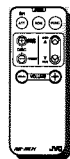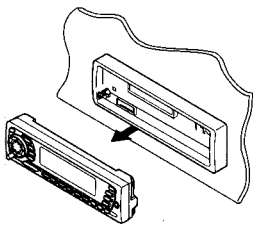# JVC

SERVICE MANUAL

CASSETTE RECEIVER

KS-FX850R
KS-FX820R
KS-FX835R

Area Suffix
E ---- Continental Europe

KS-FX850R
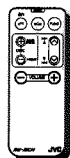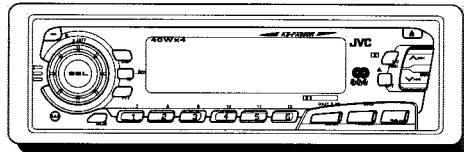
KS-FX835R
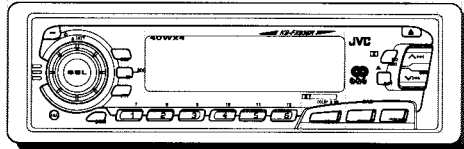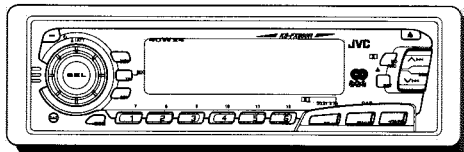
KS-FX820R

	Illumination	Remote controller
KS-FX850R	Color	○
KS-FX835R	Blue & Red	○
KS-FX820R	White	×

Contents

No.49549
Feb. 2000

Safety precaution

⚠ *CAUTION* Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

Instructions

JVC
VICTOR COMPANY OF JAPAN, LIMITED

EN, GE, FR, NL   1299MNMMDWJES

Thank you for purchasing a JVC product. Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

CONTENTS

BEFORE USE
* For safety....
- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.

* Temperature inside the car....
If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

2

KS-FX850R/KS-FX820R/KS-FX835R

JVC

CASSETTE RECEIVER
CASSETTEN-RECEIVER
RADIOCASSETTE
RADIO/CASSETTESPELER

KS-FX850R/KS-FX835R/KS-FX820R

KS-FX850R
KS-FX835R
KS-FX820R
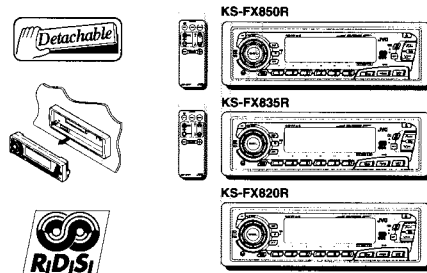
For installation and connections, refer to the separate manual.
Angaben zu Einbau und Verkabelung entnehmen Sie bitte der gesonderten Anleitung.
Pour l'installation et les raccordements, se référer au manuel séparé.
Zie de afzonderlijke handleiding voor details aangaande het installeren en verbinden van het toestel.

INSTRUCTIONS
BEDIENUNGSANLEITUNG
MANUEL D'INSTRUCTIONS
GEBRUIKSAANWIJZING

FSUN3113-311
[E]

How to reset your unit

Press and hold both the SEL (Select) and ᵕ/I/ATT (Standby/On/ATT) buttons at the same time for several seconds.
This will reset the built-in microcomputer.

Note:
Your preset adjustments — such as preset channels or sound adjustments — will also be erased.

ᵕ/I/ATT (Standby/On/ATT)

SEL (Select)

Note:
For security reasons, a numbered ID card is provided with this unit, and the same ID number is imprinted on the unit's chassis. Keep the card in a safe place, as it will help the authorities to identify your unit if stolen.

3

KS-FX850R/KS-FX820R/KS-FX835R

🔊 BASIC OPERATIONS
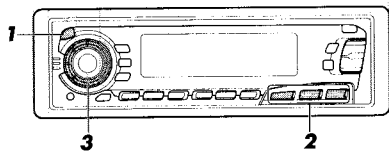
Note:
When you use this unit for the first time, set the built-in clock correctly. (See page 25.)

1

Turn on the power.

Note on One-Touch Operation:
When you select a source in step 2 below, the power automatically comes on. You do not have to press this button to turn on the power.

2

Select the source.
To operate the tuner, see pages 5 – 16.
To operate the cassette deck, see pages 17 – 20.
To operate the CD changer, see pages 34 – 36.
To operate the external component, see page 37.
To operate the DAB tuner, see pages 38 – 43.

3

Adjust the volume.

Volume level appears.
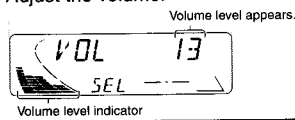
Volume level indicator

4

Adjust the sound as you want (see pages 21 – 24).

To drop the volume in a moment
Press ⏻/I/ATT briefly while listening to any source. "ATT" starts flashing on the display, and the volume level will drop in a moment.
To resume the previous volume level, press the button briefly again.

To turn off the power
Press ⏻/I/ATT for more than 1 second.

4

RADIO BASIC OPERATIONS 📻

Listening to the radio

1
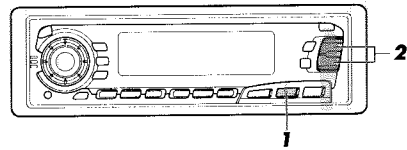
Select the band (FM1, FM2, FM3 or AM).
You can select any one of FM1, FM2, and FM3 to listen to an FM station.

┌→ F1 → F2 → F3 → AM ┐
    (FM1) (FM2) (FM3)
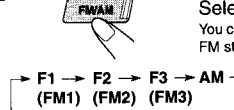
Audio (see page 28) or volume level indicator
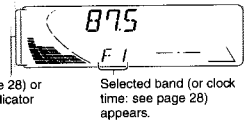
Selected band (or clock time: see page 28) appears.

2

To search stations of higher frequencies.

To search stations of lower frequencies.

Start searching a station.
When a station is received, searching stops.
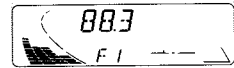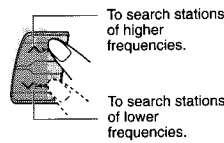
To stop searching before a station is received, press the same button you have pressed for searching.

To tune in a particular frequency without searching:
1 Press FM/AM repeatedly to select the band (FM or AM).
2 Press and hold ∧▶▶I or ∨I◀◀ until "MANU (manual)" starts flashing on the display.
  Now you can manually change the frequency while "MANU" is flashing.
3 Press ∧▶▶I or ∨I◀◀ repeatedly until the frequency you want is reached.
  • If you hold down the button, the frequency keeps changing (in 50 kHz intervals for FM and 9 kHz intervals for AM–MW/LW) until you release the button.

5

Storing stations in memory

You can use one of the following two methods to store broadcasting stations in memory.
• Automatic preset of FM stations: SSM (Strong-station Sequential Memory)
• Manual preset of both FM and AM stations

FM station automatic preset: SSM
You can preset 6 local FM stations in each FM band (FM1, FM2 and FM3).
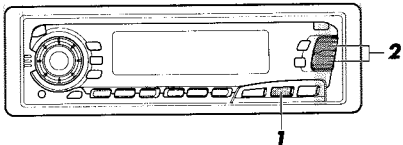
1

Select the FM band number (FM1, FM2 or FM3) you want to store FM stations into.

┌→ F1 → F2 → F3 → AM ┐
    (FM1) (FM2) (FM3)
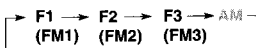
2

Press and hold both buttons for more than 2 seconds.
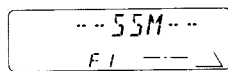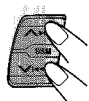
"SSM" appears, then disappears when automatic preset is over.

Local FM stations with the strongest signals are searched and stored automatically in the band number you have selected (FM1, FM2 or FM3). These stations are preset in the number buttons — No. 1 (lowest frequency) to No. 6 (highest frequency).
When automatic preset is over, the station stored in number button 1 will be automatically tuned in.

6

Manual preset
You can preset up to 6 stations in each band (FM1, FM2, FM3 and AM) manually.

EXAMPLE: Storing an FM station of 88.3 MHz into the preset number 1 of the FM1 band
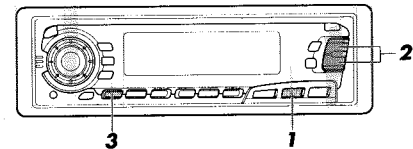
1

Select the FM1 band.
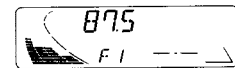
2

Tune into a station of 88.3 MHz.
See page 5 to tune into a station.
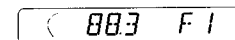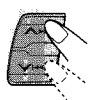
3

Press and hold the number button (in this example, 1) for more than 2 seconds.
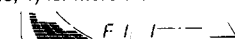
Band/preset number and "MEMO" flash alternately for a while.
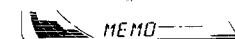
4

Repeat the above procedure to store other stations into other preset numbers.

Notes:
• *A previously preset station is erased when a new station is stored in the same preset number.*
• *Preset stations are erased when the power supply to the memory circuit is interrupted (for example, during battery replacement). If this occurs, preset the stations again.*

7

You can easily tune into a preset station.
Remember that you must store stations first. If you have not stored them yet, see pages 6 and 7.

MO RND ☐☐

2   **1**

1

Select the band (FM1, FM2, FM3 or AM) you want.

┌→ F1 → F2 → F3 → AM ┐
  (FM1) (FM2) (FM3)
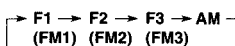
2

Select the number (1 – 6) for the preset station you want.
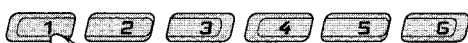
When an FM stereo broadcast is hard to receive:

Press MO RND ☐☐ (Monaural/Random/Dolby) while listening to an FM stereo broadcast. The MONO (Monaural) indicator lights up on the display. The sound you hear becomes monaural but reception will be improved.

$$ 88.3 \qquad 88.3 $$

Lights up when receiving an FM broadcast in stereo.

To restore the stereo effect, press the button again.

8

KS-FX850R/KS-FX820R/KS-FX835R

RDS OPERATIONS

What you can do with RDS EON

RDS (Radio Data System) allows FM stations to send an additional signal along with their regular programme signals. For example, the stations send their station names, as well as information about what type of programme they broadcast, such as sports or music, etc. Another advantage of RDS function is called "EON (Enhanced Other Networks)." The EON indicator lights up while receiving an FM station with the EON data. By using the EON data sent from a station, you can tune into a different station of a different network broadcasting your favorite programme or traffic announcement while listening to another programme or to another source such as tape.

By receiving the RDS data, this unit can do the following:
• Tracing the same programme automatically (Network-Tracking Reception)
• Standby Reception of TA (Traffic Announcement) or your favorite programme
• PTY (Programme Type) search
• TP (Traffic Programme) search
• And some other functions

Tracing the same programme automatically (Network-Tracking Reception)

When driving in an area where FM reception is not good, the tuner built in this unit automatically tune in another RDS station, broadcasting the same programme with stronger signals. So, you can continue to listen to the same programme in its finest reception, no matter where you drive. (See the illustration on the next page.)

Two types of the RDS data are used to make Network-Tracking Reception work correctly — PI (Programme Identification) and AF (Alternative Frequency).

Without receiving these data correctly from the RDS station you are listening to, Network-Tracking Reception will not operate.

To use Network-Tracking Reception, press and hold TP RDS (Traffic Programme/Radio Data System) for more than 1 second. Each time you press and hold the button, Network-Tracking Reception modes change as follows:

┌→ Mode 1 → Mode 2 → Mode 3 ┐

AF indicator ─┐ ┌─ REG indicator

87.5
F 1

9
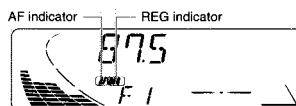
Mode 1

The AF indicator lights up but the REG indicator does not.
Network-Tracking is activated with Regionalization set to "off."
Switches to another station within the same network when the receiving signals from the current station become weak.

Note:
In this mode, the programme may differ from the one currently received.

Mode 2

Both the AF indicator and the REG indicator light up.
Network-Tracking is activated with Regionalization set to "on."
Switches to another station, within the same network, broadcasting the same programme when the receiving signals from the current station become weak.

Mode 3

Neither the AF indicator nor the REG indicator lights up.
Network-Tracking is deactivated.

Note:
If a DAB tuner is connected and Alternative Reception (for DAB services) is activated, Network-Tracking Reception is also activated automatically. On the other hand, Network-Tracking Reception cannot be deactivated without deactivating Alternative Reception. (See page 43.)

The same programme can be received on different frequencies.

Programme 1 broadcasting on frequency A

Programme 1 broadcasting on frequency E

Programme 1 broadcasting on frequency B

Programme 1 broadcasting on frequency C

Programme 1 broadcasting on frequency D

10
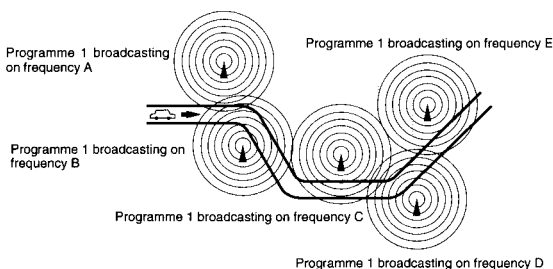
Using Standby Reception

Standby Reception allows the unit to switch temporarily to your favorite programme (PTY: Programme Type) and Traffic Announcement (TA) from the current source (another FM station, tape, CD and other connected components).

Note:
Standby Reception will not work if you are listening to an AM station.

TA Standby Reception

• When you press TP RDS while listening to an FM station, the TP indicator is lit during reception of a TP (Traffic Programme) station and the TA standby mode is engaged.

Note:
When the station being received is not a TP station, the TP indicator flashes. Press ∧▶▶ or ∨ ◀◀ to engage the TA standby mode. "SEARCH" appears on the display, and TP station search starts. When a TP station is tuned in, the TP indicator is lit.

• If you are listening to a tape or CD, and wish to listen to a TP station, press TP RDS to enter the TA standby mode. (The TP indicator lights up.)

If a traffic programme starts broadcasting while the TA standby mode is active, "TRAFFIC" appears and the playback source changes to the FM band. The volume increases to the preset TA volume level and the traffic programme can be heard (see page 16).

To deactivate the TA standby mode, press TP RDS again.

PTY Standby Reception

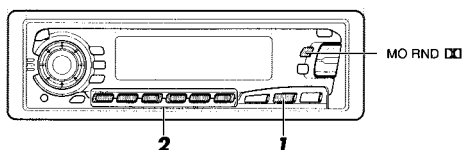• When you press PTY while listening to an FM station, the PTY indicator is lit during reception of a PTY station and the PTY standby mode is engaged. The selected PTY name stored on page 13 flashes for 5 seconds.

Note:
When the station being received is not a PTY station, the PTY indicator flashes. Press ∧▶▶ or ∨ ◀◀ to engage the PTY standby mode. "SEARCH" appears on the display, and PTY station search starts. When a PTY station is tuned in, the PTY indicator is lit.

• If you are listening to a tape or CD, and wish to listen to a selected PTY broadcast, press PTY to enter the PTY standby mode. (The PTY indicator lights up.)

If the selected PTY programme starts broadcasting while the PTY standby mode is active, the selected PTY name appears and the playback source changes to the FM band. The selected PTY programme can then be heard.

To deactivate the PTY standby mode, press PTY again.

11

KS-FX850R/KS-FX820R/KS-FX835R

Selecting Your Favorite Programme for PTY Standby Reception

You can select your favorite programme for PTY Standby Reception to store in memory. When shipped from the factory, "NEWS" is stored as the programme type for PTY Standby Reception.
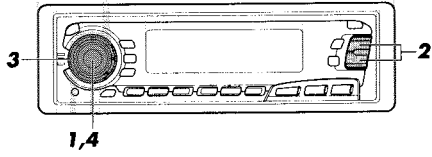
1 Press and hold SEL (select) for more than 2 seconds to call up the Preferred Setting Mode (PSM: see page 26).

2 Select "PTY STBY (standby)" if not shown on the display.

3 Select one of twenty-nine PTY codes. (See page 15.)
Selected code name appears on the display and is stored into memory.

4 Finish the setting.

Searching Your Favorite Programme

You can search one of your 6 favorite programme types stored in memory.
When shipped from the factory, the following 6 programme types have been stored in the number buttons (1 to 6).
To change the factory preset settings, see page 13.
To search your favorite programme, see page 14.

1	2	3	4	5	6
POP M	ROCK M	EASY M	CLASSICS	AFFAIRS	VARIED

12

To store your favorite programme types

1 Press and hold SEL (select) for more than 2 seconds to call up the Preferred Setting Mode (PSM: see page 26).

2 Select "PTY SRCH (search)" if not shown on the display.

3 Select one of twenty-nine PTY codes. (See page 15.)
Selected code name appears on the display.
• If the code already stored in memory is selected, it will flash on the display.

4 Press and hold the number button for more than 2 seconds to store the PTY code selected into the preset number you want.
PTY preset number appears, and selected code name and "MEMORY" alternates on the display.

5 Finish the setting.

13

To search your favorite programme type

1 Press and hold PTY (programme type) for more than 1 second while listening to an FM station.
The last selected PTY code and preset number appear.
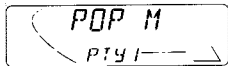
2 Select one of PTY codes stored in preset number buttons (1 to 6).
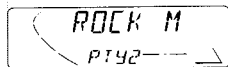
Ex. When "ROCK M" is stored in preset number button 2.

PTY search for your favorite programme starts after 5 seconds.

• If there is a station broadcasting a programme of the same PTY code you selected, that station is tuned in.
• If there is no station broadcasting a programme of the same PTY code you selected, the station will not change.

Note:
In some areas, the PTY search will not work correctly.

14

Other convenient RDS functions and adjustments

Automatic selection of the station when using the number buttons

Usually when you press the number button, the preset station is tuned in.
However, when the preset station is an RDS station, something different will happen. If the signals from that preset station are not sufficient for good reception, this unit, using the AF data, tunes in another frequency broadcasting the same programme as the original preset station is broadcasting. In case no other station is tuned in, you can also search all receivable frequencies for the same programme. (Programme search) To activate programme search, follow the procedure below.
• Programme search takes a while.
• See also "Changing the general settings (PSM)" on page 26.

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Press ∧►►I or ∨I◄◄ to select "P(programme)-SEARCH."
3. Select "ON" by turning the control dial clockwise.
   Now programme search is activated.

To cancel programme search, repeat the same procedure and select "OFF" in step 3 by turning the control dial counterclockwise.

PTY codes

NEWS:	News	SOCIAL:	Programmes on social activities
AFFAIRS:	Topical programmes expanding on current news or affairs	RELIGION:	Programmes dealing with any aspect of belief or faith, or the nature of existence or ethics
INFO:	Programmes which impart advice on a wide variety of topics	PHONE IN:	Programmes where people can express their views either by phone or in a public forum
SPORT:	Sport events		
EDUCATE:	Educational programmes	TRAVEL:	Programmes about travel destinations, package tours, and travel ideas and opportunities
DRAMA:	Radio plays		
CULTURE:	Programmes on national or regional culture	LEISURE:	Programmes concerned with recreational activities such as gardening, cooking, fishing, etc.
SCIENCE:	Programmes on natural science and technology		
VARIED:	Other programmes like comedies or ceremonies	JAZZ:	Jazz music
		COUNTRY:	Country music
POP M:	Pop music	NATION M:	Current popular music from another nation or region, in that country's language
ROCK M:	Rock music		
EASY M:	Easy-listening music		
LIGHT M:	Light music	OLDIES:	Classic pop music
CLASSICS:	Classical music	FOLK M:	Folk music
OTHER M:	Other music	DOCUMENT:	Programmes dealing with factual matters, presented in an investigative style
WEATHER:	Weather information		
FINANCE:	Reports on commerce, trading, the Stock Market, etc.		
CHILDREN:	Entertainment programmes for children		

15

1-6

⊕

Changing the display mode while listening to an FM station

You can change the initial indication on the display to either station name (PS NAME) or to station frequency (FREQ), while listening to an FM RDS station.
• See also "Changing the general settings (PSM)" on page 26.

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Select "TU DISP (tuner display)" with ∧►►I or ∨I◄◄.
3. Set to the desired indication ("PS NAME" or "FREQ") with the control dial.

Note:
By pressing DISP, you can also change the display while listening to an FM RDS station.
Each time you press the button, the following information appears on the upper part of the display:

```
┌─► PS (Station name) ─► Station Frequency ─► PTY (Programme type) ┐
└──────────────────────────────────────────────────────────────────┘
```

* *Then, the display goes back to the original indication in several seconds.*

Setting the TA volume level

You can preset the volume level for TA Standby Reception. When a traffic programme is received, the volume level automatically changes to the preset level.
• See also "Changing the general settings (PSM)" on page 26.

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Select "TA VOL (volume)" with ∧►►I or ∨I◄◄.
3. Set to the desired volume with the control dial.

Automatic clock adjustment

When shipped from the factory, the clock built in this unit is set to be readjusted automatically using the CT (Clock Time) data in the RDS signal.
If you do not want to use automatic clock adjustment, follow the procedure below.
• See also "Changing the general settings (PSM)" on page 26.

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Select "AUTO ADJ (adjust)" with ∧►►I or ∨I◄◄.
3. Select "OFF" by turning the control dial counterclockwise.
   Now automatic clock adjustment is canceled.

To reactivate clock adjustment, repeat the same procedure and select "ON" in step 3 by turning the control dial clockwise.

Note:
It takes about 2 minutes to adjust the time using the CT data. So, you must tune to the station for more than 2 minutes continuously; otherwise, the clock time will not be adjusted.

16

TAPE OPERATIONS 🔲

Listening to a tape

MO RND ᙍᙍ

1
Open the control panel.

2
1. Insert a cassette into the cassette compartment.
   The unit turns on and tape play starts automatically.
2. Close the control panel by hand.

• When one side of the tape reaches its end during play, the other side of the tape automatically starts playing. (Auto Reverse)

Note on One-Touch Operation:
When a cassette is already in the cassette compartment, pressing TAPE ◄ ► turns on the unit and starts tape play automatically.

3
Select the tape direction.
Each time you press the button, the tape direction changes alternately – forward (*FИᎶ PLAᎸ*) and reverse (*REᖴ PLAᎸ*).

To play back tapes recorded with the Dolby B NR
Press the MO RND ᙍᙍ button to set the Dolby B NR* system as required in step 2 above. The ᙍᙍ indicator lights up, and "DOLBY B" appears on the display for several seconds. To cancel the Dolby B NR, press the same button again.
* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY" and the double-D symbol ᙍᙍ are trademarks of Dolby Laboratories Licensing Corporation.

17

🔲

To stop play and eject the cassette
Press ▲.
Tape play stops, the control panel opens, then the cassette automatically ejects from the cassette compartment.
If you change the source to FM, AM, CD changer or other connected component, the tape play also stops (without ejecting the cassette this time).
• *You can also eject the cassette with the unit turned off.*

To fast-forward and rewind a tape
• Press ∧►►I for more than 1 second to fast-forward the tape.
  When the tape reaches its end, the tape is reversed and playback starts from the beginning of the other side.

• Press ∨I◄◄ for more than 1 second to rewind the tape.
  When the tape reaches its end, playback of the same side starts.

To stop fast forward and rewind at any position on the tape, press TAPE ◄ ► .
Tape play starts from that position on the tape.

Prohibiting cassette ejection

You can prohibit the cassette ejection and can "lock" a cassette in the cassette compartment. Press and hold TAPE ◄ ► and ᏝI/ATT for more than 2 seconds. "NO EJECT" flashes on the display for about 5 seconds, and the cassette is "locked."

To cancel the prohibition and "unlock" the cassette, press and hold TAPE ◄ ► and ᏝI/ATT for more than 2 seconds again. "EJECT OK" flashes for about 5 seconds, and this time the cassette is "unlocked."

18

🔲

Finding the beginning of a tune

Multi Music Scan allows you to automatically start playback from the beginning of a specified tune. You can specify up to 9 tunes ahead of or before the current tune.

∧►►I
∨I◄◄
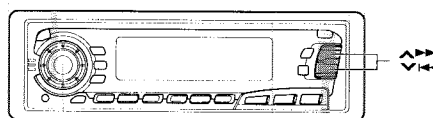
During playback

To locate a tune ahead of the current tune on the tape

To locate a tune before the current tune on the tape

Specify how many tunes ahead of or before the current tune the tune you want is located.

