-216-089-00	METAL CHIP	47K 5% 1/10W
R541	1-216-089-00	METAL CHIP	47K 5% 1/10W
R542	1-216-049-00	METAL CHIP	1K 5% 1/10W
R543	1-216-037-00	METAL CHIP	330 5% 1/10W
R544	1-216-089-00	METAL CHIP	47K 5% 1/10W
R545	1-216-089-00	METAL CHIP	47K 5% 1/10W
R546	1-216-097-00	METAL CHIP	100K 5% 1/10W
R547	1-216-085-00	METAL CHIP	33K 5% 1/10W
R548	1-216-089-00	METAL CHIP	47K 5% 1/10W
R549	1-216-089-00	METAL CHIP	47K 5% 1/10W
R550	1-216-089-00	METAL CHIP	47K 5% 1/10W
R551	1-216-089-00	METAL CHIP	47K 5% 1/10W
R552	1-216-089-00	METAL CHIP	47K 5% 1/10W
R553	1-216-017-00	METAL CHIP	47 5% 1/10W
R554	1-216-073-00	METAL CHIP	10K 5% 1/10W
R555	1-216-089-00	METAL CHIP	47K 5% 1/10W
R556	1-216-091-00	METAL CHIP	56K 5% 1/10W
R557	1-216-089-00	METAL CHIP	47K 5% 1/10W
R558	1-216-097-00	METAL CHIP	100K 5% 1/10W
R559	1-216-097-00	METAL CHIP	100K 5% 1/10W
R560	1-216-049-00	METAL CHIP	1K 5% 1/10W
R561	1-220-150-11	METAL GLAZE	680 10% 1/2W
R562	1-216-081-00	METAL CHIP	22K 5% 1/10W
R563	1-220-150-11	METAL GLAZE	680 10% 1/2W
R564	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R565	1-216-041-00	METAL CHIP	470 5% 1/10W
R566	1-216-073-00	METAL CHIP	10K 5% 1/10W
R567	1-216-049-00	METAL CHIP	1K 5% 1/10W

MAIN **PL** **REEL** **RESET**

Ref. No.	Part No.	Description	Remark
R568	1-216-073-00	METAL CHIP	10K 5% 1/10W
R569	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R570	1-216-089-00	METAL CHIP	47K 5% 1/10W
R571	1-216-089-00	METAL CHIP	47K 5% 1/10W
R572	1-216-083-00	METAL CHIP	27K 5% 1/10W
R573	1-216-097-00	METAL CHIP	100K 5% 1/10W
R574	1-216-089-00	METAL CHIP	47K 5% 1/10W
R575	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R576	1-216-041-00	METAL CHIP	470 5% 1/10W
R577	1-216-041-00	METAL CHIP	470 5% 1/10W
R578	1-216-097-00	METAL GLAZE	100K 5% 1/10W (U551RDS/U660/U661RDS)
R579	1-216-097-00	METAL GLAZE	100K 5% 1/10W (U551RDS/U661RDS)
R580	1-216-097-00	METAL CHIP	100K 5% 1/10W (U550RDS/U551RDS/U660RDS/U661RDS)
R581	1-216-097-00	METAL CHIP	100K 5% 1/10W (EXCEPT U550)
R582	1-216-097-00	METAL CHIP	100K 5% 1/10W
R583	1-216-073-00	METAL CHIP	10K 5% 1/10W
R584	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
R585	1-216-073-00	METAL CHIP	10K 5% 1/10W
R586	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R588	1-216-065-00	METAL CHIP	4.7K 5% 1/10W
R589	1-216-089-00	METAL CHIP	47K 5% 1/10W
R590	1-216-089-00	METAL CHIP	47K 5% 1/10W
R591	1-216-097-00	METAL CHIP	100K 5% 1/10W
R592	1-216-097-00	METAL CHIP	100K 5% 1/10W
R593	1-216-073-00	METAL CHIP	10K 5% 1/10W
R594	1-216-295-00	METAL CHIP	0 5% 1/10W
R595	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R596	1-216-089-00	METAL CHIP	47K 5% 1/10W
R597	1-216-049-00	METAL CHIP	1K 5% 1/10W
R598	1-216-073-00	METAL CHIP	10K 5% 1/10W
R599	1-216-097-00	METAL CHIP	100K 5% 1/10W
R600	1-216-097-00	METAL CHIP	100K 5% 1/10W
R602	1-216-099-00	METAL CHIP	120K 5% 1/10W
		< VARIABLE RESISTOR >	
RV2	1-238-600-11	RES, ADJ, CARBON 10K	
RV3	1-238-603-11	RES, ADJ, CARBON 100K	
RV4	1-238-604-11	RES, ADJ, CARBON 220K	
		< SWITCH >	
S1	1-572-272-11	SWITCH, SLIDE (U660/U660RDS/U661RDS)	
S501	1-572-272-11	SWITCH, SLIDE	
S502	1-572-272-11	SWITCH, SLIDE (9K/10K) (U660)	
		< BUZZER >	
SP501	1-529-108-21	BUZZER, PIEZOELECTRIC	