┊Ξ┤M M ᔕ
☯TAPE─·─

Each time you set the tune, the number changes up to ±9.

When the beginning of the specified tune is located, playback starts automatically.

Notes:
• *While locating a specified tune:*
  – *If the tape is rewound to its beginning, playback starts from the beginning of that side.*
  – *If the tape is fast-forwarded to the end, it is reversed and played from the beginning of the other side.*
• *In the following cases, the Multi Music Scan function may not operate correctly:*
  – *Tapes with tunes having long pianissimo passages (very quiet parts) or non-recorded portions between tunes.*
  – *Tapes with short non-recorded sections.*
  – *Tapes with high level of noise or humming between tunes.*
  – *The Dolby NR setting does not match. For example, if Dolby B NR is on and the tape was recorded with no Dolby NR.*

19

KS-FX850R/KS-FX820R/KS-FX835R

Other convenient tape functions

Skipping the blank portions on the tape

You can skip blank portions between the tunes. (Blank Skip)
When this function is on, the unit skips blank portions of 15 seconds or more, fast-forwards to the next tune, then starts playing it.
• See also "Changing the general settings (PSM)" on page 26.

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Select "B. SKIP (blank skip)" with ∧►►I or ∨I◄◄.
3. Select the desired mode with the control dial.
   The Blank Skip mode alternates between on and off.

Note:
When the tape reaches its end while fast-forwarding, the tape direction will be changed automatically.

Playing the current tune repeatedly

You can play the current tune repeatedly. (Repeat Play)

Each time you briefly press RPT (Repeat) while playing a tape, Repeat Play turns on and off alternately.

```
  REPEAT
   TAPE
```
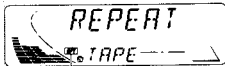
Lights up when Repeat Play is turned on.

Note:
In the following cases, Blank Skip and Repeat Play may not operate correctly:
– Tapes with tunes having long pianissimo passages (very quiet parts) or non-recorded portions during tunes.
– Tapes with short non-recorded sections.
– Tapes with high level noise or humming between tunes.
– The Dolby NR setting does not match. For example, if Dolby B NR is on and the tape was recorded with no Dolby NR.

20

SOUND ADJUSTMENTS

Adjusting the sound

You can adjust the sound characteristics to your preference.

Equalization pattern indicator
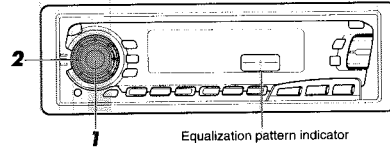
1

Select the item you want to adjust.

```
┌─► BAS ──► TRE ──► FAD ──┐
└── VOL ◄── LOUD ◄── BAL ◄──┘
```

Indication	To do:	Range
BAS (Bass)	Adjust the bass	–06 (min.) — +06 (max.)
TRE (Treble)	Adjust the treble	–06 (min.) — +06 (max.)
FAD (Fader)*	Adjust the front and rear speaker balance	R06 (rear only) — F06 (front only)
BAL (Balance)	Adjust the left and right speaker balance	L06 (left only) — R06 (right only)
LOUD (Loudness)	Boost low and high frequencies to produce a well-balanced sound at low volume level.	LOUD ON — LOUD OFF
VOL (Volume)	Adjust the volume	00 (min.) — 50 (max.)

Note:
* *If you are using a two-speaker system, set the fader level to "00."*

2
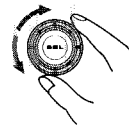
Adjust the level.

```
TRE   +06
   SEL
```
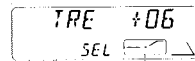
Equalization pattern changes as you adjust the bass or treble.

Note:
Normally the control dial works for volume adjustment. So you do not have to select "VOL" to adjust the volume level.

21

Using the Sound Control Memory

You can select and store a preset sound adjustment suitable to each playback source. (Advanced SCM)

Selecting and storing the sound modes

Once you select a sound mode, it is stored in memory, and will be recalled every time you select the same source. A sound mode can be stored for each of the following sources — FM1, FM2, FM3, AM, tape, and external components.
• If you do not want to store the sound mode separately for each playback source, but want to use the same sound mode for all the sources, see "Canceling Advanced SCM" on page 28.

"Link" indicator

SCM
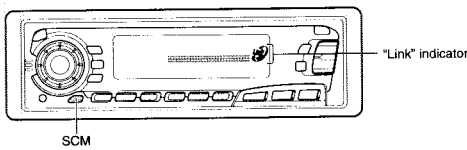
Select the sound mode you want.
Each time you press the button, the sound mode changes as follows:

```
┌─► SCM OFF ──► BEAT ──► SOFT ──► POP ─┐
```

• If the "Link" indicator is lit on the display (with "SCM LINK" set to "LINK ON"—see page 28), the selected sound mode can be stored in memory for the current source, and the effect applies to the current source.
• If the "Link" indicator is NOT lit on the display (with "SCM LINK" set to "LINK OFF"), the selected sound mode effect applies to any source.

Indication	For:	Preset values		
		Bass	Treble	Loudness
SCM OFF	(Flat sound)	00	00	On
BEAT	Rock or disco music	+02	00	On
SOFT	Quiet background music	+01	–03	Off
POP	Light music	+04	+01	Off

22

Recalling the sound modes

Source buttons
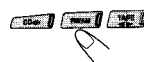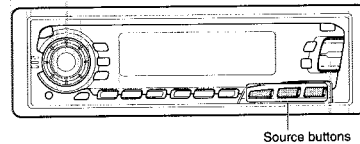
Select the source while the "Link" indicator is lit on the display.
The "Link" indicator starts flashing, and the sound mode stored in memory for the selected source is recalled.

```
   87.5
    F1
```

Equalization pattern of the selected sound mode appears.

LOUD (loudness) indicator

Sound mode indicator
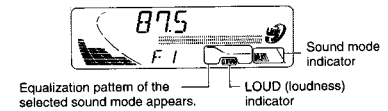
Notes:
• *You can adjust each sound mode to your preference, and store it in memory.*
  If you want to adjust and store your original sound mode, see "Storing your own sound adjustments" on page 24.
• *To adjust the bass and treble reinforcement levels or to turn on/off the loudness function temporarily, see page 21. (Your adjustments will be canceled if another source is selected.)*

23

1-8

Storing your own sound adjustments

You can adjust the sound modes (BEAT, SOFT, POP: see page 22) to your preference and store your own adjustments in memory.

3 — **2 1,4**
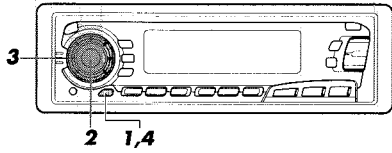
1 Call up the sound mode you want to adjust.
See page 22 for details.

2 Select "BAS (Bass)," "TRE (Treble)" or "LOUD (Loudness)."

Within 5 seconds

3 Adjust the bass or treble level or turn the loudness function ON/OFF.
See page 21 for details.

4 Press and hold SCM (Sound Control Memory) until the sound mode you have selected in step 1 flashes on the display.
Your setting is stored in memory.

5 Repeat the same procedure to store other settings.

To reset to the factory settings
Repeat the same procedure and reassign the preset values listed in the table on page 22.

24

OTHER MAIN FUNCTIONS

Setting the clock

You can also set the clock system either to 24 hours or 12 hours.
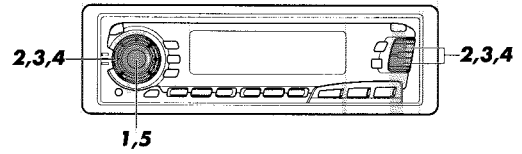
2,3,4 — **1,5** — **2,3,4**

1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.

2 Set the hour.
[1] Select "CLOCK H (Hour)" if not shown on the display.
[2] Adjust the hour.

3 Set the minute.
[1] Select "CLOCK M (Minute)."
[2] Adjust the minute.

4 Set the clock system.
[1] Select "24H/12H."
[2] Select "24H" or "12H."

5 Finish the setting.

To check the current clock time while the unit is turned off, press DISP.
The power turns on, the clock time is shown for 5 seconds, then the power turns off.

25

Changing the general settings (PSM)

You can change the items listed on the next page by using the PSM (Preferred Setting Mode) control.

Basic Procedure
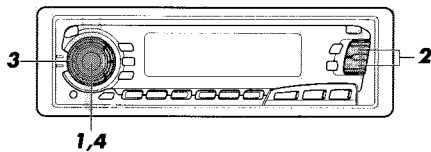
3 — **1,4** — **2**

1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.

2 Select the PSM item you want to adjust. (See page 27.)

3 Select or adjust the PSM item selected above.

4 Finish the setting.

26

1 **2** Select. **3** Set.

				Factory-preset settings	See page
CLOCK H	Hour adjustment	Back	Advance	0:00	25
CLOCK M	Minute adjustment	Back	Advance	0:00	25
SCM LINK	Sound control memory linkage	LINK OFF	LINK ON	LINK ON	28
24H/12H	24/12-hour time display	12H	24H	24H	25
AUTO ADJ	Automatic setting of the clock	OFF	ON	ON	16
CLOCK	Clock display	OFF	ON	ON	28
TU DISP	Tuner display mode	FREQ	PS NAME	PS NAME	16
PTY STBY	PTY standby	29 programme types (See page 15.)		NEWS	12
PTY SRCH	PTY search			(See page 12.)	12
TA VOL	Traffic announcement volume	VOL (00-50)		VOL 20	16
P-SEARCH	Programme search	OFF	ON	OFF	15
DAB AF*	Alternative Reception	AF OFF	AF ON	AF ON	43
LEVEL	Level display	AUDIO 1 ↔ AUDIO 2 ↕ OFF ↲		AUDIO 2	28
DIMMER	Dimmer (ONLY FOR KS-FX850R)	AUTO ↔ OFF ↕ ON ↲		AUTO	29
TEL	Audio mute for cellular phone system	OFF ↔ MUTING 1 ↕ MUTING 2 ↲		OFF	29
BEEP	Key-touch tone (ONLY FOR KS-FX850R)	OFF	ON	ON	30
B.SKIP	Blank skip	OFF	ON	OFF	20
LINE IN**	External component	CHANGER	LINE IN	CHANGER	30

* Displayed only when the DAB tuner is connected.
** Displayed only when one of the following sources is selected — FM, AM and tape.
• Press SEL (select) when the setting is complete.

27

KS-FX850R/KS-FX820R/KS-FX835R

Canceling Advanced SCM

You can cancel the Advanced SCM (Sound Control Memory), and unlink the sound modes and the playback sources.
When shipped from the factory, a different sound mode can be stored in memory for each source so that you can change the sound modes simply by changing the sources.
• LINK ON: Advanced SCM (different sound modes for different sources)
• LINK OFF: Conventional SCM (one sound mode for all sources)

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Select "SCM LINK" with ∧►►| or ∨|◄◄.
3. Select the desired mode with the control dial.
   The SCM LINK mode changes as follows:

LINK ON ◄──► LINK OFF

Selecting the clock display

You can select either the clock or the source name to be shown on the lower part of the display. When shipped from the factory, the clock is selected.
• ON: Clock
• OFF: Source name (or station band)

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Select "CLOCK" with ∧►►| or ∨|◄◄.
3. Select the desired mode with the control dial.
   The clock display mode alternates between on and off.

ON ◄──► OFF

To check the other information during play
Press DISP (display). Each time you press the button, the other information (either the clock or the source name) will be shown on the lower part of the display for a while.

Selecting the level display

You can select the level display according to your preference.
When shipped from the factory, "AUDIO 2" is selected.
• AUDIO 1: Shows the audio level indicator and the equalization pattern indicator.
• AUDIO 2: Alternates "AUDIO 1" setting and illumination display.
• OFF: Erases the audio level indicator and the equalization pattern indicator.

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Select "LEVEL" with ∧►►| or ∨|◄◄.
3. Select the desired mode with the control dial.
   The level display setting changes as follows:

┌─► AUDIO 1 ◄──► AUDIO 2 ◄──► OFF ◄─┐
└──────────────────────────────────┘

28

Selecting the dimmer mode (ONLY FOR KS-FX850R)

When you turn on the car head lights, the display automatically dims (Auto Dimmer).
When shipped from the factory, Auto Dimmer mode is activated.
• AUTO: Activates Auto Dimmer.
• ON: Always dims the display.
• OFF: Cancels Auto Dimmer.

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Select "DIMMER" with ∧►►| or ∨|◄◄.
3. Select the desired mode with the control dial.
   The dimmer mode changes as follows:

┌─► AUTO ◄──► OFF ◄──► ON ◄─┐
└───────────────────────────┘

Note on Auto Dimmer:
Auto Dimmer equipped with this unit may not work correctly on some vehicles, particularly on those having a control dial for dimming.
In this case, set the dimmer mode to "ON" or "OFF".

Selecting the telephone muting

This mode is used when a cellular phone system is connected. Depending on the phone system used, select either "MUTING 1" or "MUTING 2," whichever mutes the sounds from this unit. When shipped from the factory, this mode is deactivated.
• MUTING 1: Select this if this setting can mute the sounds.
• MUTING 2: Select this if this setting can mute the sounds.
• OFF: Cancels the telephone muting.

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Select "TEL (telephone)" with ∧►►| or ∨|◄◄.
3. Select the desired mode with the control dial.
   The telephone muting mode changes as follows:

┌─► MUTING 1 ◄──► MUTING 2 ◄──► OFF ◄─┐
└─────────────────────────────────────┘

29

Turning on/off the key-touch tone (ONLY FOR KS-FX850R)

You can deactivate the key-touch tone if you do not want to make it beep when you press a button. When shipped from the factory, the key-touch tone is activated.
• ON: Activates the key-touch tone.
• OFF: Deactivates the key-touch tone.

1. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2. Select "BEEP" with ∧►►| or ∨|◄◄.
3. Select the desired mode with the control dial.
   The key-touch tone alternates between on and off.

ON ◄──► OFF
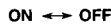
Selecting the external component to use

You can connect the external component to the CD changer jack on the rear using the Line Input Adaptor KS-U57 (not supplied).
To use the external component as the playback source through this unit, you need to select which component — CD changer or external component — to use. When shipped from the factory, CD changer is selected as the external component.
• LINE IN: To use the external component other than CD changer
• CHANGER: To use the CD changer

1. To change the source to FM, AM or TAPE, press FM/AM or TAPE ◄ ►.
2. Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
3. Select "LINE IN" with ∧►►| or ∨|◄◄.
4. Select the desired mode with the control dial.
   The external component selecting mode changes as follows:

LINE IN ◄──► CHANGER

Note:
For connecting the Line Input Adaptor KS-U57 and the external component, refer to the Installation/Connection Manual (separate volume).

30

Detaching the control panel

You can detach the control panel when leaving the car.
When detaching or attaching the control panel, be careful not to damage the connectors on the back of the control panel and on the panel holder.

How to detach the control panel
Before detaching the control panel, be sure to turn off the power.

1
Unlock the control panel.
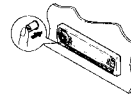
2
Pull the control panel out of the unit.
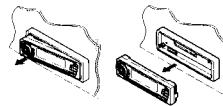
3
Put the detached control panel into the provided case.
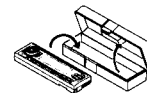
How to attach the control panel

1
Insert the right side of the control panel into the groove on the panel holder.

2
Press the left side of the control panel to fix it to the panel holder.
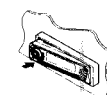
Note on cleaning the connectors:
If you frequently detach the control panel, the connectors will deteriorate.
To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.

Connectors

31
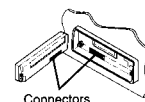
◄)) *REMOTE OPERATIONS*

This section is ONLY FOR KS-FX850R and KS-FX835R.
KS-FX820R can also be remotely controlled as instructed here (with an optionally purchased remote controller). We recommend that you use remote controller RM-RK31 with your unit. The followings are the instructions for using RM-RK31.

Remote sensor

Before using the remote controller:
* Aim the remote controller directly at the remote sensor on the main unit. Make sure there is no obstacle in between.
* Do not expose the remote sensor to strong light (direct sunlight or artificial lighting).
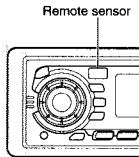
Installing the battery

When the controllable range or effectiveness of the remote controller decreases, replace the battery.

(back side)
1)
2)

Lithium coin battery
(product number:
CR2025)

(back side)
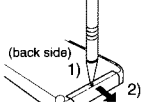
1. **Remove the battery holder.**
   1) Push out in the direction indicated by the arrow using a ball point pen or a similar tool.
   2) Remove the battery holder.
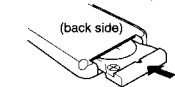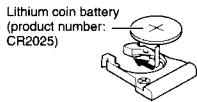
2. **Place the battery.**
   Slide the battery into the holder with the + side facing upwards so that the battery is fixed in the holder.

3. **Return the battery holder.**
   Insert again the battery holder pushing it until you hear a clicking sound.

WARNING:
* *Store the batteries in a place which children cannot reach.*
  If a child accidentally swallows the battery, immediately consult a doctor.
* *Do not recharge, short, disassemble or heat the batteries or dispose of in a fire.*
  Doing any of these things may cause the batteries to give off heat, crack or start a fire.
* *Do not leave the batteries with other metallic materials.*
  Doing this may cause the batteries to give off heat, crack or start a fire.
* *When throwing away or saving the batteries, wrap in tape and insulate; otherwise, , it may cause the batteries to give off heat, crack or start a fire.*
* *Do not poke the batteries with tweezers or similar tools.*
  Doing this may cause the batteries to give off heat, crack or start a fire.

Using the remote controller

[1] Functions the same as the ⏻/I/ATT button on the main unit.
[2] • Functions as the BAND button while listening to the radio (or the DAB tuner).
   Each time you press the button, the band changes.
   • Functions as the DISC + button while listening to the CD changer.
   Each time you press the button, the disc number increases, and the selected disc starts playing.
   • Functions as the PROG button while listening to a tape.
   Each time you press the button, the tape direction changes alternately.
[3] • Functions as the PRESET button while listening to the radio (or the DAB tuner).
   Each time you press the button, the preset station number increases, and the selected station is tuned in.
   • Functions as the DISC – button while listening to the CD changer.
   Each time you press the button, the disc number decreases, and the selected disc starts playing.
[4] Functions the same as the control dial on the main unit.
   Note: *This button does not function for the preferred setting mode adjustment.*
[5] Selects the sound mode.
   Each time you press SCM (Sound Control Memory), the mode changes.
[6] Selects the source.
   Each time you press FUNC (function), the source changes.
[7] • Searches stations while listening to the radio.
   • Selects services while listening to the DAB tuner if pressed briefly.
   • Searches ensembles while listening to the DAB tuner if pressed for more than 1 second.
   • Functions as the fast forward or rewind buttons or Multi Music Scan buttons while listening to a tape.
   • Fast-forwards or reverses the track if pressed and held while listening to a CD.
   • Skips to the beginning of the next tracks or goes back to the beginning of the current (or previous tracks) if pressed briefly while listening to a CD.

◄): *CD CHANGER OPERATIONS*

We recommend that you use one of the CH-X series with your unit.
If you have another CD automatic changer, consult your JVC IN-CAR ENTERTAINMENT dealer for connections.
* *For example, if your CD automatic changer is one of the KD-MK series, you need a cord (KS-U15K) for connecting it to this unit.*

Before operating your CD automatic changer:
* Refer also to the instructions supplied with your CD changer.
* If no discs are in the magazine of the CD changer or the discs are inserted upside down, "NO DISC" will appear on the display. If this happens, remove the magazine and set the discs correctly.
* If "RESET 1 - RESET 8" appears on the display, something is wrong with the connection between this unit and the CD changer. If this happens, check the connection, connect the connecting cord(s) firmly if necessary, then press the reset button of the CD changer.

Playing CDs

Number buttons   CD-CH

Select the CD automatic changer.
Playback starts from the first track of the first disc.
All tracks of all discs are played back.

Elapsed playing time   Track number

Disc number (or clock time:
see page 28) appears.

Note on One-Touch Operation:
When you press CD-CH, the power automatically comes on. You do not have to press ⏻/I/ATT to turn on the power.

To fast-forward or reverse the track
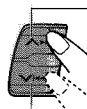
Press and hold ∧►►|, while playing a CD, to fast-forward the track.

Press and hold ∨|◄◄, while playing a CD, to reverse the track.

To go to the next tracks or the previous tracks

Press ∧►►| briefly, while playing a CD, to go ahead to the beginning of the next track. Each time you press the button consecutively, the beginning of the next tracks is located and played back.
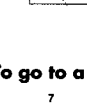
Press ∨|◄◄ briefly, while playing a CD, to go back to the beginning of the current track. Each time you press the button consecutively, the beginning of the previous tracks is located and played back.

To go to a particular disc directly

7   8   9   10   11   12

Press the number button corresponding to the disc number to start its playback (while the CD changer is playing).
* To select a disc number from 1 – 6:
  Press 1 (7) – 6 (12) briefly.
* To select a disc number from 7 – 12:
  Press and hold 1 (7) – 6 (12) for more than 1 second.

Ex. When disc number 3 is selected

Track number

Disc number

KS-FX850R/KS-FX820R/KS-FX835R
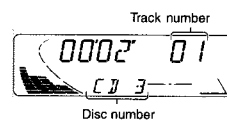
Selecting CD playback modes

To play back tracks at random (Random Play)

Each time you press MO RND 𝄞 (Monaural/Random/Dolby) while playing a CD, CD random play mode changes as follows:

```
 ┌──► RND1 ─────────► RND2 ──┐
 │      (Random1)     (Random2)  │
 └──────── Canceled ◄──────────┘
```

Mode	RND Indicator	Plays at random
RND1	Lights	All tracks of the current disc, then the tracks of the next disc, and so on.
RND2	Flashes	All tracks of all discs inserted in the magazine.

To play back tracks repeatedly (Repeat Play)

Each time you press RPT (Repeat) while playing a CD, CD repeat play mode changes as follows:

```
 ┌──► RPT1 ─────────► RPT2 ──┐
 │      (Repeat1)     (Repeat2)  │
 └──────── Canceled ◄──────────┘
```

Mode	RPT Indicator	Plays repeatedly
RPT1	Lights	The current track (or specified track).
RPT2	Flashes	All tracks of the current disc (or specified disc).

EXTERNAL COMPONENT OPERATIONS

You can connect the external component to the CD changer jack on the rear using the Line Input Adaptor KS-U57 (not supplied).

3   **1**

Preparations:
- *For connecting the Line Input Adaptor KS-U57 and the external component, refer to the Installation/ Connection Manual (separate volume).*
- *Before operating the external component using the following procedure, select the external input correctly. (See "Selecting the external component to use" on page 30.)*

1

Select the external component.

```
 ( LINE IN
       ! 00 ─── )
```
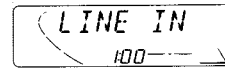
- If "LINE IN"* does not appear on the display, see page 30 and select the external input ("LINE IN").

  * *Displayed only when one of the following sources is selected — FM, AM and tape.*

Note on One-Touch Operation:
When you press CD-CH, the power automatically comes on. You do not have to press ϕ/IIATT to turn on the power.

2

Turn on the connected component and start playing the source.

3

Adjust the volume.

DAB TUNER OPERATIONS

We recommend that you use DAB (Digital Audio Broadcasting) tuner KT-DB1500 with your unit.
If you have another DAB tuner, consult your JVC IN-CAR ENTERTAINMENT dealer.
- Refer also to the Instructions supplied with your DAB tuner.

What is DAB system?
DAB is one of the digital radio broadcasting systems available today. It can deliver CD quality sound without any annoying interference and signal distortion. Furthermore, it can carry text, pictures and data.
In contrast to FM broadcast, where each programme is transmitted on its own frequency, DAB combines several programmes (called "services") to form one "ensemble."
With the DAB tuner connected with this unit, you can enjoy these DAB services.

Tuning into an ensemble and one of the services

A typical ensemble has 6 or more programmes (services) broadcast at the same time. After tuning into an ensemble, you can select a service you want to listen to.

4

3

1,2

Before you start....
Press FM/AM/DAB briefly if you are selecting TAPE, CD changer or LINE IN as the source.

1 DAB

Select the DAB tuner.

Each time you press and hold the button for more than 1 second, the DAB tuner and the FM/AM tuner are alternately selected.

DAB ◄──► FM/AM

2 DAB

Select the DAB band (DAB1, DAB2, or DAB3).

You can select any one of DAB1, DAB2, and DAB3 to tune into an ensemble.

```
 ┌──► D1 ──────► D2 ──────► D3 ──┐
 │    (DAB 1)   (DAB 2)   (DAB 3)  │
 └────────────────────────────────┘
```

3

To search ensembles of higher frequencies.