Ref. No.	Part No.	Description	Remark
		< VIBRATOR >	
X1	1-567-848-11	VIBRATOR, CRYSTAL (7.2MHz)	
X2	1-567-250-11	OSCILLATOR, CERAMIC	
X3	1-579-242-11	VIBRATOR, CRYSTAL (4.332MHz)	
X4	1-567-819-11	VIBRATOR, CERAMIC (4MHz)	(U550RDS/U551RDS/U660RDS/U661RDS)
X501	1-567-821-11	VIBRATOR, CRYSTAL (4.19MHz)	
X502	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz)	

*	1-642-880-11	PL BOARD	*****

*	1-642-879-11	REEL BOARD	*****
		< CONNECTOR >	
CNP413	1-691-742-21	PIN, CONNECTOR (PC BOARD) 4P	
		< DIODE >	
PH411	8-719-988-14	DIODE PR-11-B	
PH412	8-719-988-14	DIODE PR-11-B	
		< TRANSISTOR >	
Q411	8-729-904-07	TRANSISTOR FMG2	
		< RESISTOR >	
R411	1-216-845-11	METAL CHIP	100K 5% 1/16W
R412	1-216-845-11	METAL CHIP	100K 5% 1/16W
R413	1-216-190-00	METAL GLAZE	470 5% 1/8W

*	1-642-927-11	RESET BOARD	*****
*	1-691-740-11	CONNECTOR, BOARD TO BOARD 14P	
		< CONNECTOR >	
* CNP510	1-691-558-11	SOCKET, CONNECTOR 12P	
		< SWITCH >	
S503	1-572-474-11	SWITCH, TACTIL	