To search ensembles of lower frequencies.

Start searching an ensemble.

When an ensemble is received, searching stops.

4

Select an service you want to listen to.

To stop searching before an ensemble is received, press the same button you have pressed for searching.

To change the display information while tuning into an ensemble

Normally service name is shown on the upper part of the display.
If you want to check the ensemble name or its frequency, press DISP.
Each time you press the button, the following information appears for a while on the upper part of the display.

```
 ┌─► Service name ──► Ensemble name ──► Channel number ──► Frequency ─┐
 └────────────────────────────────────────────────────────────────────┘
```
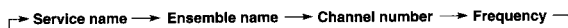
To restore the FM/AM tuner
Press and hold FM/AM/DAB for more than 1 second again.

To tune in a particular ensemble without searching:
1 Press and hold FM/AM/DAB for more than 1 second.
2 Press FM/AM/DAB repeatedly to select the DAB band (DAB1, DAB2, or DAB3).
3 Press and hold ∧►►| or ∨|◄◄ for more than 1 second.
4 Press ∧►►| or ∨|◄◄ repeatedly until the ensemble you want is reached.
  - If you hold down the button, the frequency keeps changing until you release the button.

Storing DAB services in memory

You can preset up to 6 DAB services in each DAB band (DAB1, DAB2 and DAB3) manually.
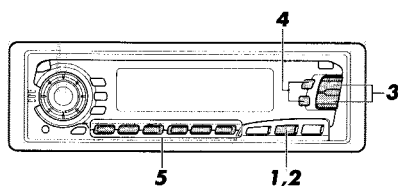
1 DAB

Select the DAB tuner.
Each time you press and hold the button, the DAB tuner and the FM/AM tuner are alternately selected.

DAB ←→ FM/AM

2 DAB

Select the DAB band (DAB1, DAB2, or DAB3) you want.
Each time you press the button, the DAB band changes as follows:

```
┌─→ D1 ──────→ D2 ──────→ D3 ──┐
│   (DAB 1)   (DAB 2)   (DAB 3)  │
```

3

Tune into an ensemble you want.

4

Select a service of the ensemble you want.

40

5
Press and hold the number button (in this example, 1) for more than 2 seconds.

Band/preset number and "MEMO" flash alternately for a while.

6
Repeat the above procedure to store other DAB services into other preset numbers.

Notes:
• *A previously preset DAB service is erased when a new DAB service is stored in the same preset number.*
• *Preset DAB services are erased when the power supply to the memory circuit is interrupted (for example, during battery replacement). If this occurs, preset the DAB services again.*

41

Tuning into a preset DAB service

You can easily tune into a preset DAB service.
Remember that you must store services first. If you have not stored them yet, see pages 40 and 41.

1 DAB

Select the DAB tuner.
Each time you press and hold the button, the DAB tuner and the FM/AM tuner are alternately selected.

DAB ←→ FM/AM

2 DAB

Select the DAB band (DAB1, DAB2, or DAB3) you want.
Each time you press the button, the DAB band changes as follows:

```
┌─→ D1 ──────→ D2 ──────→ D3 ──┐
│   (DAB 1)   (DAB 2)   (DAB 3)  │
```

3

Select the number (1 – 6) for the preset DAB service you want.

42

What you can do more with DAB

Tracing the same program automatically (Alternative Reception)

You can keep listening to the same program
• **While receiving a DAB service:**
When driving in an area where a service cannot be received, this unit automatically tunes in another ensemble or FM RDS station broadcasting the same program.
• **While receiving an FM RDS station:**
When driving in an area where a DAB service is broadcasting the same program as the FM RDS station is broadcasting, this unit automatically tunes into the DAB service.

Note:
When reception switches between DAB and FM, the listening volume level may increase or decrease inconveniently. This change in the volume level results from unequal audio injection levels at broadcaster site, but not from the malfunction of this unit.

To use Alternative Reception

When shipped from the factory, Alternative Reception is activated.
1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2 Press ∧►►| or ∨|◄◄ to select "DAB AF," if not shown on the display.
3 Select the desired mode with the control dial.
• AF ON: Traces the program among DAB services and FM RDS stations—Alternative Reception. The AF indicator lights up on the display (see page 9).
• AF OFF: Deactivates Alternative Reception

Note:
When Alternative Reception (for DAB services) is activated, Network-Tracking Reception (for RDS stations; see page 9) is also activated automatically. On the other hand, Network-Tracking Reception cannot be deactivated without deactivating Alternative Reception.

4 Press SEL (select) again to finish the setting.

43

KS-FX850R/KS-FX820R/KS-FX835R

?! MAINTENANCE

To extend the lifetime of the unit

This unit requires very little attention, but you will be able to extend the life of the unit if you follow the instructions below.

To clean the heads
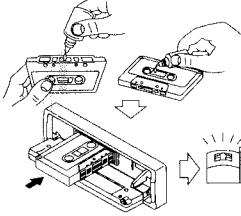
- Clean the heads after every 10 hours of use using a wet-type head cleaning tape (available at an audio store).
  When the head becomes dirty, you may realize the following symptoms:
  - Sound quality is reduced.
  - Sound level decreases.
  - Sound drops out.
- Do not play dirty or dusty tapes.
- Do not touch the highly-polished head with any metallic or magnetic tools.

To keep the tape clean
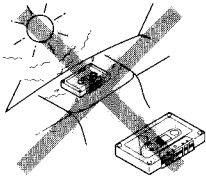
- Always store the tapes to their storage cases after use.
- Do not store tapes in the following places:
  - Subject to direct sunlight
  - With high humidity
  - At extremely hot temperatures

CAUTIONS:
- *Do not play the tapes with peeling labels; otherwise, they can damage the unit.*
- *Tighten tapes to remove slack since loose tape may become entangled with the mechanism.*
- *Do not leave a cassette in the cassette compartment after use, as the tape may become slack.*

The function below is also provided to ensure the longer life of this unit.

Ignition key-off Release/Ignition key-on play
- When you turn off the ignition key with a cassette in the compartment, the unit automatically releases the tape from its head.
- When you turn on the ignition key with a cassette in the compartment, playback automatically starts.

44

TROUBLESHOOTING ?!

What appears to be trouble is not always serious. Check the following points before calling a service center.

Symptoms	Causes	Remedies
• A cassette tape cannot be inserted.	You have tried to insert a cassette in the wrong way.	Insert the cassette with the exposed tape facing right.
• Cassette tapes become hot.	This is not a malfunction.	—
• Tape sound is at very low level and sound quality is degraded.	The tape head is dirty.	Clean it with a head cleaning tape.
• Sound is sometimes interrupted.	Connections are not good.	Check the cords and connections.
• Sound cannot be heard from the speakers.	The volume is turned to the minimum level.	Adjust it to the optimum level.
	Connections are incorrect.	Check the cords and connections.
• SSM (Strong-station Sequential Memory) automatic preset does not work.	Signals are too weak.	Store stations manually.
• Static noise while listening to the radio.	The antenna is not connected firmly.	Connect the antenna firmly.
• "NO DISC" appears on the display.	No CD is in the magazine.	Insert CDs into the magazine.
	CDs are inserted incorrectly.	Insert them correctly.
• "RESET 8" appears on the display.	This unit is not connected to a CD changer correctly.	Connect this unit and the CD changer correctly and press the reset button of the CD changer.
• "RESET 1-RESET 7" appears on the display.	—	Press the reset button of the CD changer.
• This unit does not work at all. • The CD changer does not work at all.	The built-in microcomputer may function incorrectly due to noise, etc.	Press and hold both SEL and ⏻/I/ATT at the same time for several seconds to reset the unit. (The clock setting and preset stations stored in memory are erased.) (See page 3.)

45

SPECIFICATIONS

AUDIO AMPLIFIER SECTION
Maximum Power Output:
  Front: 40 W per channel
  Rear: 40 W per channel
Continuous Power Output (RMS):
  Front: 16 W per channel into 4 Ω, 40 Hz to 20,000 Hz at no more than 0.8 % total harmonic distortion.
  Rear: 16 W per channel into 4 Ω, 40 Hz to 20,000 Hz at no more than 0.8 % total harmonic distortion.
Load Impedance: 4 Ω (4 Ω to 8 Ω allowance)
Tone Control Range:
  Bass: ±10 dB at 100 Hz
  Treble: ±10 dB at 10 kHz
Frequency Response: 40 Hz to 20,000 Hz
Signal-to-Noise Ratio: 70 dB
Line-Out Level/Impedance:
  2.0 V/20 kΩ load (250 nWb/m)

TUNER SECTION
Frequency Range:
  FM: 87.5 MHz to 108.0 MHz
  AM: (MW) 522 kHz to 1,620 kHz
       (LW) 144 kHz to 279 kHz

[FM Tuner]
Usable Sensitivity: 11.3 dBf (1.0 μV/75 Ω)
50 dB Quieting Sensitivity:
  16.3 dBf (1.8 μV/75 Ω)
Alternate Channel Selectivity (400 kHz):
  65 dB
Frequency Response: 40 Hz to 15,000 Hz
Stereo Separation: 30 dB
Capture Ratio: 1.5 dB

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

[LW Tuner]
Sensitivity: 50 μV

CASSETTE DECK SECTION
Wow & Flutter: 0.11% (WRMS)
Fast-Wind Time: 100 sec. (C-60)
Frequency Response (Dolby NR-OFF):
  30 Hz to 16,000 Hz (Normal tape)
Signal-to-Noise Ratio: (Normal tape)
  (Dolby NR-ON): 65 dB
  (Dolby NR-OFF): 56 dB
Stereo Separation: 40 dB

GENERAL
Power Requirement:
Operating Voltage: DC 14.4 V (11 V to 16 V allowance)
Allowable Operating Temperature:
  0°C to +40°C
Grounding System: Negative ground
Dimensions (W x H x D)
  Installation Size:
    182 mm x 52 mm x 150 mm
  Panel Size: 188 mm x 58 mm x 11 mm
Mass: 1.4 kg (excluding accessories)

Design and specifications subject to change without notice.

46

JVC KS-FX850R/KS-FX835R KS-FX820R

Installation/Connection Manual
Einbau/Anschlußanleitung
Manuel d'installation/raccordement
FSUN3113-T211
[E]
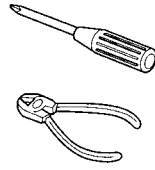
1299MNMMDWJES
EN, GE, FR

ENGLISH

• This unit is designed to operate on 12 volts DC, NEGATIVE ground electrical systems.

INSTALLATION (IN-DASH MOUNTING)

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

1 Before mounting: Press ▲ (Control Panel Release button) to detach the control panel.

2 Remove the trim plate.

3 Remove the sleeve after disengaging the sleeve locks.

(1) Stand the unit.

Note: When you stand the unit, be careful not to damage the fuse on the rear.

(2) Insert the 2 handles between the unit and the sleeve, as illustrated, to disengage the sleeve locks.

(3) Remove the sleeve.

Note: Be sure to keep the handles for future use after installing the unit.

4 Install the sleeve into the dashboard.

* After the sleeve is correctly installed into the dashboard, bend the appropriate tabs to hold the sleeve firmly in place, as illustrated.

5 Fix the mounting bolt to the rear of the unit's body and place the rubber cushion over the end of the bolt.

6 Do the required electrical connections.

7 Slide the unit into the sleeve until it is locked.

8 Attach the trim plate so that the projection on the trim plate is fixed to the left side of the unit.

9 Attach the control panel.

DEUTSCH

• Dieses Gerät ist für einen Betrieb in elektrischen Anlagen mit 12 V Gleichstrom und (–) Erdung ausgelegt.

EINBAU (IM ARMATURENBRETT)

• Die folgende Abbildung zeigt einen typischen Einbau. Dennoch müssen Sie entsprechend Ihrem jeweiligen Auto Anpassungen vornehmen. Bei irgendwelchen Fragen oder wenn Sie Informationen hinsichtlich des Einbausatzes brauchen, wenden Sie sich an ihren JVC Autoradiohändler oder ein Unternehmen das diese Einbausätze vertreibt.

1 Vor dem Einbau: ▲ (Schalttafel-Freigabetaste) zum Lösen der Schalttafel drücken.

2 Den Frontrahmen herausnehmen.

3 Die Halterung nach dem Entriegeln der Halterungensperren abnehmen.

(1) Das Gerät aufstellen.

Hinweis: Beim Aufstellen des Geräts darauf achten, daß die Sicherung auf der Rückseite nicht beschädigt wird.

(2) Die beiden Griffe zwischen dem Gerät und der Halterung wie abgebildet einstecken und die Halterungensperren entriegeln.

(3) Die Halterung entfernen.

Hinweis: Sicherstellen, daß die Griffe für künftigen Gebrauch nach dem Einbau des Geräts aufbewahrt werden.

4 Die Halterung im Armaturenbrett einbauen.

* Nach dem korrekten Einbau der Halterung im Armaturenbrett, die entsprechenden Riegel umknicken, um die Halterung an ihrem Platz zu sichern, siehe Abbildung.

5 Die Befestigungsschraube an der Rückseite des Gerätekörpers befestigen und das Ende der Schraube mit einem Gummipuffer abdecken.

6 Nehmen Sie die erforderlichen elektrischen Anschlüsse vor.

7 Das Gerät in die Halterung schieben, bis es einrastet.

8 Befestigen Sie die Frontrahmen in der Form, daß der Fortsatz der Frontrahmen auf der linken Seite des Geräts befestigt wird.

9 Die Schalttafel anbringen.

FRANÇAIS

• Cet appareil est conçu pour fonctionner sur des sources de courant continu de 12 volts à masse NEGATIVE.

INSTALLATION (MONTAGE DANS LE TABLEAU DE BORD)

• L'illustration suivante est un exemple d'installation typique. Cependant, vous devez faire les ajustements correspondant à votre voiture particulière. Si vous avez des questions ou avez besoin d'information sur les kits d'installation, consulter votre revendeur d'autoradios JVC ou une compagnie d'approvisionnement.

1 Avant le montage: Appuyer sur ▲ (touche de libération du panneau de commande) pour détacher le panneau de commande.

2 Retirer la plaque d'assemblage.

3 Libérer les verrous du manchon et retirer le manchon.

(1) Poser l'appareil à la verticale.

Remarque: Lorsque vous mettez l'appareil à la verticale, faire attention de ne pas endommager le fusible situé sur le fond.

(2) Insérer les 2 poignées entre l'appareil et le manchon comme indiqué pour désengagé les verrous de manchon.

(3) Retirer le manchon.

Remarque: S'assurer de garder les poignées pour une utilisation ultérieur, après l'installation de l'appareil.

4 Installer le manchon dans le tableau de bord.

* Après installation correcte du manchon dans le tableau de bord, plier les bonnes pattes pour maintenir fermement le manchon en place, comme montré.

5 Monter le boulon de montage sur l'arrière du corps de l'appareil puis passer l'amortisseur en caoutchouc sur l'extrémité du boulon.

6 Réalisez les connexions électriques.

7 Faire glisser l'appareil dans le manchon jusqu'à ce qu'il soit verrouillé.

8 Attachez la plaque d'assemblage de façon que la projection de la plaque soit fixée sur le côté gauche de l'appareil.

9 Remonter le panneau de commande.

1

2

3 Handle
Griffe
Poignée

Lock Plate
Arretierplättchen
Plaque de verrouillage

Slot
Schlitz
Fente

Fuse
Sicherung
Fusible

Sleeve
Halterung
Manchon

Dashboard
Armaturenbrett
Tableau de bord

Rubber cushion
Gummipuffer
Amortisseur en caoutchouc

Sleeve
Halterung
Manchon

184 mm

53 mm

Mounting bolt
Befestigungsschraube
Boulon de montage

4

5

7

8

9

Trim plate
Frontrahmen
Plaque d'assemblage

6 See "ELECTRICAL CONNECTIONS."
Siehe „ELEKTRISCHE ANSCHLÜSSE".
Référez-vous "RACCORDEMENTS ELECTRIQUES."

4 *

KS-FX850R/KS-FX820R/KS-FX835R

• When using the optional stay
• Beim Verwenden der Anker-Option
• Lors de l'utilisation du hauban en option

Fire wall
Feuerwand
Cloison

Stay (option)
Anker (Option)
Hauban (en option)

Washer
Unterlegscheibe
Rondelle

Lock nut
Sicherungsmutter
Ecrou d'arrêt

Dashboard
Armaturenbrett
Tableau de bord

Screw (option)
Schraube (Option)
Vis (en option)

Sleeve
Halterung
Manchon

Mounting bolt
Befestigungsschraube
Boulon de montage
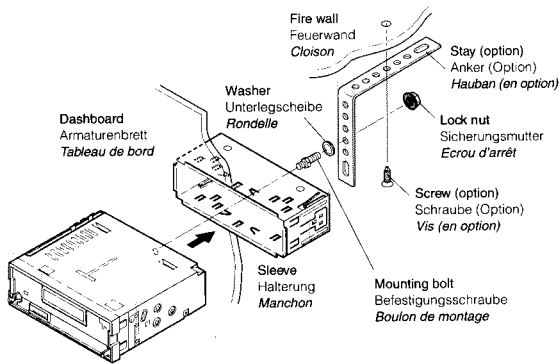
• When installing the unit without using the sleeve
• Beim Einbau des Geräts ohne Halterung
• Lors de l'installation de l'appareil scans utiliser de manchon

In a Toyota for example, first remove the car radio and install the unit in its place.
Zum Beispiel in einem Toyota zuerst das Autoradio ausbauen und dann das Gerät an seinem Platz einbauen.
Par exemple dans une Toyota, retirer d'abord l'autoradio et installer l'appareil à la place.

Flat type screws (M5 x 6 mm)*
Senkkopfschrauben (M5 x 6 mm)*
Vis à tête plate (M5 x 6 mm)*

* Not included with this unit.
* Nicht Teil dieses Geräts.
* Non fourni avec cet appareil.

Bracket*
Konsole*
Support*

Pocket
Taschen
Poche

Flat type screws (M5 x 6 mm)*
Senkkopfschrauben (M5 x 6 mm)*
Vis à tête plate (M5 x 6 mm)*

Bracket*
Konsole*
Support*
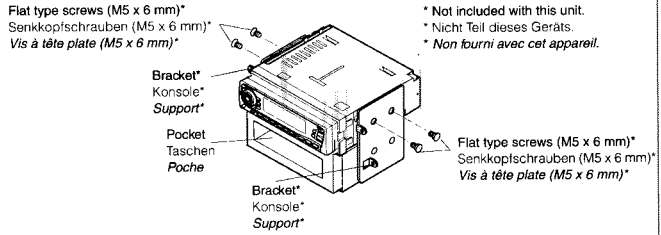
Note: When installing the unit on the mounting bracket, make sure to use the 6 mm-long screws. If longer screws are used, they could damage the unit.

Hinweis: Beim Anbringen des Gerät an der Konsole sicherstellen, daß 6 mm lange Schrauben verwendet werden. Werden längere Schrauben verwendet, können sie das Gerät beschädigen.

Remarque: Lors de l'installation de l'appareil sur le support de montage, s'assurer d'utiliser des vis d'une longueur de 6 mm. Si des vis plus longues sont utilisées, elles peuvent endommager l'appareil.

Removing the unit

• Before removing the unit, release the rear section.
1 Remove the control panel.
2 Remove the trim plate.
3 Insert the 2 handles into the slots, as shown. Then, while gently pulling the handles away from each other, slide out the unit. **(Be sure to keep the handles after installing it.)**

Ausbau des Geräts

• Vor dem Ausbau des Geräts den hinteren Teil freigeben.
1 Die Schalttafel abnehmen.
2 Den Frontrahmen abnehmen.
3 Die 2 Griffe in die Schlitze wie gezeigt stecken. Dann die Griffe behutsam auseinander ziehen und das Gerät herausziehen. **(Die Griffe nach dem Einbau auf jeden Fall aufbewahren.)**

Retrait de l'appareil

• Avant de retirer l'appareil, libérer la section arrière.
1 Retirer le panneau de commande.
2 Retirer la plaque d'assemblage.
3 Introduire les deux poignées dans les fentes, comme montré. Puis, tout en tirant doucement les poignées écartées, faire glisser l'appareil pour le sortir. **(S'assurer de conserver les poignées après l'installation de l'appareil.)**

1　　**2**　　**3**

Handle
Griff
Poignée
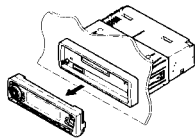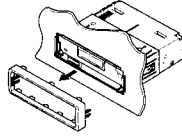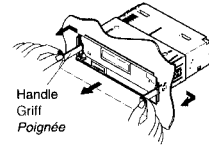
Parts list for installation and connection
The following parts are provided with this unit.
After checking them, please set them correctly.

Teileliste für den Einbau und Anschluß
Die folgenden Teile werden zusammen mit diesem Gerät geliefert.
Nach ihrer Überprüfung, die Teile richtig einsetzen.

Liste des pièces pour l'installation et raccordement
Les pièces suivantes sont fournies avec cet appareil.
Après vérification, veuillez les placer correctement.

Hard case
Etui
Etui de transport
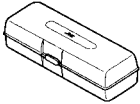
Sleeve
Halterung
Manchon
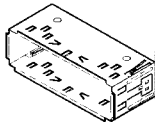
Trim plate
Frontrahmen
Plaque d'assemblage
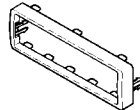
ONLY FOR KS-FX850R/KS-FX835R
NUR FÜR KS-FX850R/KS-FX835R
SEULEMENT POUR LES KS-FX850R/KS-FX835R

Battery
Batterie
Pile

Remote controller
Fernbedienung
Télécommande
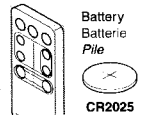
CR2025

Power cord
Spannungsversorgungskabel
Cordon d'alimentation
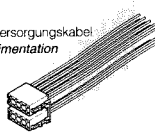
Handles
Griffe
Poignées

Washer (ø5)
Unterlegscheibe(ø5)
Rondelle (ø5)

Lock nut (M5)
Sicherungsmutter (M5)
Ecrou d'arrêt (M5)

Mounting bolt (M5 x 20 mm)
Befestigungsschrauben (M5 x 20 mm)
Boulon de montage (M5 x 20 mm)

Rubber cushion
Gummipuffer
Amortisseur en caoutchouc

ELECTRICAL CONNECTIONS

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

Note:
This unit is designed to operate on **12 volts DC, NEGATIVE ground electrical systems.** If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC IN-CAR ENTERTAINMENT dealers.

• Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC IN-CAR ENTERTAINMENT dealer.
• If noise is a problem...
This unit incorporates a noise filter in the power circuit. However, with some vehicles, clicking or other unwanted noise may occur. If this happens, connect the unit's **rear ground terminal** (see connection diagram) to the car's chassis using shorter and thicker cords, such as copper braiding or gauge wire. If noise still persists, consult your JVC IN-CAR ENTERTAINMENT dealer.
• Maximum input of the speakers should be more than 40 watts at the rear and 40 watts at the front, with an impedance of **4 to 8 ohms.**
• **Be sure to ground this unit to the car's chassis.**
• The heat sink becomes very hot after use. Be careful not to touch it when removing this unit.

Heat sink
Abstrahlblech
Dissipateur de chaleur
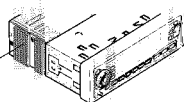
ELEKTRISCHE ANSCHLÜSSE

Zur Vermeidung von Kurzschlüssen empfehlen wir, daß Sie den negativen Batterieanschluß abtrennen und alle elektrischen Anschlüsse herstellen, bevor das Gerät eingebaut wird. Sind Sie sich über den richtigen Einbau des Geräts nicht sicher, lassen Sie es von einem qualifizierten Techniker einbauen.

Hinweis:
Dieses Gerät ist für den Betrieb in **elektrischen Anlagen mit 12 V Gleichstrom und (–) Erdung** ausgelegt. Hat Ihr Fahrzeug nicht über diese Anlage, ist ein Spannungsinverter erforderlich, der bei JVC Autoradiohändler erworben werden kann.

• Die Sicherung mit einer der entsprechenden Nennleistung ersetzen. Brennt die Sicherung häufig durch, wenden Sie sich an ihren JVC Autoradiohändler.
• Sind Störgeräusche ein Problem...
Dieses Gerät enthält ein Störfilter im Stromkreis. Bei manchen Fahrzeugen kann jedoch ein Klicken oder andere unerwünschte Störgeräusche auftreten. Sollte das der Fall sein, die **hintere Erdungscanschlußklemme** (siehe Schaltplan) des Geräts am Fahrwerk des Fahrzeugs anschließen, dabei kürzere und dickere Kabel wie beispielsweise Kupfergeflechtdraht oder Stahldraht verwenden. Bleibt Störgeräusch bestehen, wenden Sie sich an Ihren JVC Autoradiohändler.
• Maximale Eingangsleistung der Lautsprecher muß höher als 40 W hinten und 40 W vorne sein, mit einer Impedanz von **4 bis 8 Ohm.**
• **Sicherstellen, daß das Gerät am Fahrwerk geerdet wird.**
• Das Abstrahlblech wird nach dem Gebrauch sehr heiß. Beim Ausbau des Geräts darauf achten, das Abstrahlblech nicht zu berühren.

RACCORDEMENTS ELECTRIQUES

Pour éviter tout court-circuit, nous vous recommandons de débrancher la borne négative de la batterie et d'effectuer tous les raccordements électriques avant d'installer l'appareil. Si l'on n'est pas sûr de pouvoir installer correctement cet appareil, le faire installer par un technicien qualifié.

Remarque:
Cet appareil est conçu pour fonctionner sur des sources de courant continu de **12 volts à masse NEGATIVE.** Si votre véhicule n'offre pas ce type d'alimentation, il vous faut un convertisseur de tension, que vous pouvez acheter chez un revendeur d'autoradios JVC.

• Remplacer le fusible par un de la valeur précisée. Si le fusible saute souvent, consulter votre revendeur d'autoradios JVC.
• Si le bruit est un problème...
Cet appareil incorpore un filtre de bruit dans le circuit d'alimentation. Cependant, avec certains véhicules, quelques claquements ou autres bruits non désirés risquent de se produire. Si cela arrive, raccorder la **borne de masse arrière** de l'appareil au châssis de la voiture (voir le schéma de raccordement) en utilisant des cordons les plus gros et les plus courts possibles telle qu'une barre de cuivre ou une tresse. Si le bruit persiste, consulter votre revendeur d'autoradios JVC.
• La puisccance admissible des haut-parleurs doit être supérieure à 40 watts à l'arrière et à 40 watts l'avant, avec une impédance de **4 à 8 ohms.**
• **S'assurer de raccorder la mise à la masse de cet appareil au châssis de la voiture.**
• Le radiateur devient très chaud après usage. Faire attention de ne pas le toucher en retirant cet appareil.

A Typical Connections / Typische Anschlüsse / Raccordements typiques

Before connecting: Check the wiring in the vehicle carefully. Incorrect connection may cause serious damage to this unit.

1 Connect the colored leads of the power cord to the car battery, speakers and power aerial (if any) in the following sequence.
① Black: ground
② Yellow: to car battery (constant 12V)
③ Red: to an accessory terminal
④ Others: to speakers
⑤ Blue with white stripe: to power aerial (200mA max.)
⑥ Orange with white stripe (ONLY FOR KS-FX850R):
 to car light control switch
⑦ Brown: to cellular phone system (For details, refer to the instructions of the cellular phone.)

2 Connect the aerial cord.

3 Finally connect the wiring harness to the unit.

Note: If your vehicle does not have any accessory terminal, move the fuse from the fuse position 1 (initial position) to fuse position 2, and connect the red lead (A7) to the positive (+) battery terminal.
• The yellow lead (A4) is not used in this case.

Vor dem Anschließen: Die Verdrahtung im Fahrzeug sorgfältig überprüfen. Falsche Anschlüsse können ernsthafte Schäden am Gerät hervorrufen.

1 Die farbigen Leitungen des Spannunsgversorgungskabels an der Autobatterie, den Lautsprechern und dem Motorantenne (sofern vorhanden) in folgender Reihenfolge anschließen.
① Schwarz: Erdung
② Gelb: an autobatterie (konstant 12 V)
③ Rot: an Zubehöranschlußklemme
④ Andere: an Lautsprecher
⑤ Blau mit weißem Streifen: an Motorantenne (max. 200 mA)
⑥ Orange mit weißem Streifen (NUR FÜR KS-FX850R): zum Autolichtschalter
⑦ Braun: an Mobiltelefon (Weitere informationen entnehmen Sie bitte der Bedienungscanleitung des Mobiltelefons.)

2 Das Antennenkabel anschließen.

3 Die Kabelbäume am Gerät anschließen.

Hinweis: Verfügt Ihr Fahrzeug nicht über eine Zubehöranschlußklemme, die Sicherung von der 1. Sicherungsposition (Erstposition) in die 2. Sicherungsposition versetzen, die rote Leitung (A7) an der (+) Batterieanschlußklemme anschließen.
• Die gelbe Leitung (A4) wird in diesem Fall nicht verwendet.

Avant de commencer la connexion: vérifiez attentivement le câblage du véhicule. Une connexion incorrecte peut endommager sérieusement l'appareil.

1 Connectez les fils de couleur du cordon d'alimentation à la batterie de la voiture, aux enceintes et à l'antenne automatique (s'il y en a une) dans l'ordre suivant.
① Noir: a la masse
② Jaune: a la batterie de la voiture (12V constant)
③ Rouge: à la prise accessoire
④ Autres: aux enceintes
⑤ Bleu à bandes blanches: à l'antenne automatique (200 mA max.)
⑥ Orange à bandes blanches (SEULEMENT POUR LE KS-FX850R): à l'interrupteur d'éclairage de la voiture
⑦ Marron: à un système de téléphone cellulaire (Pour les détails, se référer aux instructions du téléphone cellulaire.)

2 Connectez le cordon d'antenne.

3 Finalement, connectez le faisceau de fils à l'appareil.

Remarque: Si votre véhicule ne possède pas de borne accessoire, déplacez le fusible de la position de fusible 1 (position originale) à la position de fusible 2 et connectez le fil rouge (A7) à la borne positive (+) de la batterie.
• Le fil jaune (A4) n'est pas utilisé dans ce cas.

Fuse position 2
2. Sicherungsposition
Position de fusible 2
Fuse position 1
1. Sicherungsposition
Position de fusible 1

CD changer or another external component
CD-Wechsler oder eine andere externe Komponente.
Changeur CD JVC ou autre appareil extérieur

When connecting a CD changer, we recommend to use one of the CH-X series CD changers.
• If your CD changer is one of the KD-MK series, you need an optional cord (KS-U15K).
You can also use an external component such as a portable MD player by connecting the Line Input Adaptor KS-U57 (not supplied). (See diagram **B**.)
Wenn Sie einen CD-Wechsler anschließen möchten, empfiehlt es sich, einen CD-Wechsler der Modellreihe CH-X zu verwenden.
• Wenn Ihr CD-Wechsler zur Modellreihe KD-MK gehören, benötigen Sie ein anderes Kabel (KS-U15K).
Sie können auch eine externe Komponente, z.B. einen tragbaren MD-Spieler, verwenden, wenn Sie den (nicht zum Lieferumfang gehörenden) Line-Eingangsadapter KS-U57 anschließen (siehe Diagramm **B**)
Lors de la connexion d'un changeur CD, nous vous recommandons d'utiliser un des changeurs CD de la série CH-X.
• Si votre changeur appartient à la série KD-MK, vous avez besoin d'un cordon optionnel (KS-U15K).
Vous pouvez aussi utiliser un appareil extérieur tel qu'un lecteur de MD en connectant l'adaptateur d'entrée de ligne KS-U57 (non fourni) (voir le diagramme **B**).

Rear ground terminal
Hintere Erdungscanschlußklemme
Borne arrière de masse

Aerial terminal
Antennenanschlußklemme
Borne de l'antenne

10A fuse
10A Sicherung
Fusible 10A

Line out
(see diagram **B**)
Ausgang (line-out)
(siehe schaltplan **B**)
*Sortie de ligne
(voir le diagramme **B**)*

To aerial
Zur Antenne
A l'antenne

★ Not included with this unit.
Wird nicht mit Gerät mitgeliefert.
Non fourni avec cet appareil.

Ignition switch
Zündschalter
Interrupteur d'allumage

Black
Schwarz (A8)
Noir

To metallic body or chassis of the car
Zur metallenen Karosserie oder zum Fahrwerk des Autos
Vers corps métallique ou châssis de la voiture

Yellow*1
Gelb*1 (A4)
Jaune*1

To a live terminal in the fuse block connecting to the car battery (bypassing the ignition swich)
Zur einer stromführenden Anschlußklemme im Sicherungsblock zum Anschließen an die Autobatterie (Umgehen des Zündschalters)
A une borne sous tension du porte-fusible connectée à la batterie de la voiture (en dérivant l'interrupteur d'allumage)

Red
Rot (A7)
Rouge

To an accessory terminal in the fuse block
Zur einer Zubehöranschlußklemme im Sicherungsblock
Vers borne accessoire du porte-fusible

Blue with white stripe
Blau mit weißem Streifen (A5)
Bleu avec bande blanche

To power aerial if any
Zur Motorantenne, sofern vorhanden
Vers borne d'antenne automatique s'il y en a une

Orange with white stripe
Orange mit weißem Streifen (A6)
Orange avec bande blanche

(ILLUMINATION)

To car light control switch (ONLY FOR KS-FX850R)
Zum Autolichtschalter (NUR FÜR KS-FX850R)
À l'interrupteur d'éclairage de la voiture (SEULEMENT POUR LE KS-FX850R)

Brown / Braun / Marron (A2)

To cellular phone system
Zur Mobiltelephon
À un système de téléphone cellulaire

Fuse block
Sicherungsblock
Porte-fusible

*1: Before checking the operation of this unit prior to installation, this lead must be connected, otherwise power cannot be turned on.
*1: Vor der Überprüfung der Funktionsfähigkeit des Geräts vor dem Einbau, muß diese Leitung angeschlossen werden, da sonst die Stromversorgung nicht eingeschaltet werden kann.
*1: Pour vérifier le fonctionnement de cet appareil avant installation, ce fil doit être raccordé, sinon l'appareil ne peut pas être mis sous tension.

(B6) (B5) ④ (B4) (B3) (B8) (B7) (B2) (B1)

White with black stripe — White
Weiß mit schwarzem (-) (+) Weiß
Streifen
Blanc avec bande noire *Blanc*

Left speaker (front)
Linker Lautsprecher (vorne)
Haut-parleur gauche (avant)

Gray with black stripe — Gray
Grau mit schwarzem (-) (+) Grau
Streifen
Gris avec bande noire *Gris*

Right speaker (front)
Rechter Lautsprecher (vorne)
Haut-parleur droit (avant)

Green with black stripe — Green
Grün mit schwarzem (-) (+) Grün
Streifen
Vert avec bande noire *Vert*

Left speaker (rear)
Linker Lautsprecher (hinten)
Haut-parleur gauche (arrière)

Purple with black stripe — Purple
Lila mit schwarzem Streifen (-) (+) Lila
Violet avec bande noire *Violet*

Right speaker (rear)
Rechter Lautsprecher (hinten)
Haut-parleur droit (arrière)

PRECAUTIONS on power supply and speaker connections:

• **DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the unit will be seriously damaged.**
• Connect the black lead (ground), yellow lead (to car battery, constant 12V), and red lead (to an accessory terminal) correctly.
• BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car.
 – **If the speaker wiring in your car is as illustrated in Fig. 1 and Fig. 2 below,** DO NOT connect the unit using that original speaker wiring. If you do, the unit will be seriously damaged. Redo the speaker wiring so that you can connect the unit to the speakers as illustrated in Fig. 3.
 – **If the speaker wiring in your car is as illustrated in Fig. 3,** you can connect the unit using the original speaker wiring in your car.
 – If you are not sure of the speaker wiring of your car, consult your car dealer.
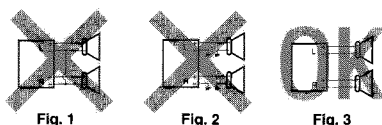
VORSICHTSMASSREGELN beim Anschließen der Stromversorgung und Lautsprecher:

• **Die Lautsprecherleitungen des Netzkabels NICHT an der Autobatterie anschließen, da sonst das Gerät schwer beschädigt wird.**
• Die schwarze Leitung (Erdung), die gelbe Leitung (zur Autobatterie, konstant 12 V) und die rote Leitung (zur Zubehöranschlußklemme) richtig anschließen.
• VOR dem Anschließen der Lautsprecherleitungen des Spannungsversorgungskabels an die Lautsprecher, die Lautsprecherverdrahtung in Ihrem Auto überprüfen.
 – **Ist die Lautsprecherverdrahtung wie unten in "Fig. 1" und "Fig. 2" abgebildet,** das Gerät NICHT mit der Originalverdrahtung der Lautsprecher anschließen, da sonst das Gerät schwer beschädigt wird.
 Die Lautsprecherverdrahtung erneuern, so daß Sie das Gerät an den Lautsprechern wie in "Fig. 3" abgebildet anschließen können.
 – **Ist die Lautsprecherverdrahtung in Ihrem Auto wie in "Fig. 3" abgebildet,** können Sie das Gerät mit der Originalverdrahtung der Lautsprecher in Ihrem Auto anschließen.
 – Sind Sie sich über die Lautsprecherverdrahtung in Ihrem Auto nicht sicher, wenden Sie sich an Ihren Autohändler.

PRECAUTIONS sur l'alimentation et la connexion des enceintes:

• **NE CONNECTEZ PAS les fils d'enceintes du cordon d'alimentation à la batterie; sinon, l'appareil serait sérieusement endommagé.**
• Connectez correctement le fil noir (a la masse), le fil jaune (a la batterie de la voiture, 12V constant) et le fil rouge (à la prise accessoire).
• AVANT de connecter les fils d'enceintes du cordon d'alimentation aux enceintes, vérifiez le câblage des enceintes de votre voiture.
 – Si le câblage des enceintes de votre voiture est réalisé comme montré sur la Fig. 1 ou Fig. 2 ci-dessous, NE CONNECTEZ PAS l'appareil en utilisant ce câblage original d'enceintes. Si vous le faites, l'appareil sera sérieusement endommagé.
 Recommencez le câblage des enceintes de façon que vous puissiez connecter l'appareil aux enceintes comme montré sur la Fig. 3.
 – Si le câblage des enceintes de votre voiture est comme montré sur la Fig. 3, vous pouvez connecter l'appareil en utilisant ce câblage original d'enceintes pour votre voiture.
 – Si vous n'êtes pas sûrs du câblage d'enceintes de votre voiture, consulter le concessionnaire de votre voiture.

Fig. 1   Fig. 2   Fig. 3

KS-FX850R/KS-FX820R/KS-FX835R

Connecting the leads / Anschließen der Leitungen / Raccordement des fils

Twist the core wires when connecting.
Die Kerndrähte beim Anschließen verdrehen.
Torsader les âmes des fils en les raccordant.
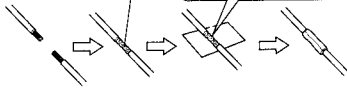
Solder the core wires to connect them securely.
Die Kerndrähte anlöten, um sie fest anzuschließen.
Souder les âmes des fils pour les raccorder entre eux de façon sûre.

CAUTION / VORSICHT/ PRECAUTION:
- To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape.
- Zur Vermeidung eines Kurzschlusses die Anschlußklemmen der NICHT VERWENDETEN Leitungen mit Isolierklebeband umwickeln.
- Pour éviter les court-circuits, couvrir les bornes des fils qui ne sont PAS utilisés avec de la bande isolante
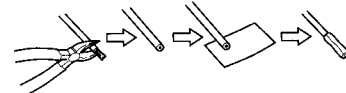
B Connections Adding Other Equipment / Anschlüsse zum Hinzufügen von anderer Ausrüstung / Raccordement pour ajouter d'autres appareils

Amplifier / Verstärker / Amplificateur

You can connect an amplifier and other equipment to upgrade your car stereo system.
- Connect the remote lead (blue with white stripe) to the remote lead of the other equipment so that it can be controlled through this unit.
- For amplifier only:
  - Connect this unit's line-out terminals to the amplifier's line-in terminals.
  - **Disconnect the speakers from this unit, connect them to the amplifier. Leave the speaker leads of this unit unused. (Cover the terminals of these unused leads with insulating tape, as illustrated above.)**

Sie können einen Verstärker oder ein anderes Gerät anschließen, um Ihre Autostereoanlage zu erweitern.
- Schließen Sie das Fernbedienungskabel (blau mit weißem Streifen) an das Fernbedienungskabel des anderen Geräts an, so daß es über dieses Gerät gesteuert werden kann.
- Nur für den Verstärker:
  - Die Anschlußklemmen am Ausgang dieses Gerät an den Anschlußklemmen des Eingangs des Verstärkers anschließen.
  - Die Lautsprecher von diesem Gerät abtrennen und am Verstärker anschließen. Die Lautsprecherleitungen dieses Geräts unbenutzt lassen. (Die Anschlußklemmen dieser nicht verwendeten Leitungen mit Isolierband umwickeln, siehe Abb. oben.)

Vous pouvez connecter un amplificateur ou autre appareil pour améliorer votre système autoradio.
- *Connectez le fil de commande à distance (bleu avec bande blanche) au fil de commande à distance de l'autre appareil de façon qu'il puisse être commandé via cet appareil.*
- *Pour l'amplificateur seulement:*
  - *Raccorder les bornes de sortie ligne de cet appareil aux bornes d'entrée ligne de l'amplificateur.*
  - *Déconnectez les enceintes de cet appareil et connectez-les à l'amplificateur. Laissez les fils d'enceintes de cet appareil inutilisés. (Recouvrir les extrémités de ces fils inutilisés avec de la bande isolante comme montré ci-dessus.)*

Rear speakers / Hintere Lautsprecher / *Haut-parleur arrière*

Blue with white stripe / Blau mit weißem Streifen / *Bleu avec bande blanche*

Y-connector (not supplied with this unit) / Y-Anschluß (nicht mitgeliefert) / *Connecteur Y (non fourni avec cet appareil)*

JVC Amplifier / JVC Verstärker / *JVC Amplificateur*

Remote lead (Blue with white stripe) / Fernbedienungsleitung (Blau mit weißem Streifen) / *Fil d'alimentation à distance (Bleu avec bande blanche)*

Signal cord (not supplied with this unit) / Einzelleitung (nicht mit diesem Gerät mitgeliefert) / *Cordon de signal (non fourni avec cet appareil)*

To power aerial if any / Zur Motorantenne, sofern vorhanden / *Vers l'antenne automatique, s'il y en a une*

Front speakers / Vordere Lautsprecher / *Haut-parleur avant*

KS-FX850R
KS-FX835R
KS-FX820R

Front speakers / Vordere Lautsprecher / *Haut-parleur avant*

JVC Amplifier / JVC Verstärker / *JVC Amplificateur*

Front speakers / Vordere Lautsprecher / *Haut-parleur avant*

You can connect another power amplifier for front speakers.
Sie können einen anderen Leistungsverstärker für die vorderen Lautsprecher anschließen.
Vous pouvez connecter un autre amplificateur de puissance pour les enceintes avant.

CD changer and DAB tuner / CD-Wechsler und DAB-Tuner / Changeur CD et tuner DAB

You can connect a JVC CD changer and/or a JVC DAB (Digital Audio Broadcasting) tuner.
- For their connections, refer to the instructions supplied with them.

Sie können einen CD-Wechsler und/oder einen DAB-Tuner (Tuner für digitalen Rundfunk) von JVC anschließen.
- Weitere Informationen über den Anschluß können Sie der Bedienungsanleitung entnehmen, die dem jeweiligen Gerät beiliegt.

Vous pouvez connecter un changeur CD JVC et/ou un tuner DAB (Digital Audio Broadcast) JVC.
- *Pour leurs connexions, référez-vous aux modes d'emploi qui les accompagnent.*

Connecting cord supplied with your DAB tuner
Verbindungskabel, das zum Lieferumfang des DAB-Tuners gehört
Cordon de connexion fourni avec votre tuner DAB

Connecting cord supplied with your CD changer
Verbindungskabel, das zum Lieferumfang des CD-Wechsler gehört
Cordon de connexion fourni avec votre changeur CD

Connecting cord supplied with your DAB tuner or CD changer
Verbindungskabel, das zum Lieferumfang des DAB-Tuners oder CD-Wechslers gehört
Cordon de connexion fourni avec votre tuner DAB ou changeur CD

JVC DAB tuner / DAB-Tuner von JVC / *Tuner DAB JVC*

JVC CD changer / CD-Wechsler von JVC / *Changeur CD JVC*

KS-FX850R
KS-FX835R
KS-FX820R

JVC DAB tuner / DAB-Tuner von JVC / *Tuner DAB JVC*

or / oder / ou

JVC CD changer / CD-Wechsler von JVC / *Changeur CD JVC*

KS-FX850R
KS-FX835R
KS-FX820R
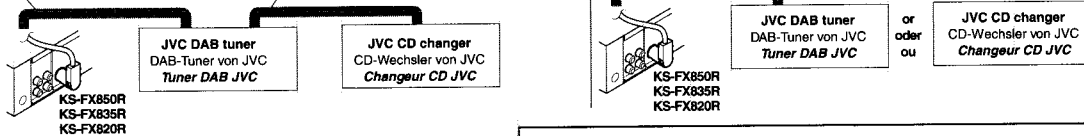
- You can connect both components in series as illustrated above.
- Es ist möglich, beide Komponenten in einer Serienschaltung entsprechend der obigen Darstellung anzuschließen.
- *Vous pouvez connecter les deux appareils en série comme montré ci-dessus.*

CAUTION / VORSICHT / PRECAUTION:
- Before connecting the CD changer and/or the DAB tuner, make sure that the unit is turned off.
- Bevor Sie den CD-Wechsler und/oder den DAB-Tuner anschließen, vergewissern Sie sich, daß das Gerät ausgeschaltet ist.
- Avant de connecter le changeur CD et/ou le tuner DAB, s'assurer que l'unité est éteinte.

External component / Externe Komponente / Appareil extérieur

KS-FX850R/KS-FX835R/KS-FX820R

CD changer jack
Buchse für CD-Wechsler
Prise du changeur CD

Line Input Adaptor KS-U57 (not supplied with this unit)
Line-Eingangsadapter KS-U57 (nicht mit diesem Gerät mitgeliefert)
Adaptateur d'entrée de ligne KS-U57 (non fourni avec cet appareil)

Signal cord (not supplied with this unit)
Einzelleitung (nicht mit diesem Gerät mitgeliefert)
Cordon de signal (non fourni avec cet appareil)

External component
Externe Komponente
Appareil extérieur

TROUBLESHOOTING

- **The fuse blows.**
  * Are the red and black leads connected correctly?
- **Power cannot be turned on.**
  * Is the yellow lead connected?
- **No sound from the speakers.**
  * Is the speaker output lead short-circuited?
- **Sound is distorted.**
  * Is the speaker output lead grounded?
  * Are the "–" terminals of L and R speakers grounded in common?
- **Unit becomes hot.**
  * Is the speaker output lead grounded?
  * Are the "–" terminals of L and R speakers grounded in common?

FEHLERSUCHE

- **Die Sicherung brennt durch.**
  * Sind die roten und schwarzen Leitungen richtig angeschlossen?
- **Stromversorgung kann nicht eingeschaltet werden.**
  * Ist die gelbe Leitung angeschlossen?
- **Kein Ton aus den Lautsprechern.**
  * Ist die Lautsprecherausgangsleitung kurzgeschlossen?
- **Ton verzerrt.**
  * Ist die Lautsprecherausgangsleitung geerdet?
  * Sind die (–) Anschlußklemmen der linken und rechten Lautsprecher zusammen geerdet?
- **Gerät wird heiß.**
  * Ist die Lautsprecherausgangsleitung geerdet?
  * Sind die (–) Anschlußklemmen der linken und rechten Lautsprecher zusammen geerdet?