SWITCH

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	1-692-037-11	SWITCH, KEY BOARD *****		D735	8-719-987-45	DIODE CL-155Y/PG-CD	
*	3-377-581-01	PLATE (LCD), LIGHT GUIDE		D736	8-719-987-45	DIODE CL-155Y/PG-CD	
*	3-377-597-01	SHEET (REFLECTOR)		D737	8-719-987-45	DIODE CL-155Y/PG-CD	
		< CAPACITOR >		D738	8-719-987-45	DIODE CL-155Y/PG-CD	
C701	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V	D739	8-719-987-45	DIODE CL-155Y/PG-CD	
C702	1-162-995-11	CERAMIC CHIP 0.022uF	50V	D740	8-719-987-45	DIODE CL-155Y/PG-CD	
C703	1-164-378-11	CERAMIC CHIP 30PF	5% 50V	D741	8-719-987-45	DIODE CL-155Y/PG-CD	
C704	1-164-378-11	CERAMIC CHIP 30PF	5% 50V	D742	8-719-987-45	DIODE CL-155Y/PG-CD	
C705	1-164-232-11	CERAMIC CHIP 0.01uF	50V	D743	8-719-987-45	DIODE CL-155Y/PG-CD	
C706	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V	D744	8-719-987-45	DIODE CL-155Y/PG-CD	
C707	1-135-149-21	TANTALUM CHIP 2.2uF	20% 10V	D745	8-719-987-45	DIODE CL-155Y/PG-CD	
C721	1-164-222-11	CERAMIC CHIP 0.22uF	25V	D746	8-719-987-45	DIODE CL-155Y/PG-CD	
C722	1-164-232-11	CERAMIC CHIP 0.01uF	50V	D747	8-719-987-45	DIODE CL-155Y/PG-CD	
C750	1-164-156-11	CERAMIC CHIP 0.1uF	25V	D750	8-719-422-43	DIODE MA8051-H-TX	
		< CONNECTOR >				< IC >	
CNP700	1-691-557-11	PIN, CONNECTOR 12P		IC701	8-759-066-23	IC uPD75008GB-676-3B4	
		< DIODE >		IC702	8-759-066-23	IC uPD75008GB-676-3B4	
D700	8-719-404-46	DIODE MA110-TX		IC721	8-759-246-16	IC TC9240F	
D701	8-719-404-46	DIODE MA110-TX		IC750	8-759-515-60	IC RS-20	
D702	8-719-404-46	DIODE MA110-TX				< JUMPER RESISTOR >	
D703	8-719-404-46	DIODE MA110-TX		JR701	1-216-295-00	METAL CHIP 0 5% 1/10W	
D704	8-719-404-46	DIODE MA110-TX		JR702	1-216-295-00	METAL CHIP 0 5% 1/10W	
		< DIODE >		JR703	1-216-295-00	METAL CHIP 0 5% 1/10W	
D705	8-719-404-46	DIODE MA110-TX				< COIL >	
D706	8-719-404-46	DIODE MA110-TX		L701	1-410-204-31	INDUCTOR CHIP 10uH	
D708	8-719-404-35	DIODE MA141WK				< DISPLAY PANEL >	
D711	8-719-422-58	DIODE MA8062-TX		LCD701	1-809-595-11	DISPLAY PANEL, LIQUID CRYSTAL	
D712	8-719-422-58	DIODE MA8062-TX				< PILOT LAMP >	
D713	8-719-422-58	DIODE MA8062-TX		PL721	1-518-646-11	LAMP, PILOT	
D714	8-719-422-58	DIODE MA8062-TX		PL722	1-518-646-11	LAMP, PILOT	
D720	8-719-404-46	DIODE MA110-TX		PL723	1-518-648-11	LAMP, PILOT	
D721	8-719-422-43	DIODE MA8051-H-TX		PL724	1-518-648-11	LAMP, PILOT	
D722	8-719-987-45	DIODE CL-155Y/PG-CD				< TRANSISTOR >	
D723	8-719-987-45	DIODE CL-155Y/PG-CD		Q701	8-729-402-13	TRANSISTOR XN1501-TX	
D724	8-719-987-45	DIODE CL-155Y/PG-CD		Q702	8-729-810-13	TRANSISTOR 2SA1677	
D725	8-719-987-45	DIODE CL-155Y/PG-CD		Q721	8-729-429-92	TRANSISTOR XN1211	
D726	8-719-987-45	DIODE CL-155Y/PG-CD		Q722	8-729-904-63	TRANSISTOR DTB123YK	
D727	8-719-987-45	DIODE CL-155Y/PG-CD		Q723	8-729-904-63	TRANSISTOR DTB123YK	
D728	8-719-987-45	DIODE CL-155Y/PG-CD		Q725	8-729-904-66	TRANSISTOR DTD113EK	
D729	8-719-987-45	DIODE CL-155Y/PG-CD		Q726	8-729-904-66	TRANSISTOR DTD113EK	
D730	8-719-987-45	DIODE CL-155Y/PG-CD		Q727	8-729-904-66	TRANSISTOR DTD113EK	
D731	8-719-987-45	DIODE CL-155Y/PG-CD		Q728	8-729-904-66	TRANSISTOR DTD113EK	
D732	8-719-987-45	DIODE CL-155Y/PG-CD					
D733	8-719-987-45	DIODE CL-155Y/PG-CD					
D734	8-719-987-45	DIODE CL-155Y/PG-CD					