EN CAS DE DIFFICULTÉS

- **Le fusible saute.**
  * *Les fils rouge et noir sont-ils racordés correctement?*
- **L'appareil ne peut pas être mise sous tension.**
  * *Le fil jaune est-elle raccordée?*
- **Pas de son des haut-parleurs.**
  * *Le fil de sortie de haut-parleur est-il court-circuité?*
- **Le son est déformé.**
  * *Le fil de sortie de haut-parleur est-il à la masse?*
  * *Les bornes "–" des haut-parleurs gauche et droit sont-elles mises ensemble à la masse?*
- **L'appareil devient chaud.**
  * *Le fil de sortie de haut-parleur est-il à la masse?*
  * *Les bornes "–" des haut-parleurs gauche et droit sont-elles mises ensemble à la masse?*

Disassembly method

■ Removing the front panel unit
(See Fig.1)

1. Press the release switch and remove the front panel unit in the direction of the arrow.
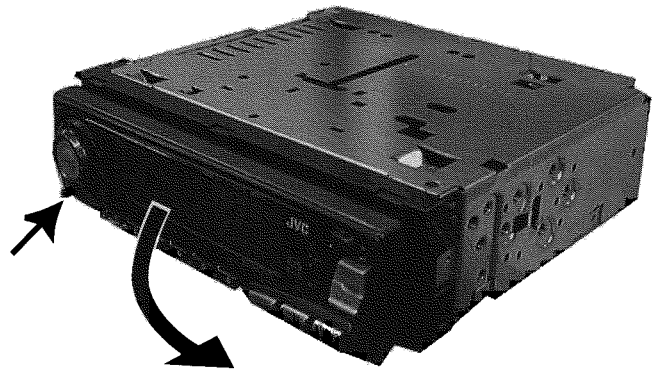
Fig.1

■ Removing the front chassis (See Fig.2~3)

1. Remove the two screws **A** attaching the front chassis.

2. Insert a screwdriver to the two joints **a** on the side of the front chassis, two joints **b** on the right side and one joint **c** from upside, then detach the front chassis toward the front side.

A   Fig.2

Front chassis
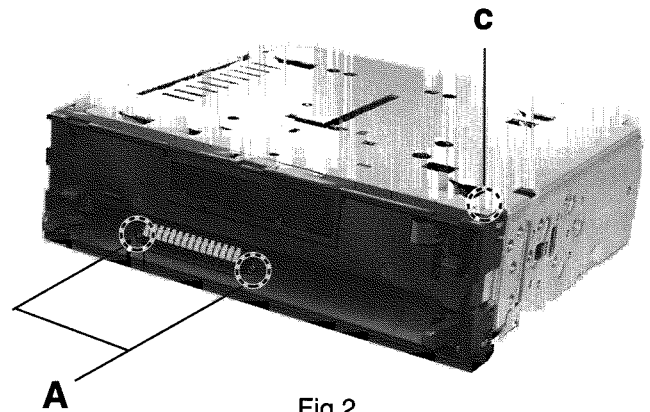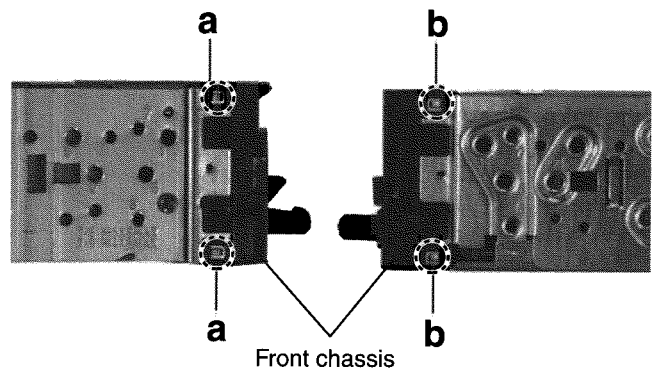
Fig. 3

■ Removing the heat sink (See Fig.4)

1. Remove the three screws **B** attaching the heat sink on the left side of the body, and remove the heat sink.

Heat sink
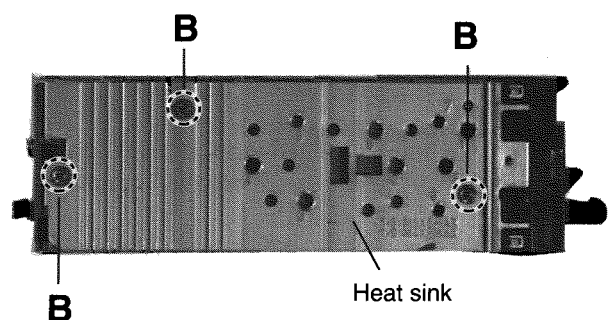
Fig. 4

■ Removing the bottom cover (See Fig.5)

1. Turn the body upside down.

2. Insert a screwdriver to the two joints **d** and two joints **e** on both sides of the body and the joint **f** on the back of the body, then detach the bottom cover from the body.
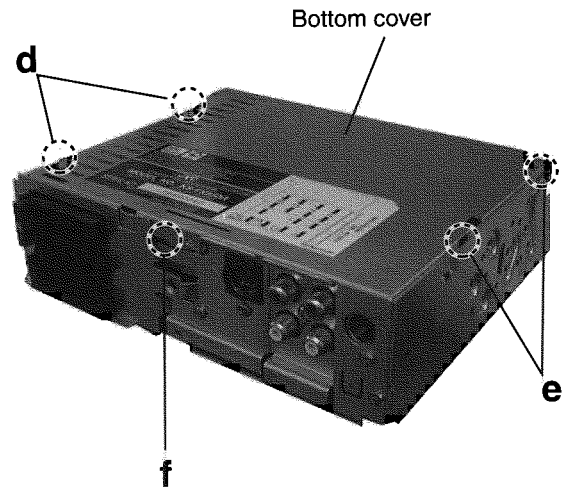
Bottom cover

Fig. 5

■ Removing the rear panel (See Fig.6)

1. Remoe the front chassis.

2. Remove the heat sink.

3. Remove the bottom cover.

4. Remove the five screws **B** attaching the rear panel and one screw **C** attaching the pine jack on the back of the body.
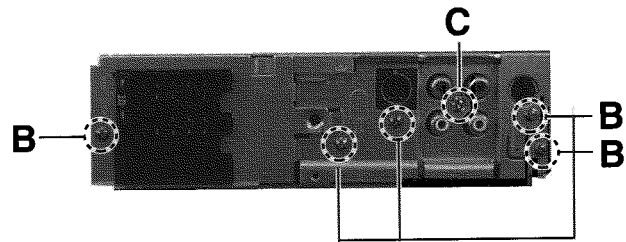
Fig. 6

■ Removing the main amplifier board assembly   (See Fig.7)

1. Remove the front chassis.

2. Remove the bottom cover.

3. Remove the rear panel.

4. Remove the two screws **D** attaching the main amplifier board assembly on the top cover.

5. Disconnect connector CP701 on the main amplifier board assembly from the cassette mechanism assembly.

Main board assembly

CP701
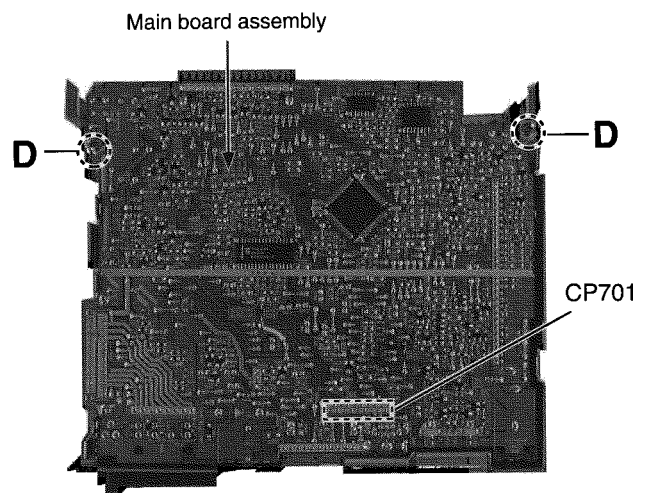
Fig. 7

■ Removing the Cassette mechanism assembly (See Fig.8)

1. Remove the front chassis.

2. Remove the bottom cover.

3. Remove the main amplifier board assembly.

4. Remove the fore screws **F** attaching the cassette mechanism assembly from the top cover.

Cassette mechanism assembly

Fig. 8

Top cover
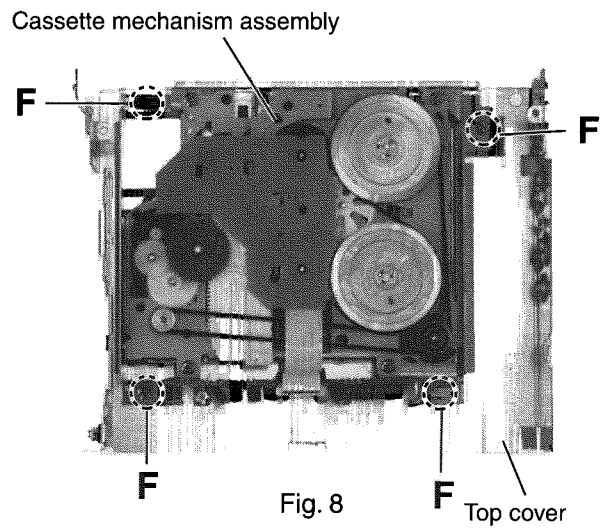
■ Removing the control switch board (See Fig.9 and 10)

1. Remove the front panel unit from the main body.

2. Remove the five screws **G** attaching the rear cover on the back of the front panel unit.

3. Remove the control switch board from the front panel unit.

Fig. 9

LCD & Key control board

Fig. 10

<Removal of the cassette mechanism>
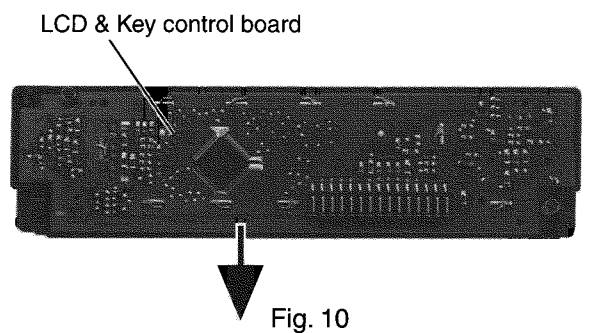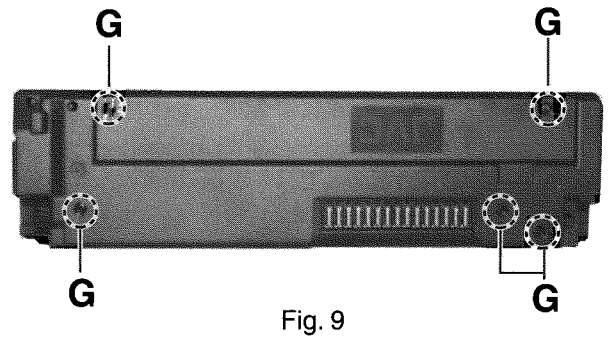
■ Removing the mecha control P.W.B.
(See Fig.1 and 2)

1. For the 6pin harness extending from connector CN402 on the mecha control P.W.B, disconnect it from the head relay P.W.B.

2. Disconnect the card wire from connector CN403 on the mecha control P.W.B.

3. Remove the screw A attaching the mecha control P.W.B.

4. Move the tab a as shown in Fig.2 and remove the mecha control P.W.B. while moving it in the direction of the arrow.
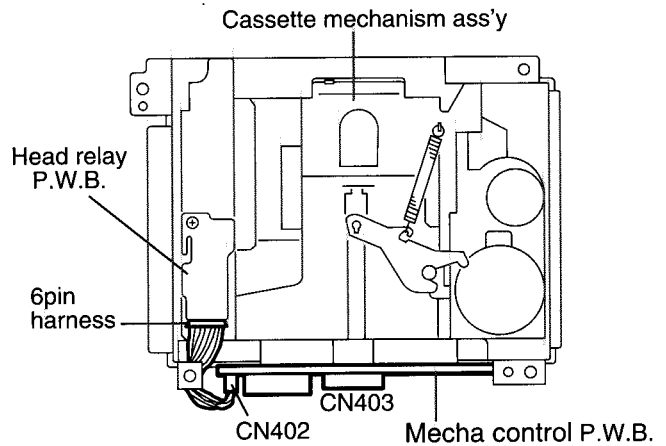
■ Removing the cassette mechanism assembly (See Fig.1 to 3)

1. Disconnect the 6pin harness from connector CN402 and the card wire from CN403 on the mecha control P.W.B. (Refer to Fig.1 and 2).

2. Remove the four screws B on the bottom of the cassette mechanism.

Fig.1
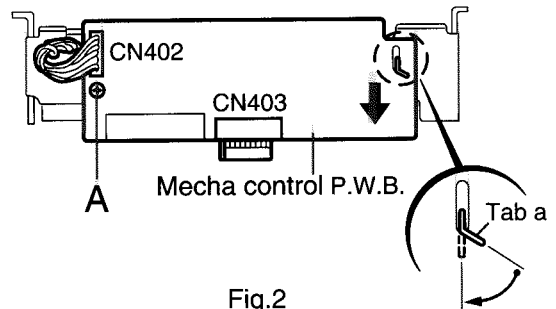
Fig.2
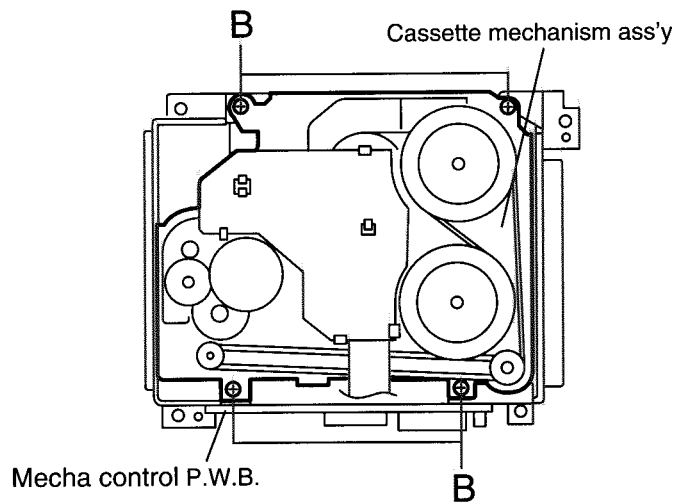
Fig.3

■Removing the head relay P.W.B.
(See Fig.4)

1. Unsolder the soldering b on the head relay P.W.B.

2. Remove the screw C attaching the head relay P.W.B.

3. Remove the head relay P.W.B. in the direction of the arrow while releasing the two joints c.

Fig.4
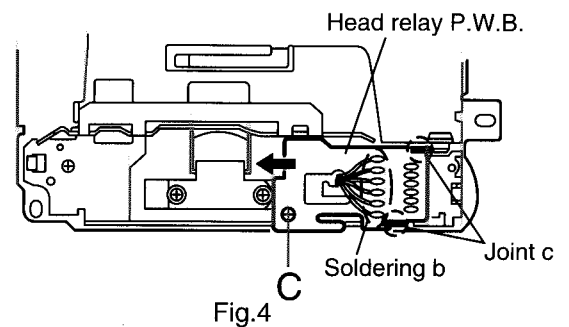
■Removing the load arm (See Fig.5)

1. Remove the E washer attaching the load arm using a pincette or something like that and remove the spring d.

2. Move the part of the load arm marked ※ upwards to release it from the axis of rotation. Then rotate the load arm in the direction of the arrow to remove it from the cach.

Fig.5
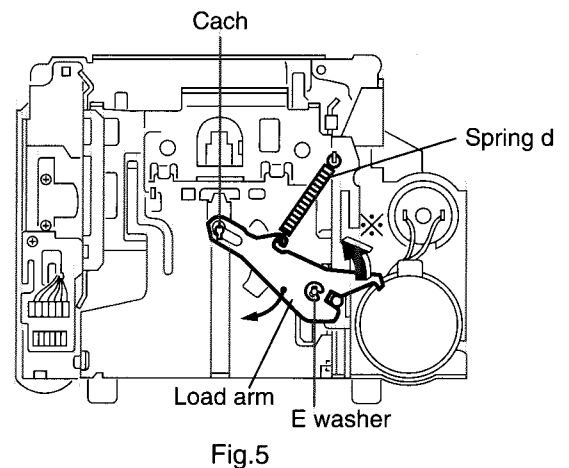
■Removing the sub chassis (See Fig.6)

* Prior to performing the following procedure, remove the head relay P.W.B.

1. Remove the screw D attaching the sub chassis.

2. Push the tab e in the direction of the arrow to detach the one side of the sub chassis. Then release the sub chassis from the tab f.

Fig.6
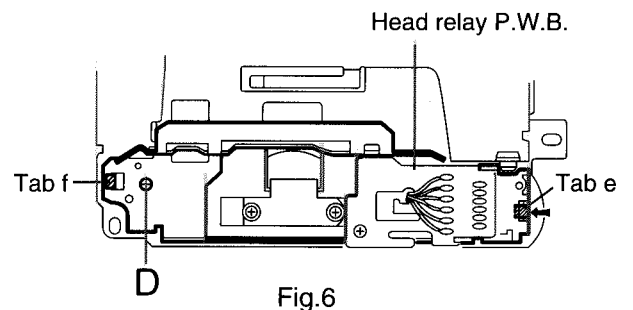
■Removing the cassette holder and the holder arm in the eject mode
(See Fig.7 and 8)

* Prior to performing the following procedure, remove the head relay P.W.B., the load arm and the sub chassis.

1. Remove the screw E attaching the reinforce bracket.

2. Remove the reinforce bracket.

3. Push the tab g fixing the cassette holder in the direction of the arrow and open the cassette holder and the holder arm upward until they stop at an angle of 45 degrees. Move the two joints h to the side and remove the cassette holder and the holder arm from the shaft.

Fig.7
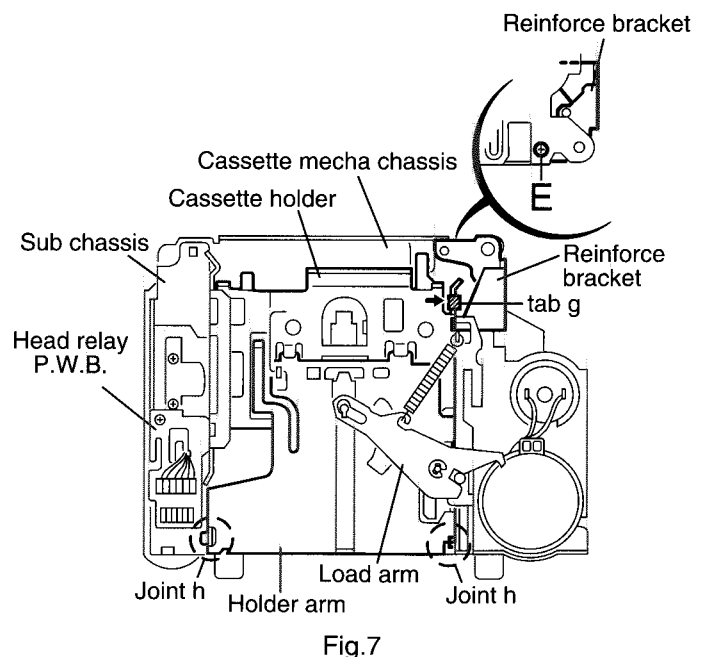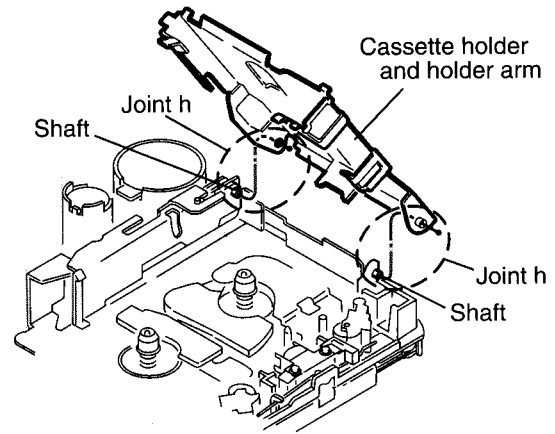
Fig.8

■Removing the play head (See Fig.9)

* Prior to performing the following procedure, remove the head relay P.W.B.and the sub chassis.

1. Remove the two screws F attaching the play head (The spring under the play head comes off at the same time).
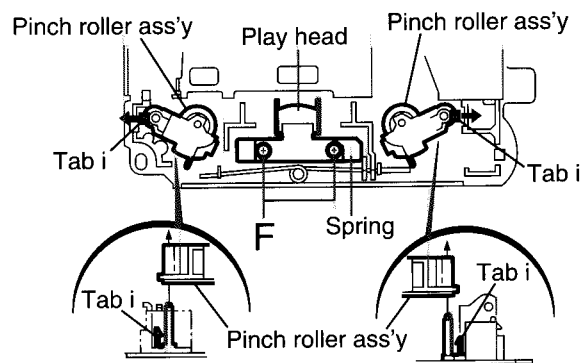
■Removing the pinch roller ass'y (See Fig.9)

* Prior to performing the following procedure, remove the head relay P.W.B.and the sub chassis.

1. Push each tab i in the direction of the arrow and pull out the pinch rollers on both sides.

Fig.9

■Removing the reel disc P.W.B. (See Fig.10)

1. Unsolder the soldering j on the reel disc P.W.B.

2. Push the seven tabs k on the bottom of the cassette mechanism assembly in the direction of the arrow.
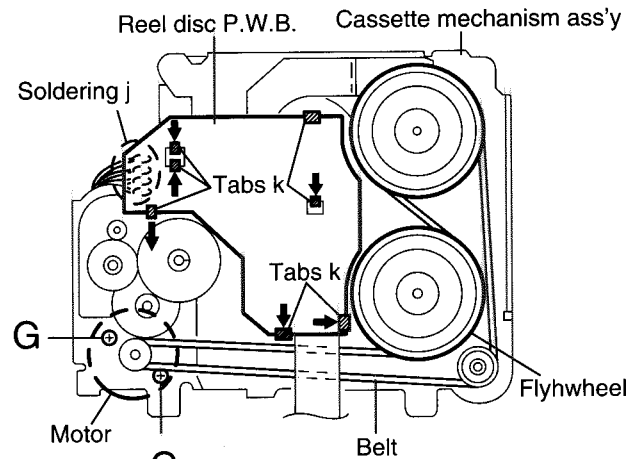
Fig.10

■Removing the motor and the sub motor (See Fig.10 and 11)

1. Unsolder the two soldering l of the motor and the sub motor.

2. Release the sub motor from the three tabs m. Push the sub motor upward and pull out it.

3. Remove the belt on the bottom of the cassette mechanism assembly and remove the two screws G attaching the motor.

ATTENTION: The motors can be detached before removing the load arm.

Fig.11

2-6
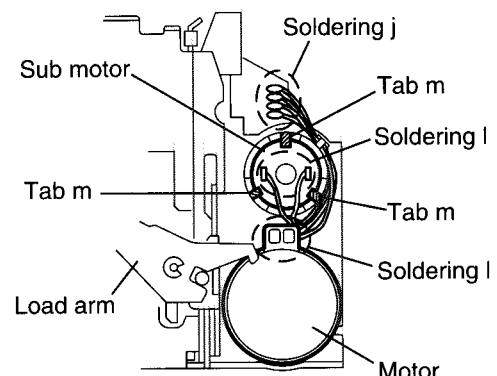
■ Removing the flywheel
(See Fig.10 and 12)

1. Prior to performing the following procedure, remove the head relay P.W.B, the load arm, the sub chassis, the cassette holder, the holder arm and the reel disc P.W.B.

2. Remove the belt on the bottom of the cassette mechanism ass'y.

3. Remove the slit washer attaching the flywheel on the upper side of the cassette mechanism ass'y and pull out the flywheel downward. Then remove another flywheel in the same way.
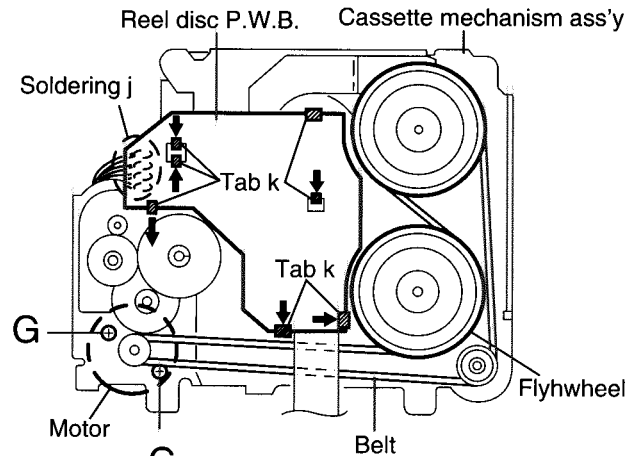
ATTENTION: When reassembling, make sure to use a new slit washer.

■ Removing the reel disc ass'y(I)
(See Fig.12 to 14)

* Prior to performing the following procedure, remove the head relay P.W.B, the load arm, the sub chassis, the cassette holder and the holder arm.

1. Disengage the part n inside of the reel driver which engages with the shaft, using a pincette or something like that. Then remove the reel driver from the shaft.

2. Remove the reel driver spring and the reel table.

Fig.10
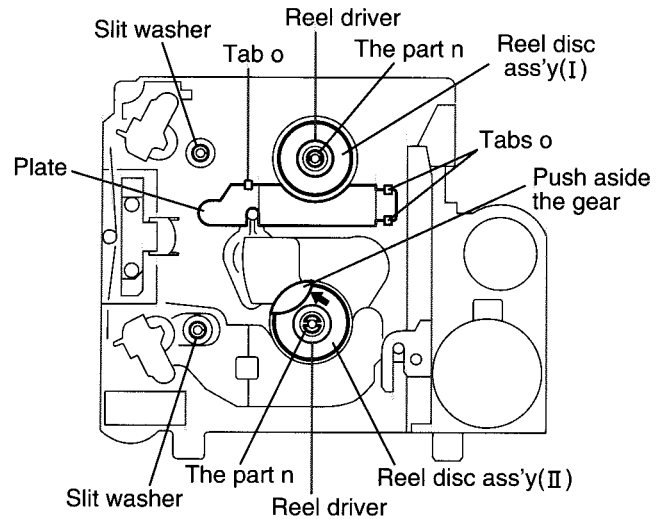
Fig.12
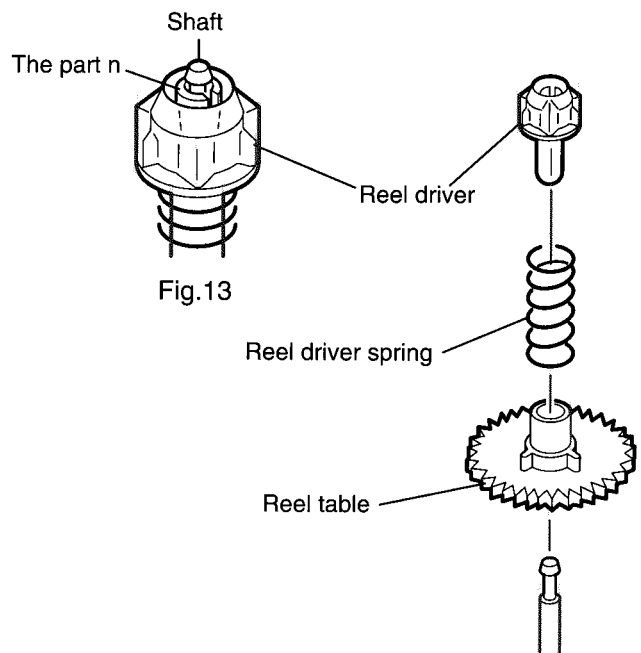
Fig.13

Fig.14

Adjustment method

■Test instruments required for adjustment

1. Digital oscilloscope(100MHz)
2. Frequency Counter meter
3. Electric voltmeter
4. Wow & flutter meter
5. Test Tapes

    MC-109C .... For TAPA CURL confirmation
    (without Padd type)
    VT724 .... For DOLBY level measurement
    VT739 .... For playback frequency measurement
    VT712 .... For wow flutter & tape speed measurement
    VT703 .... For head azimuth measurement

6. Torque gauge .... Cassette type for CTG-N
    (mechanism adjustment)

■ Measuring conditions(Amplifier section)

    Power supply voltage .... DC14.4V (10.5 - 16V)
    Load impedance .... 4Ω (2Speakers connection)
    Line out 20kΩ

■Standard volume position

Balance and Bass,Treble volume .Fader
:Center(Indication"0")
Loudness,Dolby NR,Sound,Cruise:Off

following conditions. Playback the test tape VT721.

AM mode	999kHz/62dB,INT/400Hz,30% modulation signal on receiving.
FM mono mode	97.5MHz/66dB,INT/400Hz,22.5kHz deviation pilot off mono
FM stereo mode	1kHz,67.5kHz dev. pilot7.5kHz dev.
Output level	0dB(1 μV,50Ω/open terminal)

■ Arrangement of adjusting & test points

Cassette mechanism
(Surface)

2-9

Motor assembly

Tape speed adjust

Azimuth screw A
(Forward)

Playback head

Azimuth screw B
(Reverse)

Head section view

Azimuth screw B
(Reverse)

Azimuth screw A
(Forward)

Playback Head

KS-FX850R/KS-FX820R/KS-FX835R
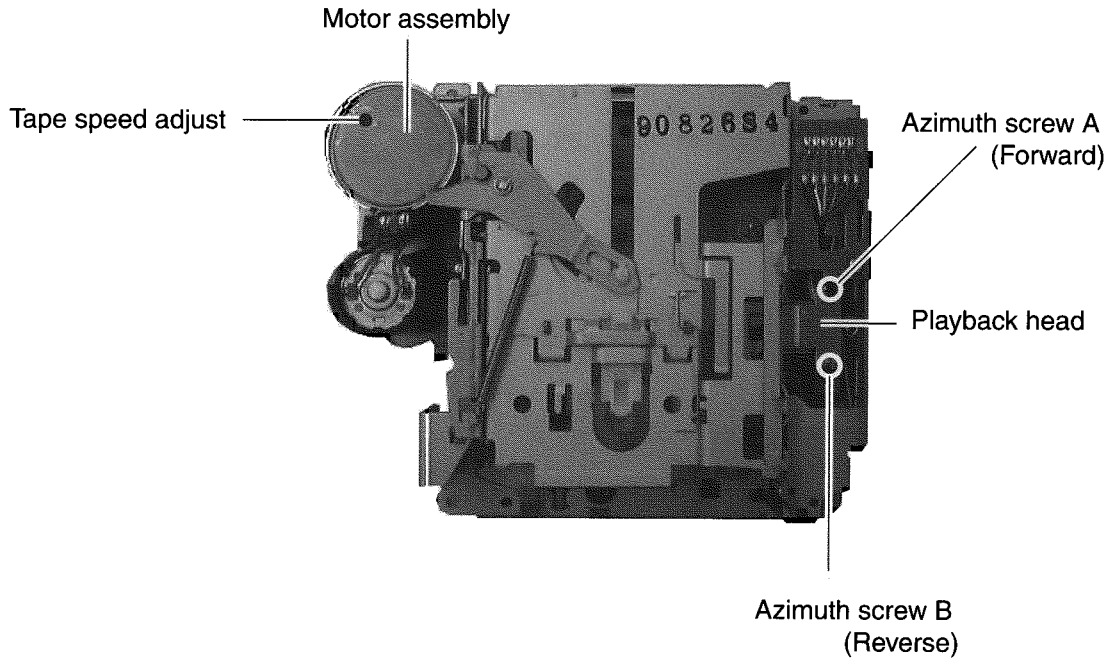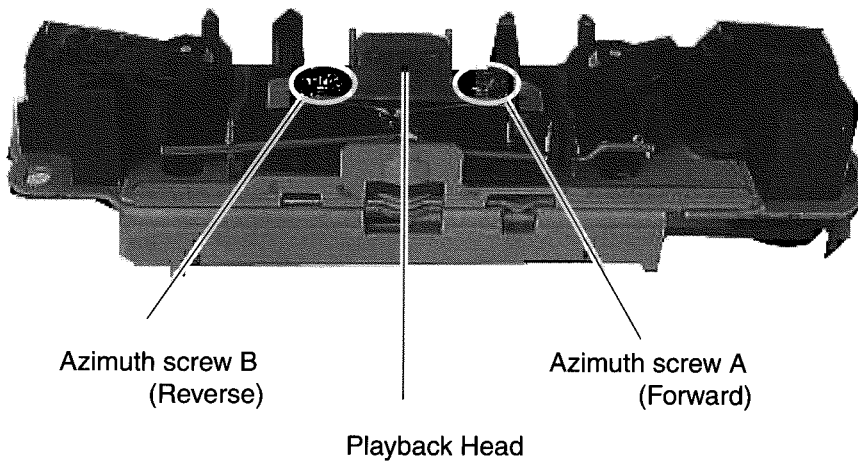
■Information for using a car audio service jig

1. We're advancing efforts to make our extension cords common for all car audio products.
   Please use this type of extension cord as follows.
2. As a U-shape type top cover is employed, this type of extension cord is needed to check operation of the mechanism assembly after disassembly.
3. Extension cord : EXTKSRT002-18P (18 pin extension cord) For connection between mechanism assembly and main board assembly.
   Check for mechanism driving section such as motor ,etc..

■Disassembly method
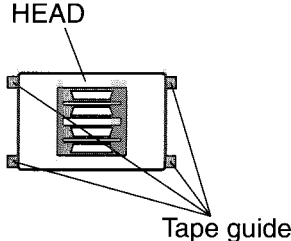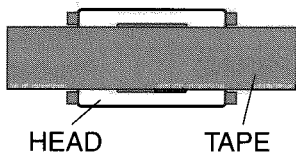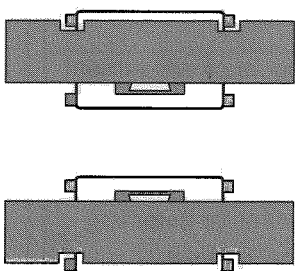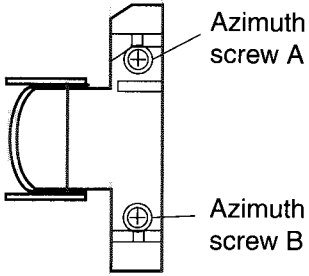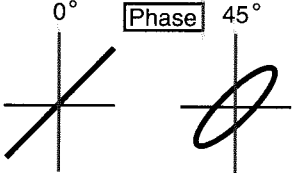
1. Remove the bottom cover.
2. Remove the front panel assembly.
3. Remove the top cover .
4. Install the front panel.
5. Confirm that current is being carried by connecting an extension cord jig.

Note

Available to connect to the CP701 connector when installing the front panel.

Cassette mechanism

Extension cord
EXTKSRT002-18P

to Cassette mechanism

to Main board

Front panel assembly

EXTKSRT002-18P
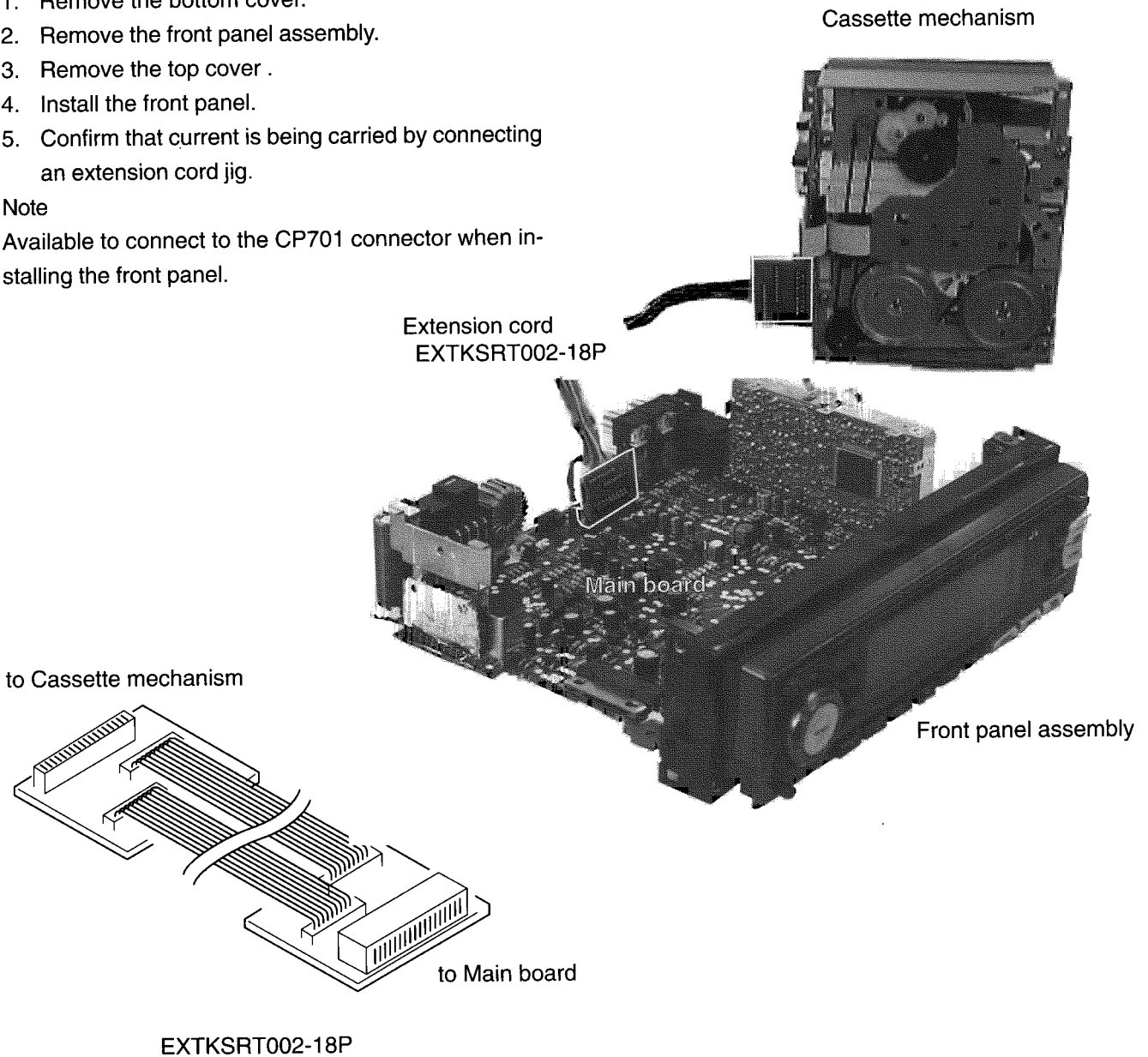
■Mechanism adjustment section

Item	Adjusting & Confirmation Methods	Adjust	Std. Value
1. Tape running adjustment	a) At Forward playmode, using mirror tape, make adjustment with Azimuth screw A and Azimuth screw B, without curl of 4 parts of head tape guide. b) At Reverse play mode, using mirror tape, make adjustment with Azimuth screw A and Azimuth screw B, without tape curl of 4 parts of head guide. c) At Forward / Reverse play mode, make confirmation of no tape curl of 4 parts of head tape guide.	Azimuth screw A Azimuth screw B	
2. Azimuth adjustment confirmation	a) At forward play mode, make adjustment of peak of Lch / Rch output with Azimuth screw A. * For Oscilloscope litharge corrugation, set 45° as standard. b) At Reverse play mode, make adjustment of peak of Lch / Rch output with Azimuth screw B. * For Oscilloscope litharge corrugation, set 45 as standard. c) With AC volt meter confirm the difference of output for 4ch between Lch / Rch at forward play mode and Lch / Rch Reverse play mode being within 3.0dB. d) After operation, make confirmation of Lch / Rch azimuth output being within 1.0dB from adjustment value. HEAD Tape guide OK HEAD TAPE Tape curl NG 	0° Phase 45° 	
2. Tape Speed and Wow & Flutter	1.Check to see if the reading of the frequency counter & W ow flutter meter is within 2940-3090 Hz(FWD/REV), and less than 0.35% (JIS RMS). 2.In case of out of specification, adjust the motor with a built-in volume resistor .	Built-in volume resistor	Tape Speed 2940-3090Hz Wow&Flutter Less than 0.35% (JIS RMS)
3. Playback Frequency response	1.Play the test tape (VT724 : 1kHz) back and set the volume position at 2V . 2.Play the test tape (VT739)back and confirm 0±3dB at1kHz/ 10kHz and -4+2dB at 1kHz/63Hz. 3.When 10kHz is out of specification, it will be necessary to read adjust the azimuth.		Speaker out 1kHz/10kHz : 0dB±3dB, 63Hz/1kHz : -4dB+2dB,

Descrption of major ICs

■ **CXA2560Q (IC401) : Dolby B type noise reduction system with play back equalizer amp.**

1.Pin layout & block diagram
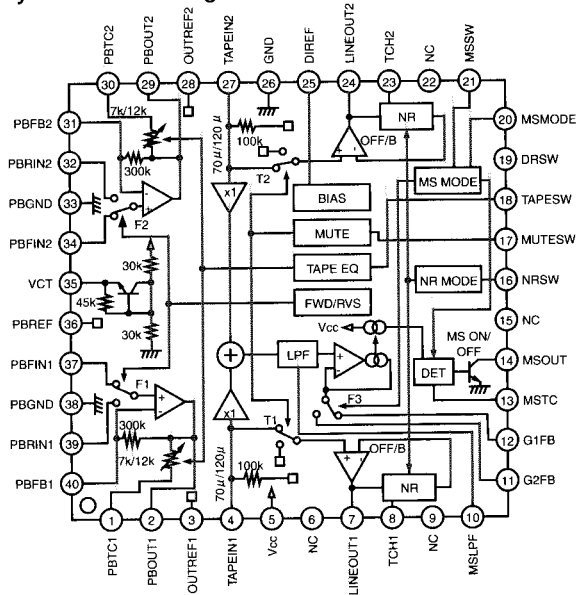
2. Pin function

Pin No.	Symbol	I/O	Function
1	PBTC1	-	Playback equalizer amplifier capacitance
2	PBOUT1	O	Playback equalizer amplifier output
3	OUTREF1	O	Output reference
4	TAPEIN1	I	TAPE input
5	Vcc	-	Power supply
6	NC	-	
7	LINEOUT1	O	Line output
8	TCH1	-	Time constant for the HLS
9	NC	-	
10	MSLPF	-	Cut-off frequency adjustment of the music sensor LPF
11	G2FB	-	Music signal interval detection
12	G1FB	-	Music signal interval detection
13	MSTC	-	Time constant for detecting music signal interval
14	MSOUT	O	Music sensor out
15	NC	-	No use
16	NRSW	I	Dolby NR control
17	MUTESW	I	Mute function control
18	TAPESW	I	Playback equalizer amplifier control
19	DRSW	I	Head select control
20	MSMODE	I	Music sensor mode control
21	MSSW	I	Music sensor control
22	NC	-	
23	TCH2	-	Time constant for the HLS
24	LINEOUT2	O	Line output

Pin No.	Symbol	I/O	Function
25	DIREF	-	Resistance for setting the reference
26	GND	-	Ground
27	TAPEIN2	I	TAPE input
28	OUTREF2	O	Output reference
29	PBOUT2	O	Playback equalizer amplifier output
30	PBTC2	-	Playback equalizer amplifier capacitance
31	PBFB2	I	Playback equalizer amplifier feedback
32	PBRIN2	I	Playback equalizer amplifier input
33	PBGND	-	Playback equalizer amplifier ground
34	PBFIN2	I	Playback equalizer amplifier input
35	VCT	O	Center
36	PBREF	O	Playback equalizer amplifier reference
37	PBFIN1	I	Playback equalizer amplifier input
38	PBGND	-	Playback equalizer amplifier ground
39	PBRIN1	I	Playback equalizer amplifier input
40	PBFB1	I	Playback equalizer amplifier feedback

■ BA4905-V3 (IC901) : Regulator

1.Terminal layout
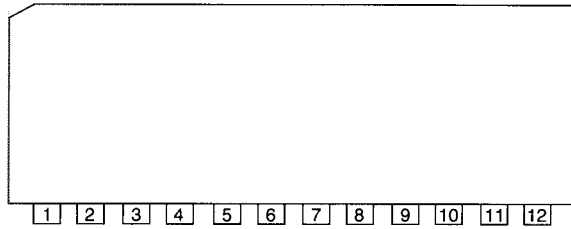
2.Block daigram
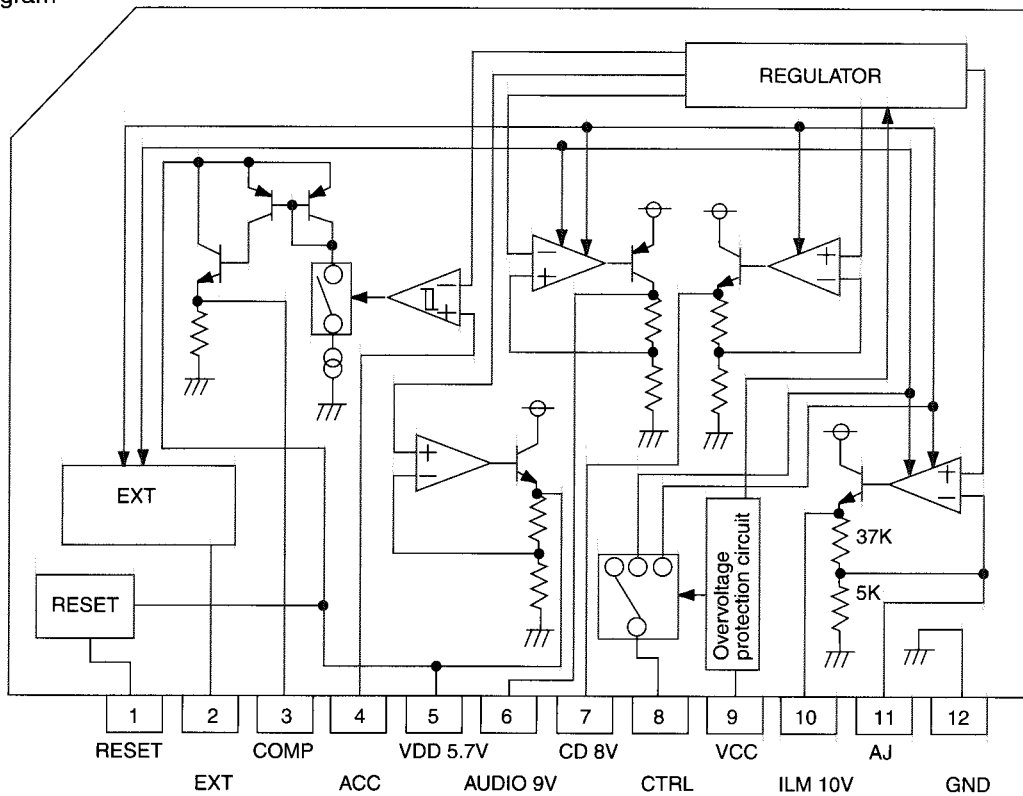
3.Pin function

Pin no.	Symbol	Function
1	RESET	If VDD voltage becomes 4V or less.RESET output becomes low level.
2	EXT output	This output voltage is approximately 0.5V lower than VCC. and max output current is 300mA.
3	COMP output	A voltage supply for ACC block. This output voltage is approximately 0.7V lower than VDD'S. The max output current is 100mA.
4	ACC	Control of the COMP output by inputting voltage.
5	VDD output	This output voltage is 5.7V, and max output current is 100mA. This voltage supply is for microcomputer. Whenever back up voltage supply is connected, the output keeps on running.
6	AUDIO output	This output voltage is 9.0v, and max output current is 500mA. This voltage supply for AUDIO.
7	CD output	This output voltage is 8.0V, and max output current is 1A. This voltage supply for CD.
8	CTRL	Output selector of CD. AUDIO, ILM and EXT.
9	VCC	To be connected with the BACK UP of car.
10	ILM output	This output voltage is 10V, and max output current is 500mA. Output voltage is adjustable.
11	AJ	Putting a resistance between ILM and AJ or between AJ and GND makes ILM output voltage adjustable.
12	GND	Ground.