SWITCH

Ref. No.	Part No.	Description	Remark
< RESISTOR >			
R701	1-216-089-00	METAL CHIP 47K 5%	1/10W
R702	1-216-089-00	METAL CHIP 47K 5%	1/10W
R703	1-216-081-00	METAL CHIP 22K 5%	1/10W
R704	1-216-073-00	METAL CHIP 10K 5%	1/10W
R705	1-216-105-00	METAL CHIP 220K 5%	1/10W
R706	1-216-105-00	METAL CHIP 220K 5%	1/10W
R707	1-216-081-00	METAL CHIP 22K 5%	1/10W
R708	1-216-063-00	METAL CHIP 3.9K 5%	1/10W
R709	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R710	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R711	1-216-073-00	METAL CHIP 10K 5%	1/10W
R712	1-216-089-00	METAL CHIP 47K 5%	1/10W
R713	1-216-089-00	METAL CHIP 47K 5%	1/10W
R720	1-216-049-00	METAL CHIP 1K 5%	1/10W
R721	1-216-041-00	METAL CHIP 470 5%	1/10W
R722	1-216-097-00	METAL CHIP 100K 5%	1/10W
R723	1-216-089-00	METAL CHIP 47K 5%	1/10W
R724	1-216-049-00	METAL CHIP 1K 5%	1/10W
R725	1-216-049-00	METAL CHIP 1K 5%	1/10W
R726	1-216-049-00	METAL CHIP 1K 5%	1/10W
R727	1-216-035-00	METAL CHIP 270 5%	1/10W
R728	1-216-034-00	METAL CHIP 240 5%	1/10W
R729	1-216-035-00	METAL CHIP 270 5%	1/10W
R730	1-216-034-00	METAL CHIP 240 5%	1/10W
R731	1-216-033-00	METAL CHIP 220 5%	1/10W
R732	1-216-032-00	METAL CHIP 200 5%	1/10W
R733	1-216-033-00	METAL CHIP 220 5%	1/10W
R734	1-216-032-00	METAL CHIP 200 5%	1/10W
R735	1-216-033-00	METAL CHIP 220 5%	1/10W
R736	1-216-032-00	METAL CHIP 200 5%	1/10W
R737	1-216-027-00	METAL CHIP 120 5%	1/10W
R738	1-216-023-00	METAL CHIP 82 5%	1/10W
R739	1-216-027-00	METAL CHIP 120 5%	1/10W
R740	1-216-023-00	METAL CHIP 82 5%	1/10W
R741	1-216-033-00	METAL CHIP 220 5%	1/10W
R742	1-216-032-00	METAL CHIP 200 5%	1/10W
R750	1-216-025-00	METAL CHIP 100 5%	1/10W
R751	1-216-041-00	METAL CHIP 470 5%	1/10W
< SWITCH >			
S700	1-692-037-41	SWITCH, KEY BOARD (SEL)	
S701	1-692-037-41	SWITCH, KEY BOARD (-)	
S710	1-692-037-41	SWITCH, KEY BOARD (MUTE)	
S712	1-692-037-41	SWITCH, KEY BOARD (1/INTRO)	
S713	1-692-037-41	SWITCH, KEY BOARD (2/REPEAT)	
S720	1-692-037-41	SWITCH, KEY BOARD (+)	
S721	1-692-037-41	SWITCH, KEY BOARD (SEEK -/AMS ◀)	

Ref. No.	Part No.	Description	Remark
S730	1-692-037-41	SWITCH, KEY BOARD (SENS/LOUD)	
S731	1-692-037-41	SWITCH, KEY BOARD (SEEK +/AMS ▶)	
S732	1-692-037-41	SWITCH, KEY BOARD (3/BANK)	
S733	1-692-037-41	SWITCH, KEY BOARD (4/SHUF)	
S740	1-692-037-41	SWITCH, KEY BOARD (OFF)	
S741	1-692-037-41	SWITCH, KEY BOARD (DSPL)	
S742	1-692-037-41	SWITCH, KEY BOARD (8/MTL)	
S743	1-692-037-41	SWITCH, KEY BOARD (☰)	
S750	1-692-037-41	SWITCH, KEY BOARD (PRESET +/DISC FF)	
S751	1-692-037-41	SWITCH, KEY BOARD (PRESET -/DISC REW)	
S752	1-692-037-41	SWITCH, KEY BOARD (6/BL. SKIP)	
S753	1-692-037-41	SWITCH, KEY BOARD (5/ATA)	
S760	1-692-037-41	SWITCH, KEY BOARD (LIST)	
S761	1-692-037-41	SWITCH, KEY BOARD (10)	
S762	1-692-037-41	SWITCH, KEY BOARD (7/DOLBY)	
S763	1-692-037-41	SWITCH, KEY BOARD (9)	
S770	1-692-037-41	SWITCH, KEY BOARD (TAPE)	
S771	1-692-037-41	SWITCH, KEY BOARD (CD)	
S772	1-692-037-41	SWITCH, KEY BOARD (FM) (U550/U660)	
S772	1-692-037-41	SWITCH, KEY BOARD (AF/TA) (U550RDS/U551RDS U660RDS/U661RDS)	
S773	1-692-037-41	SWITCH, KEY BOARD (AM) (U550/U660)	
S773	1-692-037-41	SWITCH, KEY BOARD (FM/AM) (U550RDS/U660RDS)	
S773	1-692-037-41	SWITCH, KEY BOARD (FM/MW/LW) (U551RDS/U661RDS)	
< VIBRATOR >			
X701	1-577-273-11	OSCILLATOR, CERAMIC (4.19MHz)	

MISCELLANEOUS			

6	1-574-339-11	CORD (WITH CONNECTOR) (U550/U550RDS/U551RDS)	
6	1-690-212-21	CORD (WITH CONNECTOR) (ANT)	
6	1-690-944-11	CORD (WITH CONNECTOR) (ANT)	
111	1-635-519-12	PC BOARD, FLEXIBLE	
* 118	1-565-121-11	HOUSING, CONNECTOR 2P	
* 210	1-563-470-11	HOUSING, CONNECTOR 2P	
* CNJ303	1-563-470-11	HOUSING, CONNECTOR 2P	
△F1	1-532-678-11	FUSE 12A	
△F2	1-532-414-11	FUSE 1A	
HP901	1-543-726-21	HEAD, MAGNETIC (PLAYBACK) (MG-55N-31)	
HP901	1-543-800-21	HEAD, MAGNETIC (PLAYBACK) (MG-55N2-31)	
M901	X-3344-136-3	MOTOR SUB ASSY, CAPSTAN	
M902	X-3362-826-1	GEAR ASSY, MOTOR	
PM901	1-454-461-11	SOLENOID, PLUNGER	
S901	1-570-771-11	SWITCH	

Note:
The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Note:
Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SWITCH

Ref. No.	Part No.	Description	Remark
S902	1-572-397-11	SWITCH, ROTARY SLIDE	

		ACCESSORIES & PACKING MATERIALS	

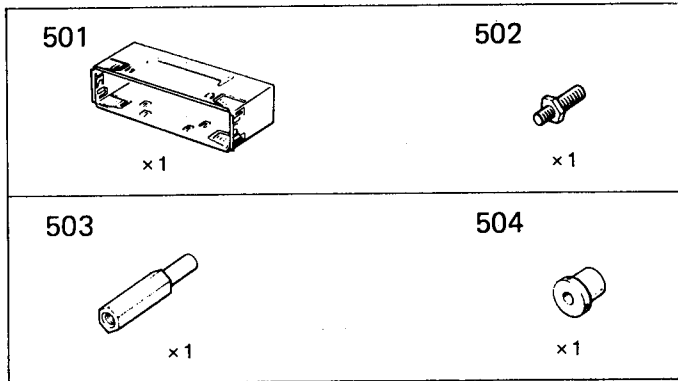
	X-3364-955-1	FRAME ASSY, FITING	
	X-3365-133-1	CASE ASSY	
	1-690-741-11	CORD (WITH CONNECTOR) (U550)	
	1-690-742-11	CORD (WITH CONNECTOR) (EXCEPT U550)	
	3-323-209-01	BOLT (4-5), STUD	
	3-323-210-01	ADJUSTOR, STUD BOLT	
	3-323-219-01	FRAME, FITTING (U660RDS;AEP)	
	3-336-617-01	BAG, PROTECTION	
	3-349-410-01	BUSHING	
*	3-355-207-01	CARDBOARD (E)	
	3-374-201-01	CASE	
	3-377-579-01	CATCHER, RAY, FILTER (U550;US/U660/ U660RDS;AEP/U661RDS)	
	3-377-579-11	CATCHER, RAY, FILTER (U550RDS/U551RDS)	
*	3-378-267-01	INDIVIDUAL CARTON (U660RDS)	
	3-378-552-01	FRAME (UPPER), FITTING (EXCEPT U550; CND/U660RDS)	
	3-378-553-01	FRAME (LOWER), FITTING (EXCEPT U550; CND/U660RDS)	
*	3-378-977-01	INDIVIDUAL CARTON (U550)	
*	3-378-974-01	INDIVIDUAL CARTON (U660)	
*	3-378-269-01	INDIVIDUAL CARTON (U661RDS)	
*	3-378-737-01	CUSHION (UPPER)	
*	3-378-738-01	CUSHION (LOWER)	
	3-378-976-01	PANEL (DISPLAY)	
	3-379-363-01	KEY	
	3-379-855-01	CUSHION (M)	
*	3-381-283-01	INDIVIDUAL CARTON (U550RDS)	
*	3-381-285-01	INDIVIDUAL CARTON (U551RDS)	