■ UPD178018AGC-551 (IC701) : Main system control CPU

1. Pin layout

```
   ┌─────────────┐
   │ 80   ~   61 │
   │ 1        60 │
   │             │
   │ ⌇        ⌇  │
   │             │
   │ 20       41 │
   │   21 ~ 40   │
   └─────────────┘
```
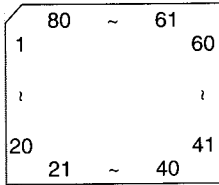
2. Pin function

Pin No.	Port Name	I/O	Descriptions
1	KEY 0	I	Key input 0
2	KEY 1	I	Key input 1
3	KEY 2	I	Key input 2
4	LEVEL	I	Level meter input
5	SM	I	S.meter level input
6	SQ	I	S.Quality level input
7	LCDCE	O	CE output to LCD driver
8	LCDDA	O	Data output to LCD driver
9	LCDSCK	O	Clock output to LCD driver
10	BUSI/O	I	I/O selector output for J-BUS, H : OUT, L: INPUT
11	OPEN	I	Door open detect input
12	BUSSI	I	J-BUS Data input
13	BUSSO	O	J-BUS Data output
14	BUSSCK	I/O	J-BUS Clock in/output
15	NC	-	Non connect
16	NC	-	Non connect
17	NC	-	Non connect
18	NC	-	Non connect
19	INLOCK	-	Non connect
20	NC	-	Non connect
21	GNDPORT	-	Port GND
22	VDDPORT	-	Port Vdd
23	NC	O	Non connect
24	AFCK	O	AF check output, L: AF check
25	MONO	O	Monaural on /off selecting output, H:mono on
26	FM/AM	O	FM/AM switching output L : FM H : AM
27	SEEK/STP	O	Auto seek /stop selecting output, H: Seek, L:Stop
28	NC	I	Pulse signal input port for Cruise control
29	IFC	I	FM/AM midle frequency counter input
30	VDDPLL	-	PLL Vdd
31	FMOSC	I	FM/AM limited generator frequency input
32	NC	-	None connect
33	GNDPLL	-	PLL GND
34	AMEO	·O	AM error out output
35	FMEO	O	FM error out output
36	IC	-	GND
37	SD/ST	I	Station detector, Stereo signal input, H:Find Station, L:Stereo
38	STAGE0	I	Pull up
39	NC	-	Non connect
40	MOTOR	O	Main motor output

■ UPD178018AGC-551 (IC701) : Main system control CPU

Pin No.	Port Name	I/O	Descriptions
41	FF/REW	I	Output for input signal level switching for MS L : FF,REW H : PLAY
42	F/R	O	FWD,REV running direction switch signal input
43	DOLBY	O	Dolby on "H" output
44	MSIN	I	MS input
45	I2CCLK	O	I2C information clock output
46	I2CDAO	O	I2C information data output
47	I2CDAI	I	I2C information clock input
48	REEL	O	Switch for detecting tape end position
49	SUBMO1	I	Sub motor clock direction input
50	SUBMO2	O	Sub motor clock opposite detection drive output
51	MODE	O	Mechanism mode position detection input
52	TAPEIN	O	Cassette in detection input H : cassette in L : cassette out
53	STANDBY	I	Standby position detection input H : eject side L : operation side
54	NC	-	Non connect
55	NC	-	Non connect
56	NC	-	Non connect
57	NC	-	Non connect
58	NC	-	Non connect
59	BEEP	O	Touch tone output
60	MUTE	O	Mute output , L : mute on
61	PCNT	O	Power ON /OFF switching output , H : power on
62	TELMUTE	I	Telephone mute signal detection input
63	DIMIN	I	Dimmer signal detection input L : dimmer
64	DIMOUT	O	Dimmer control output , Dimmer off L output
65	ENC1	I	Rotary volume signal 1 input Power save : L
66	ENC2	I	Rotary volume signal 2 input
67	ACCDET	I	Power save 1 Working togethe ACC Power save : L
68	POWER	O	Power save 2, Working together Back up by H input, stop mode
69	RDSSCK	I	Clock input for RDS
70	RDSDA	I	RDS data input
71	REMOCON	I	Remocom input
72	DETACH	I	Detach signal input H : Power save
73	J-BUSINT	I	Cut-in input for J-BUS signal
74	REGCPU	-	Regulator for CPU power supply, Connect the GND with0.1 μ F.
75	GND	-	Ground
76	X2	-	Connecting the crystal oscillator for system clock
77	X1	I	Connecting the crystal oscillator for system clock
78	REGOSC	-	Regulator for oscillator circuit.Connect the GND with 0.1 μF.
79	VDD	-	Vdd
80	RESET	-	Pull up

■ HA13158A (IC301) : Power amp

1. Pin layout
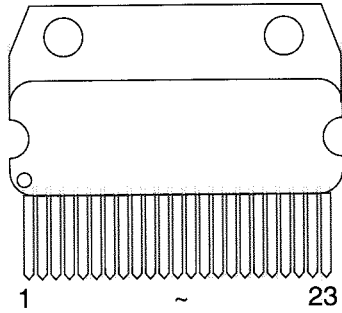
2. Block diagram
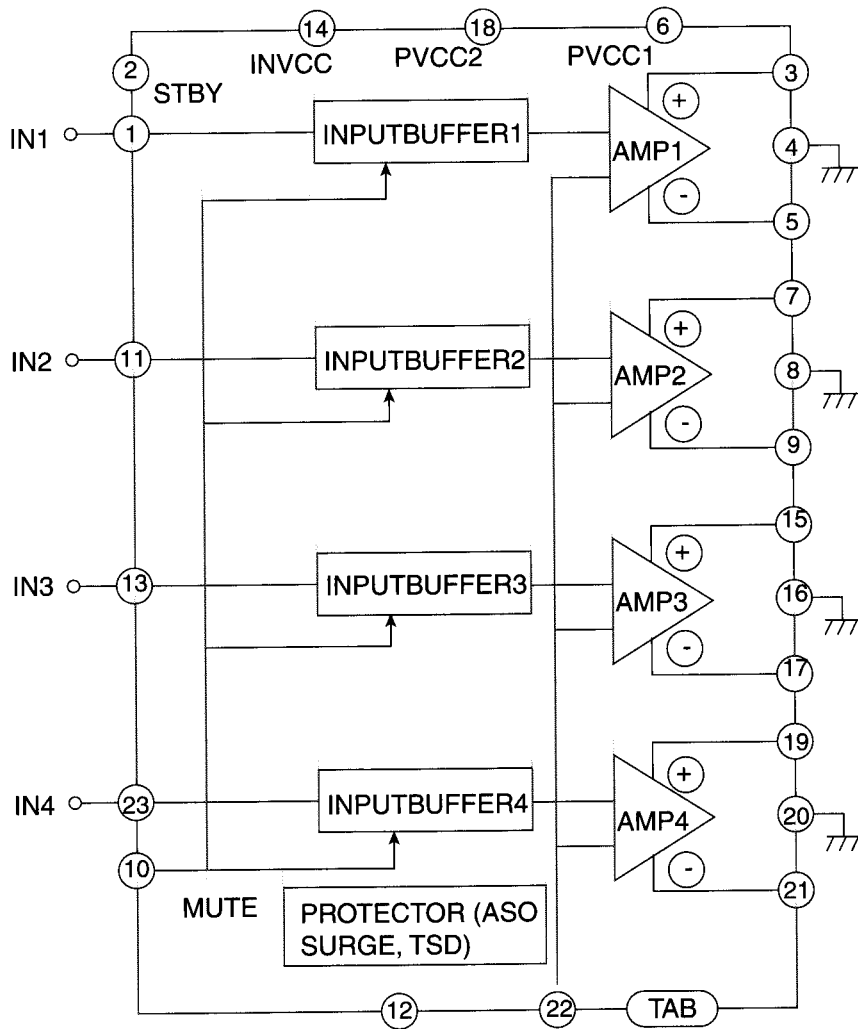
■HD74HC126FP-X (IC801) : Buffer

1. Pin layout
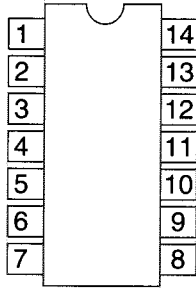
2. Function

Inputs		Outputs
C	A	Y
L	X	Z
H	L	H
H	H	L
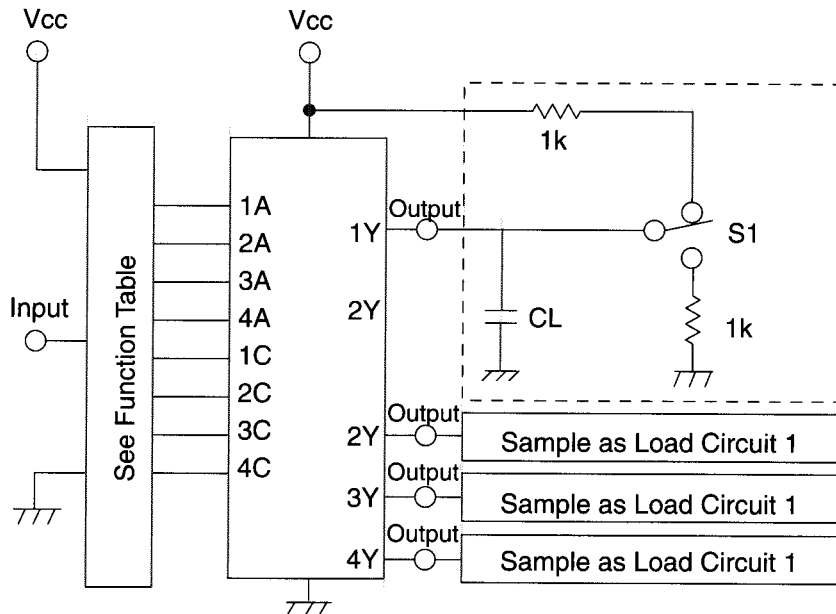
■ RPM6938-SV4 (IC602) : Remote control receiver

3. Block diagram
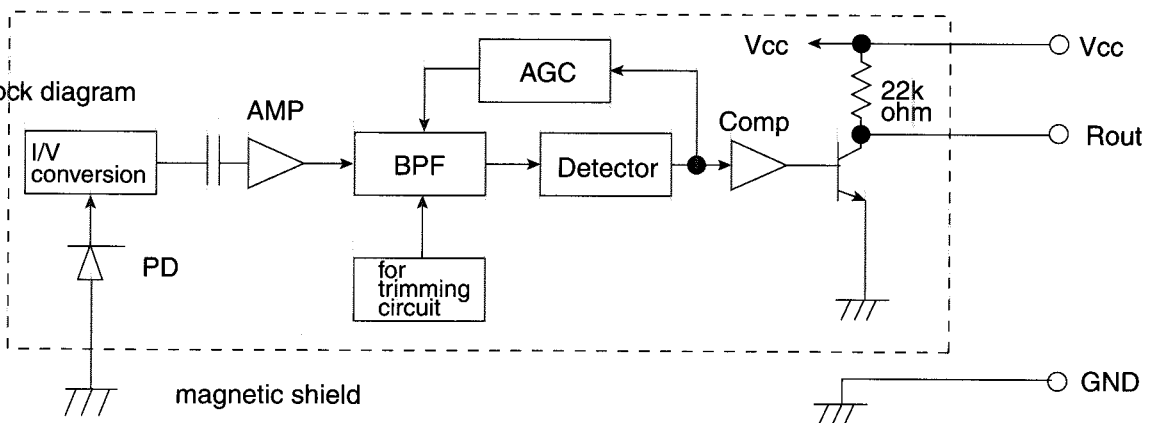
■ LC75873NW (IC601) : LCD Driver

1.Block Diagram
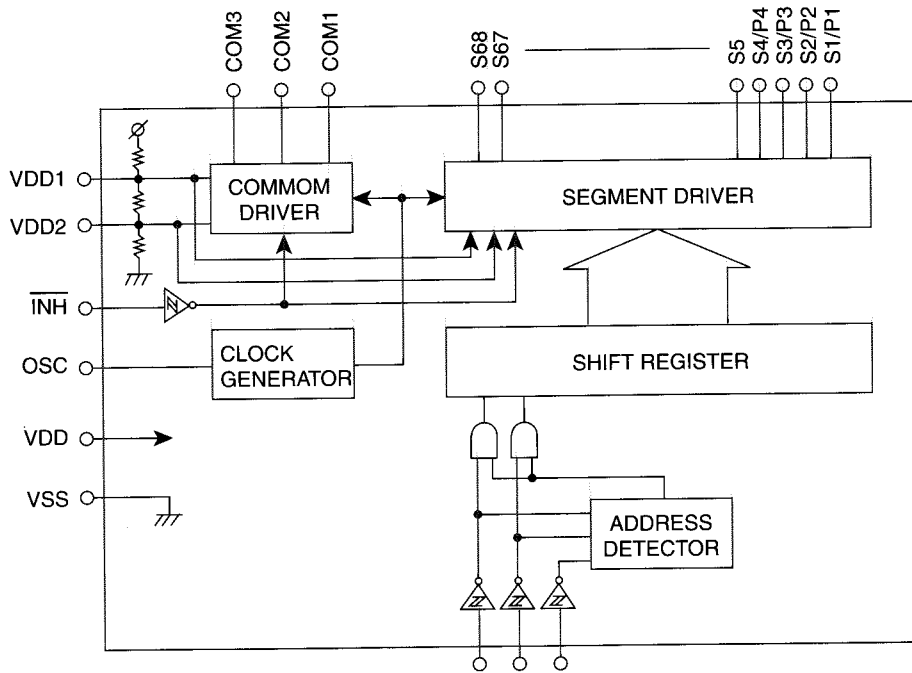
2.Pin Functions

Pin No.	Symbol	I/O	Description
1~66	S3~S68	O	Segment Output.
67~69	COM1~3	O	Common Driver Output.
70	VDD	-	Power Supply Connection.
71	VDD1	I	Used for applying the LCD drive 2/3 bias voltage externally. Must be connected to VDD2 when a 1/2 bias drive scheme in used.
72	VDD2	I	Used for applying the LCD drive 1/3 bias voltage externally. Must be connected to VDD1 when a 1/2 bias drive scheme in used.
73	VSS	-	Power supply connection.
74	OSC	I/O	Oscillator connection. An oscillator circuit is formed by connecting an external resistor and capacitor to this pin.
75	INH	I	Display off control input.
76	CE	I	Chip enable input.
77	CLOCK	I	Synchronization clock input.
78	DI	I	Serial data input.
79	DIMMER	O	DIMMER Control signal output.
80	NC	-	Non connect.

■ SAA6579T-X (IC71) : RDS demodulator

1. Pin layout
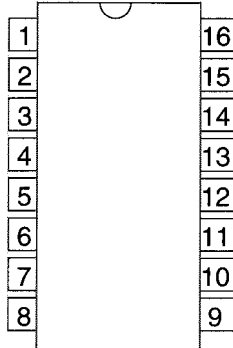
2. Pin function

Pin No.	Symbol	Function
1	QUAL	Quality indication output
2	RDDA	RDS data output
3	Vref	Reference voltage output (0.5VDDA)
4	MUX	Multiplex signal input
5	VDDA	+5V supply voltage for anarog part
6	VSSA	Ground for analog part (0V)
7	CIN	Subcarrier input to comparator
8	SCOUT	Subcarrier output of reconstruction filter
9	MODE	Oscillator mode / test sontrol input
10	TEST	Test enable input
11	VSSD	Ground for digital part (0V)
12	VDDD	+5V supply voltage for digital part
13	OSCI	Oscillator input
14	OSCO	Oscillator output
15	T57	57kHz clock signal output
16	RDCL	RDS clock output

3. Block diagram
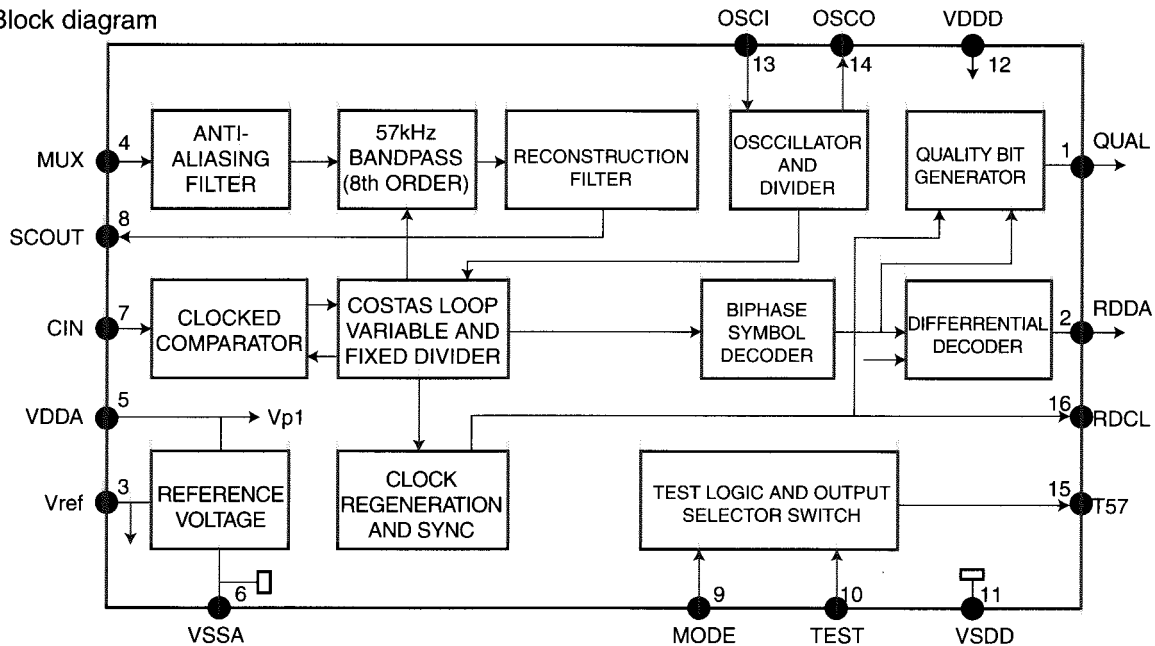
■ LB1641 (IC402) : DC Motor Driver

1. Pin Layout

GND OUT1 P1 VZ IN1 IN2 VCC1 VCC2 P2 OUT2
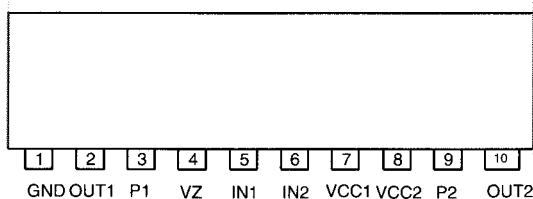
2. Pin Functions

Input		Output		Mode
IN1	IN2	OUT1	OUT2	
0	0	0	0	Brake
1	0	1	0	CLOCKWISE
0	1	0	1	COUNTER-CLOCKWISE
1	1	0	0	Brake

■ TEA6320T-X (IC161) : E.volume

1.Pin Layout

SDA	1	32	SCL
GND	2	31	VCC
OUTLR	3	30	OUTRR
OUTLF	4	29	OUTRF
TL	5	28	TR
B2L	6	27	B2R
B1L	7	26	B1R
IVL	8	25	IVR
ILL	9	24	ILR
QSL	10	23	QSR
IDL	11	22	IDR
MUTE	12	21	Vref
ICL	13 CD-CH	20	ICR
IMD	14	19	CAP
IBL	15 TAPE	18	IBR
IAL	16 TUNER	17	IAR

2.Block Diagram
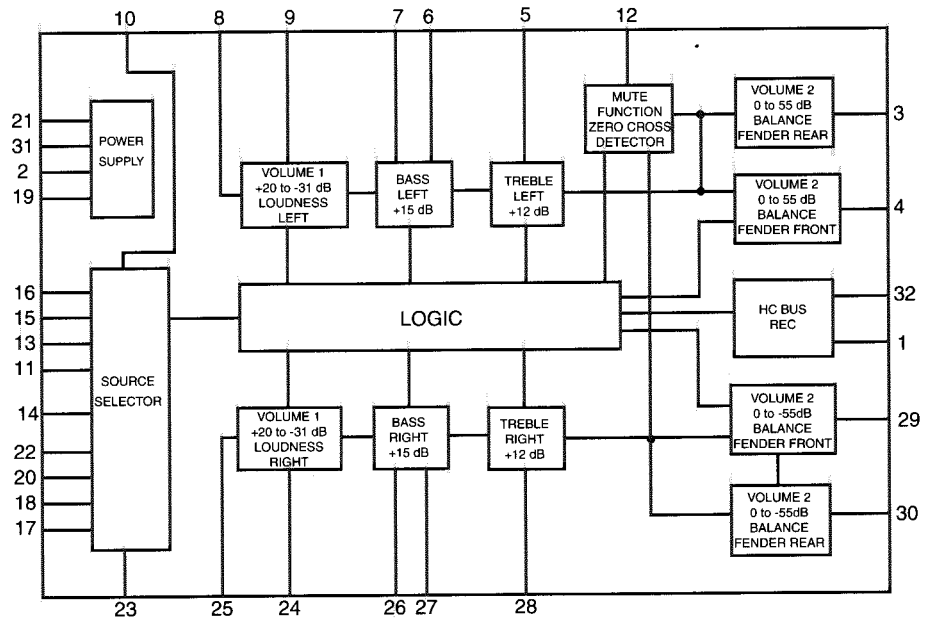
3.Pin Functions

Pin No.	Symbol	I/O	Functions	Pin No.	Symbol	I/O	Functions
1	SDA	I/O	Serial data input/output.	17	IAR	I	Input A right source.
2	GND	-	Ground.	18	IBR	I	Input B right source.
3	OUTLR	O	output left rear.	19	CAP	-	Electronic filtering for supply.
4	OUTLF	O	output left front.	20	ICR	I	Input C right source.
5	TL	I	Treble control capacitor left channel or input from an external equalizer.	21	Vref	-	Reference voltage (0.5Vcc)
6	B2L	-	Bass control capacitor left channel or output to an external equalizer.	22	IDR	-	Not used
7	B1L	-	Bass control capacitor left channel.	23	QSR	O	Output source selector right channel.
8	IVL	I	Input volume 1. left control part.	24	ILR	I	Input loudness right channel.
9	ILL	I	Input loudness. left control part.	25	IVR	I	Input volume 1. right control part.
10	QSL	O	Output source selector. left channel.	26	B1R	-	Bass control capacitor right channel
11	IDL	-	Not used	27	B2R	O	Bass control capacitor right channel or output to an external equalizer.
12	MUTE	-	Not used	28	TR	I	Treble control capacitor right channel or input from an external equalizer.
13	ICL	I	Input C left source.	29	OUTRF	O	Output right front.
14	IMO	-	Not used	30	OUTRR	O	Output right rear.
15	IBL	I	Input B left source.	31	Vcc	-	Supply voltage.
16	IAL	I	Input A left source.	32	SCL	I	Serial clock input.