	3-754-823-11	MANUAL, INSTRUCTION (U550RDS/U551RDS) (ENGLISH, FRENCH, GERMAN, ITALIAN, DUTCH)	
	3-754-823-21	MANUAL, INSTRUCTION (U550) (ENGLISH, FRENCH)	
	3-754-823-41	MANUAL, INSTRUCTION (U550RDS) (SPANISH, SWEDISH, PORTUGUESE)	
	3-754-824-01	MANUAL, INSTRUCTION INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN, DUTCH) (U550RDS/U551RDS)	
	3-754-824-21	MANUAL, INSTRUCTION INSTALL (U550) (ENGLISH, FRENCH)	
	3-754-824-41	MANUAL, INSTRUCTION INSTALL (U550RDS) (SPANISH, SWEDISH, PORTUGUESE)	
	3-754-861-11	MANUAL, INSTRUCTION INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN, DUTCH) (U660RDS/U661RDS)	

Ref. No.	Part No.	Description	Remark
	3-754-861-41	MANUAL, INSTRUCTION INSTALL (U660RDS;AEP) (SPANISH, SWEDISH, PORTUGUESE)	
	3-754-861-51	MANUAL, INSTRUCTION INSTALL (U660) (ENGLISH, SPANISH, CHINESE)	
	3-754-863-11	MANUAL, INSTRUCTION (U660RDS/U661RDS) (ENGLISH, FRENCH, GERMAN, ITALIAN, DUTCH)	
	3-754-863-41	MANUAL, INSTRUCTION (U660RDS;AEP) (SPANISH, SWEDISH, PORTUGUESE)	
	3-754-863-51	MANUAL, INSTRUCTION (U660) (ENGLISH, SPANISH, CHINESE)	
	7-633-110-41	TAPE (50MMX500M)	

HARDWARE LIST

#1	7-621-255-25	SCREW +P 2X4
#2	7-621-772-10	SCREW +B 2X4
#3	7-624-101-01	STOP RING 1.2 (E TYPE)
#4	7-627-853-57	PRECISION SCREW +P 2X5 TYPE3
#5	7-685-132-19	SCREW +P 2.6X5 TYPE2 NON-SLIT
#6	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT
#7	7-621-773-95	SCREW +PTT 2.6X6 (S)
#8	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT
#9	7-685-105-19	SCREW +P 2X8 TYPE2 NON-SLIT
#10	7-621-770-67	SCREW(+PTT 2.6X8), GROUND POINT
#12	7-624-104-04	STOP RING 2.0, TYPE -E
#13	7-627-554-07	SCREW, PRECISION +P 2X2.2
#14	7-627-850-18	SCREW, PRECISION +P 1.4X2.5
#15	7-627-850-67	SCREW, PRECISION +P 1.4X4
#16	7-628-253-00	SCREW +PS 2X4
#17	7-624-102-04	STOP RING 1.5, TYPE -E
#18	7-621-255-65	SCREW +P 2X10

• MOUNTING HARDWARE



Ref. No.	Part No.	Description	Remark
501	X-3365-133-1	CASE ASSY	
502	3-323-209-01	BOLT (4-5), STUD	
503	3-323-210-01	ADJUSTOR, STUD BOLT	
504	3-349-410-01	BUSHING	