Block diagram
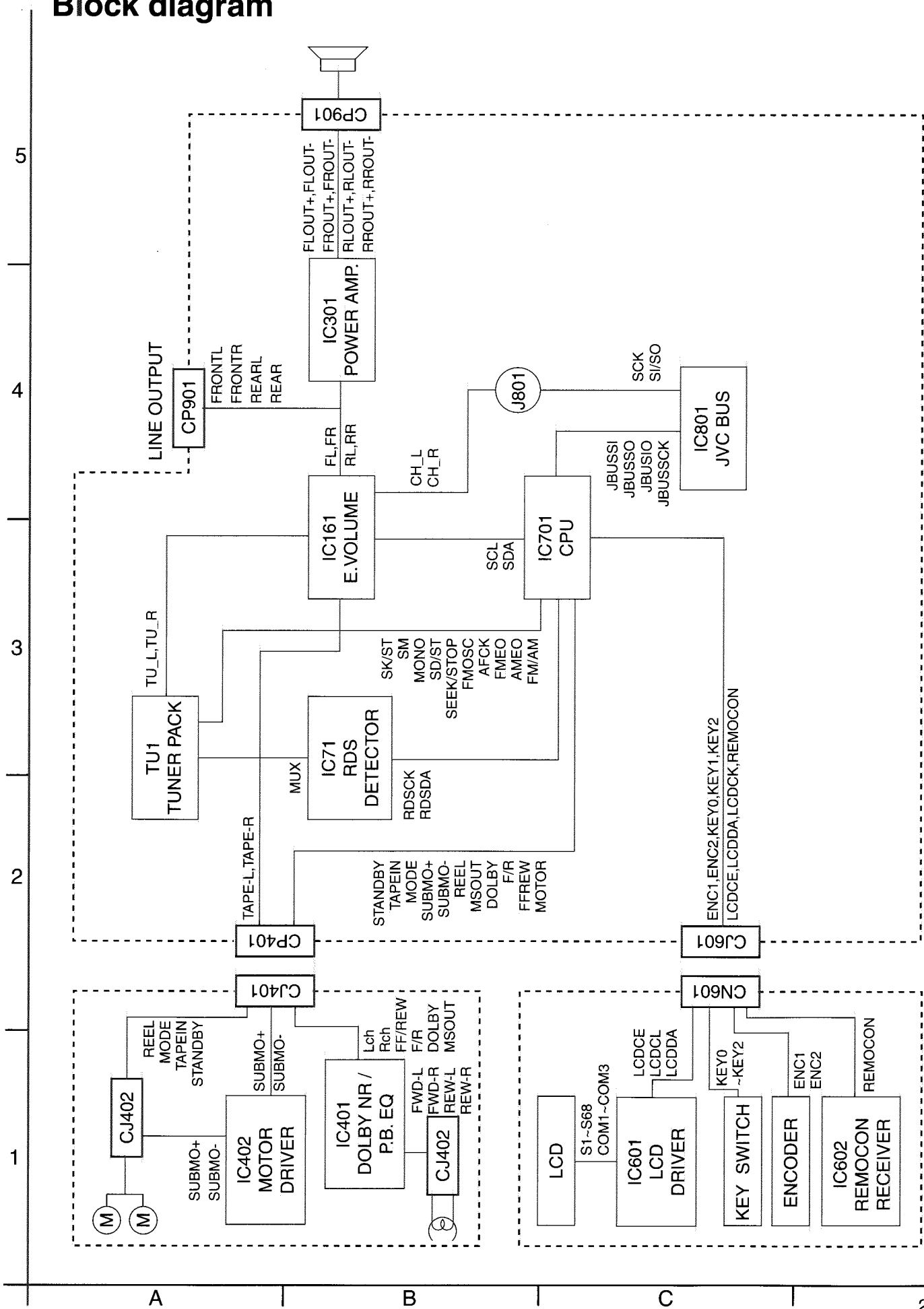
-MEMO-

Standard schematic diagrams

■Tuner & Main circuit section
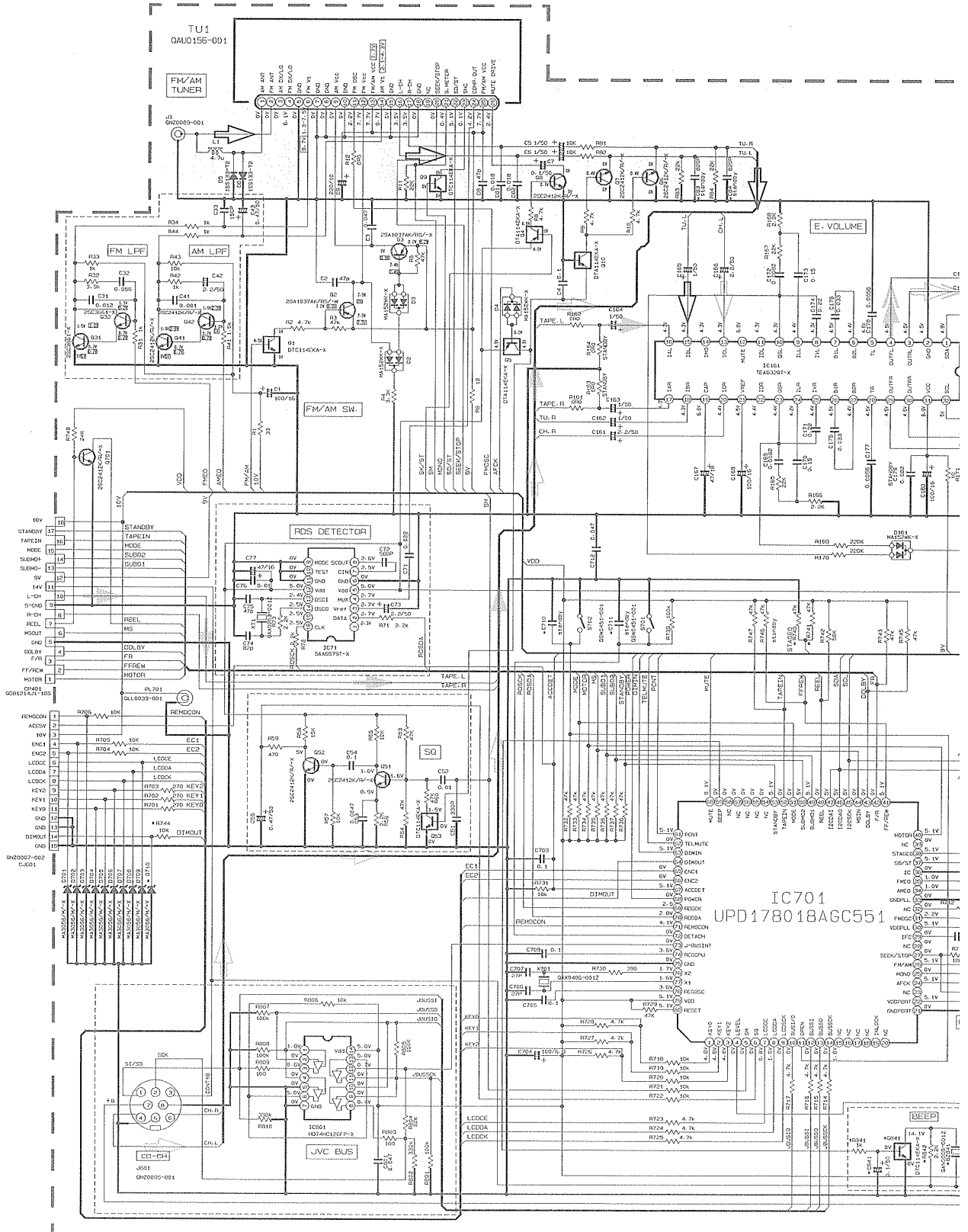
WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL
) AM MODE
D.
OR 1/4W 15% METAL GLAZE RESISTOR.
R 25V CERAMIC CAPACITOR.
E IN OHM.
RE IN uF(p-pF)
WN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

LINE OUTPUT

IC301
HA13158A

POWER AMP

REGULATOR

IC901
BA4905-V3

MEM. DETECT

MUTING

REMOTE
PROTECTION

CPU

LEVEL
METER

BEEP
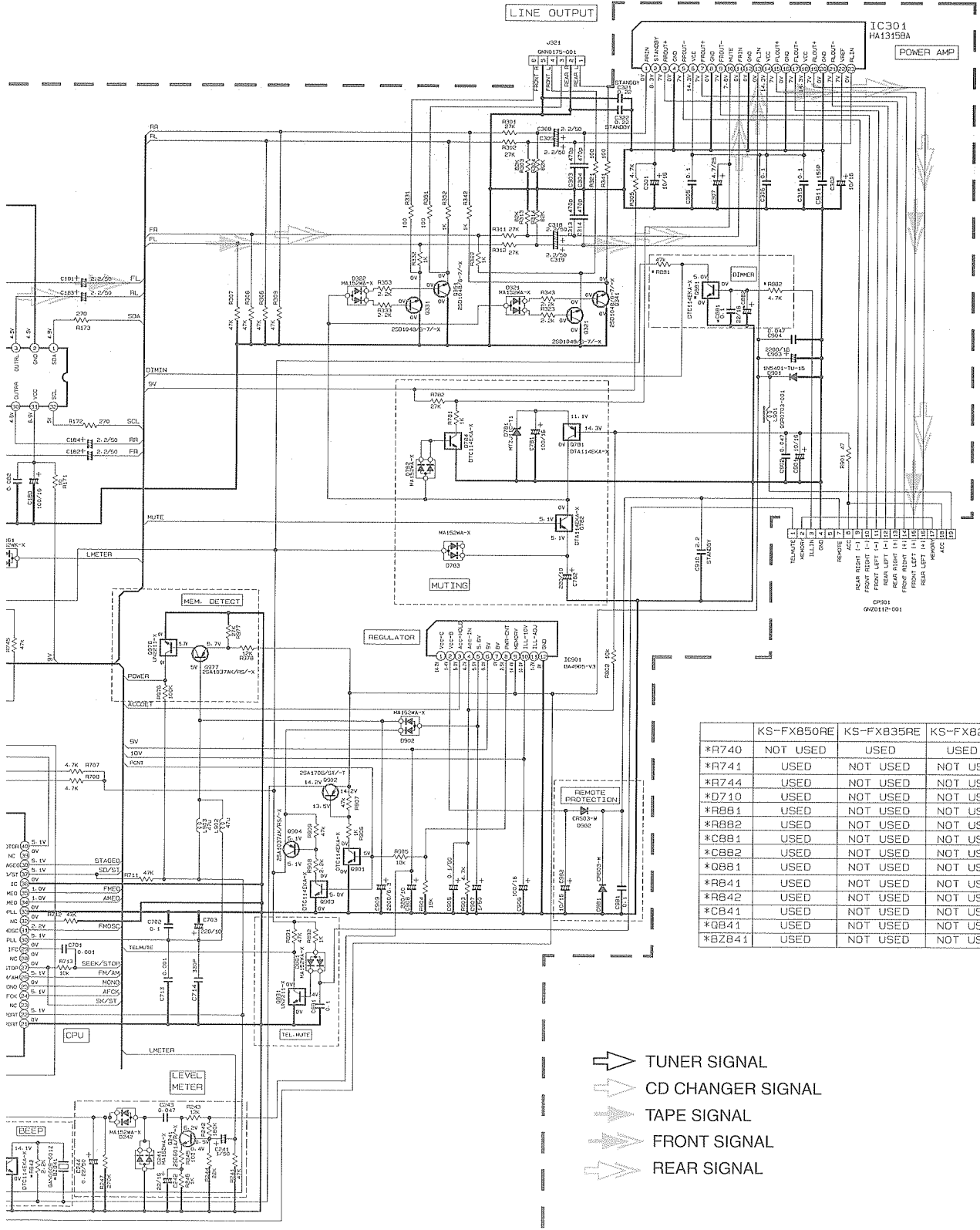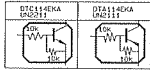
	KS-FX850RE	KS-FX835RE	KS-FX820RE
*R740	NOT USED	USED	USED
*R741	USED	NOT USED	NOT USED
*R744	USED	NOT USED	NOT USED
*D710	USED	NOT USED	NOT USED
*R881	USED	NOT USED	NOT USED
*R882	USED	NOT USED	NOT USED
*C881	USED	NOT USED	NOT USED
*C882	USED	NOT USED	NOT USED
*Q881	USED	NOT USED	NOT USED
*R841	USED	NOT USED	NOT USED
*R842	USED	NOT USED	NOT USED
*C841	USED	NOT USED	NOT USED
*Q841	USED	NOT USED	NOT USED
*BZ841	USED	NOT USED	NOT USED

⇨ TUNER SIGNAL

⇨ CD CHANGER SIGNAL

⇨ TAPE SIGNAL

⇨ FRONT SIGNAL

⇨ REAR SIGNAL

MAIN PWB : FSMW1091

E   F   G   2-23
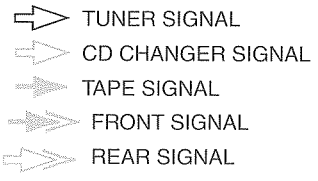
■Mechanism control circuit section

CJ403

METAL 1
TAPEIN 2
GND 3
MOTOR 4
SUBMO+ 5
SUBMO- 6
STANDBY 7
MODE 8
GND 9
REEL 10
PHOTO 11

390 20mA
R401

QGF1219F1~11

CJ402

COMMON-L 1 4v
FWD-L 2 4v
FWD-R 3 4v
REW-R 4 4v
REW-L 5 4v
COMMON-R 6 4v

*IC401
CXA2560Q

(30) PBTC2 4V
(29) PBOUT2 4V
(28) OUTREF2 3.7V
(27) TAPEIN2 0V
(26) GND 0V
(25) DIREF 3.9V
(24) OUT2 0.7V
(23) TCH2 1.1V
(22) NC
(21) MSSW

(31) PBFB2 4.0V
(32) PBRIN2 0V
(33) PBGND 0V
(34) PBFIN2 4.0V
(35) VCT 3.9V
(36) PBREF 3.9V
(37) PBFIN1 3.9V
(38) PBGND 3.9V
(39) PBRIN1 3.9V
(40) PBFB1 3.9V

FF/REW (20) 4.8V
DIRECTION (19) 0V
METAL (18) 5.2V
MUTE (17) 0V
NRSW (16) 0V
NC (15) 0V
MSOUT (14) 4.8V
MSTC (13) 0.4V
G1FB (12) 4.0V
G2FB (11) 4.0V

(1) PBTC1 4V
(2) PBOUT1 4V
(3) OUTREF1 3.8V
(4) TAPEIN1 0V
(5) VCC 7.9V
(6) NC 1.4V
(7) OUT1 3.9V
(8) TCH1 0.6V
(9) NC 1.4V
(10) MSLPF 3.9V

C411 0.015
C408 100P
C407 100P
R407 180
C409 22/16
C405 100P
R406 180
C405 100P
C410 0.015
C412 0.1
C416 0.1
C418 220P
C419 0.47/50
R414 3.9K
C414 22/16
R412 100
R408 12K
VR401 33K
R409 24K
R410 24K
R411 12K
VR402 33K
R413 18K
C413 0.1
C417 0.1

C401 100P
R402 100K
C402 100P
R403 100K
C403 100P
R404 100K
C404 100P
R405 100K

QGB1214K1~16S
CJ401

MOTOR 1 4.8V
FF/REW 2 4.8V

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION----TAPE MODE.
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/4W ±5% OR 1/10W ±5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V).

   TF-----TF CAPACITOR

A   B   C   D

5   4   3   2   1

MECHA CONTROL PWB : FSMW1093

Q403
2SB1322/RS/-T

14.9V   15V
       14.3V   47K
               R423

DSK10C-T1   3.3K
               R422
               0V
D402   4.8V
          Q402
          DTC114EKA-X
          0V
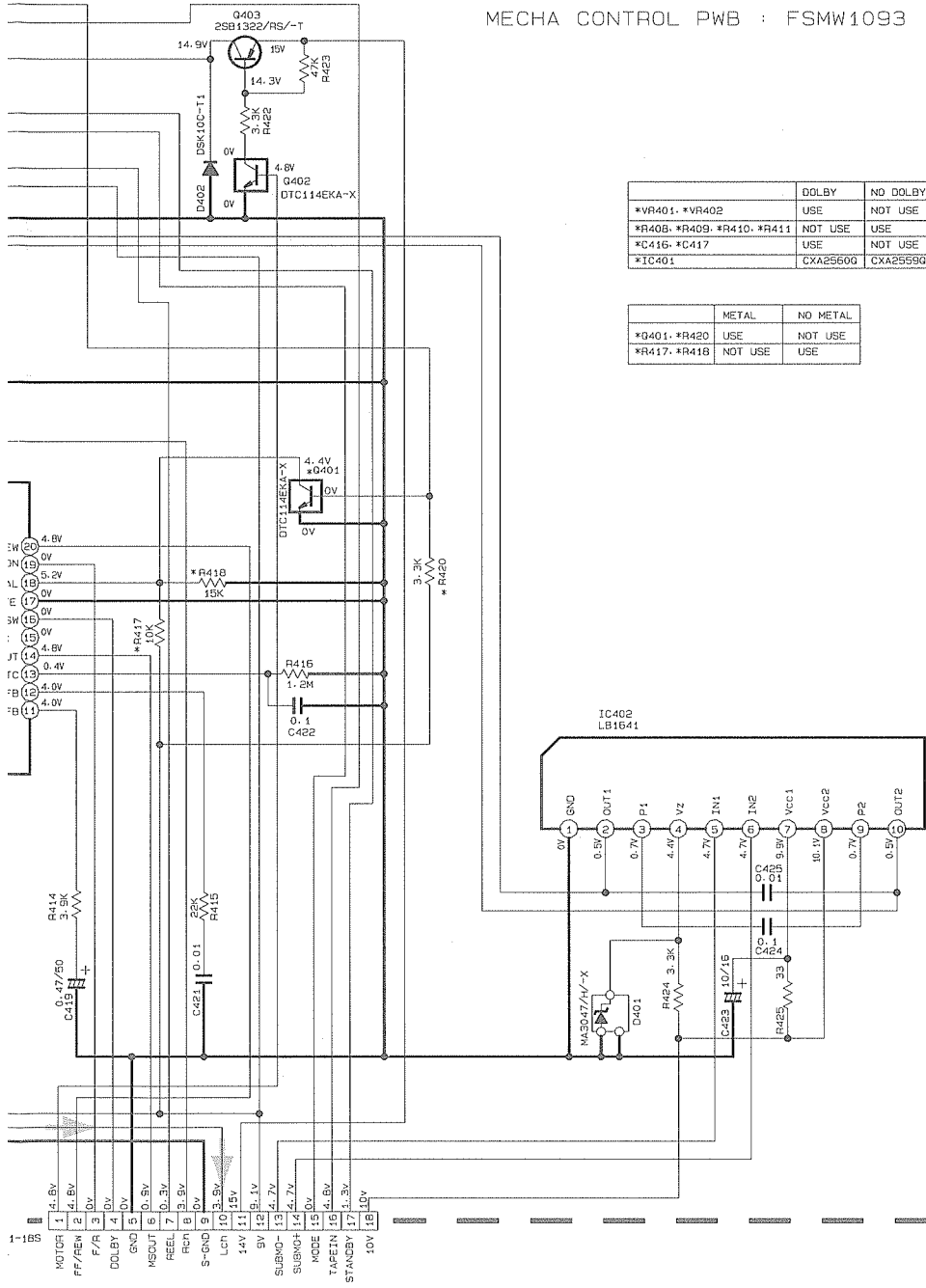
	DOLBY	NO DOLBY
*VR401, *VR402	USE	NOT USE
*R408, *R409, *R410, *R411	NOT USE	USE
*C416, *C417	USE	NOT USE
*IC401	CXA2560Q	CXA2559Q

	METAL	NO METAL
*Q401, *R420	USE	NOT USE
*R417, *R418	NOT USE	USE

4.4V
*Q401
DTC114EKA-X
0V
0V

3W ⑳ 4.8V
JN ⑲ 0V
NL ⑱ 5.2V
E ⑰ 0V   *R418
3W ⑯ 0V   15K
   ⑮ 0V
JT ⑭ 4.8V   *R417
rC ⑬ 0.4V   10K
FB ⑫ 4.0V   R416
FB ⑪ 4.0V   1.2M
                  3.3K
                  *R420
                  0.1
                  C422

IC402
LB1641

① GND   ② OUT1 ③ P1   ④ VZ   ⑤ IN1   ⑥ IN2   ⑦ Vcc1 ⑧ Vcc2 ⑨ P2   ⑩ OUT2
0V   0.5V   0.7V   4.4V   4.7V   4.7V   9.9V   10.1V   0.7V   0.5V

R414   22K   C425
3.9K   R415   0.01

C419   C421   0.1
0.47/50   0.01   C424

              MA3047/H/-X
              D401   R424   C423   33
                      3.3K   10/16   R425

1-16S
① MOTOR   4.8V
② FF/REW   4.8V
③ F/R   0V
④ DOLBY   0V
⑤ GND   0V
⑥ MSOUT   0.5V
⑦ REEL   0.3V
⑧ RCn   3.9V
⑨ S-GND   0V
⑩ LCn   3.9V
⑪ 14V   15V
⑫ 9V   9.1V
⑬ SUBMO-   4.7V
⑭ SUBMO+   4.7V
⑮ MODE   4.8V
⑯ TAPEIN   0V
⑰ STANDBY 1.3V
⑱ 10V   10V

TAPE SIGNAL

D   E   F   G   H

◼ LCD & Key control circuit section

	KS-FX850RE
*LCD1	QLD0113-0(
*D602, *D603, *D604, *D605, *D606 *D607, *D608, *D609, *D610, *D611 *D612, *D613, *D614, *D615, *D616 *D617, *D618, *D619, *D620, *D621 *D622, *D623, *D624, *D625, *D626 *D627	LNJ308G81/
*D641, *D642, *D643	NSPW310BS/
*R645, *R646	USED
*Q641, *Q642	USED
*R641, *R642, *R643	470
*R644	470

CRUISE

STEREO
MONO
DD
Link

LOCAL TP PTY
EON AF REG
RPT RND

BBE SOFT
BEAT POP

LOUD

ENG01
QSW0063-001

R605 2.7k R604 1.8k R603 1.2k R602 820 R601 560

S606 DOWN/ B.SKIP S605 MO/RND S604 RPT S603 TAPE S602 FM/AM S601 CD-CH

R611 3.9k R610 2.7k R609 1.8k R608 1.2k R607 820 R606 560

S613 UP/ F.SKIP S612 6 S611 5 S610 4 S609 3 S608 2 S607 SEL

R616 2.7k R615 1.8k R614 1.2k R613 820 R612 560

S619 1 S618 SCM S617 PTY S616 TP S615 DISP S614 POWER

S601 ~ S620 *NSW0066-001X

FX850RE	KS-FX835RE	KS-FX820RE
0113-001	QLD0123-001	QLD0124-001
308G81/1-3/X	SML-310VT/JK/-X	LNJ308G81/1-3/X
W310BS/B/	NSPB320BS/VP/	NSPW310BS/B/
USED	NOT USED	NOT USED
USED	NOT USED	NOT USED
470	390	1.0K
470	OR0	OR0

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION - - - FM MODE [___] DIMMER ON

2. UNLESS OTHERWISE SPECIFIED,
   ALL RESISTORS ARE 1/4W 5% CARBON RESISTOR OR 1/4W, 1/10W 5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN F(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(F) / RATED VOLTAGE(V).
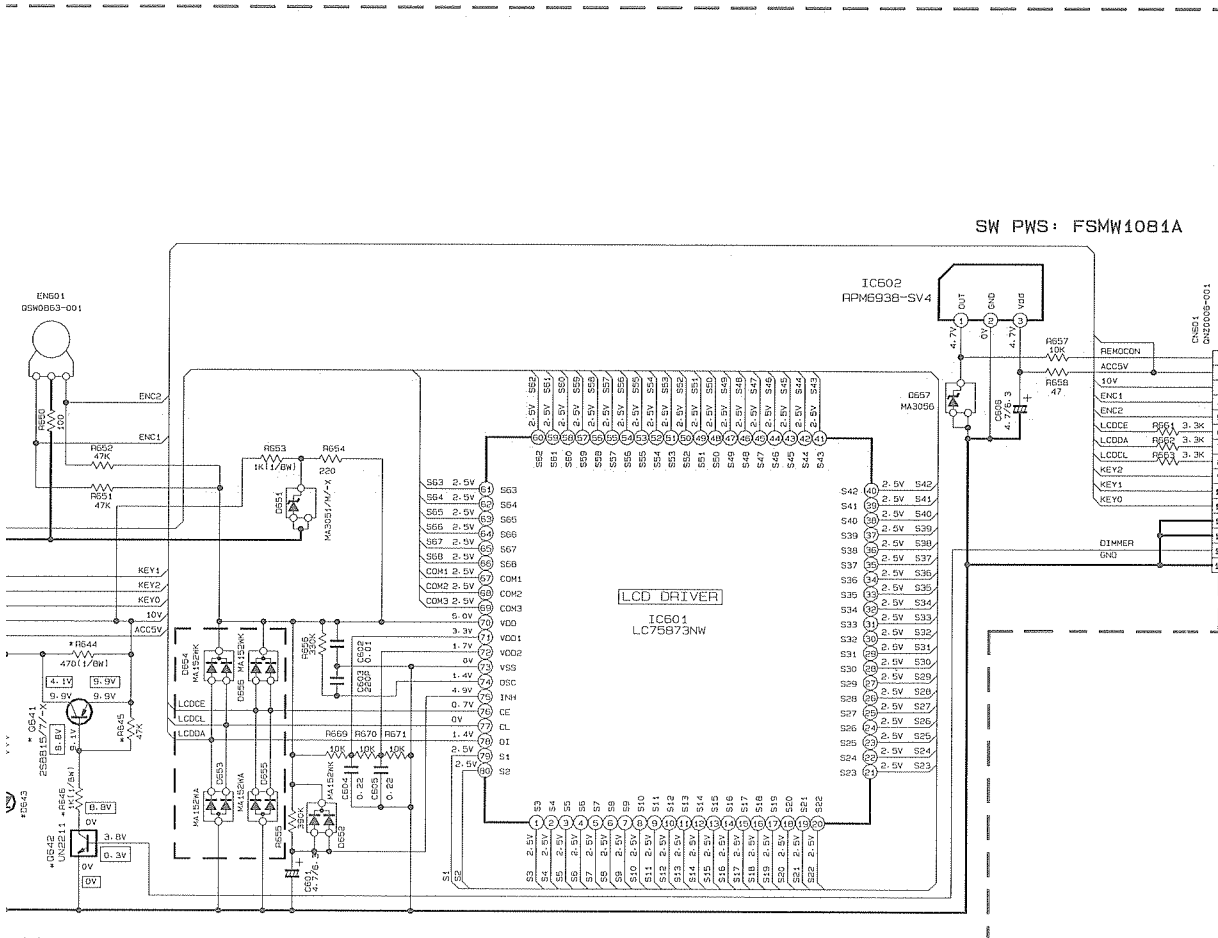
Printed circuit boards

■ain board
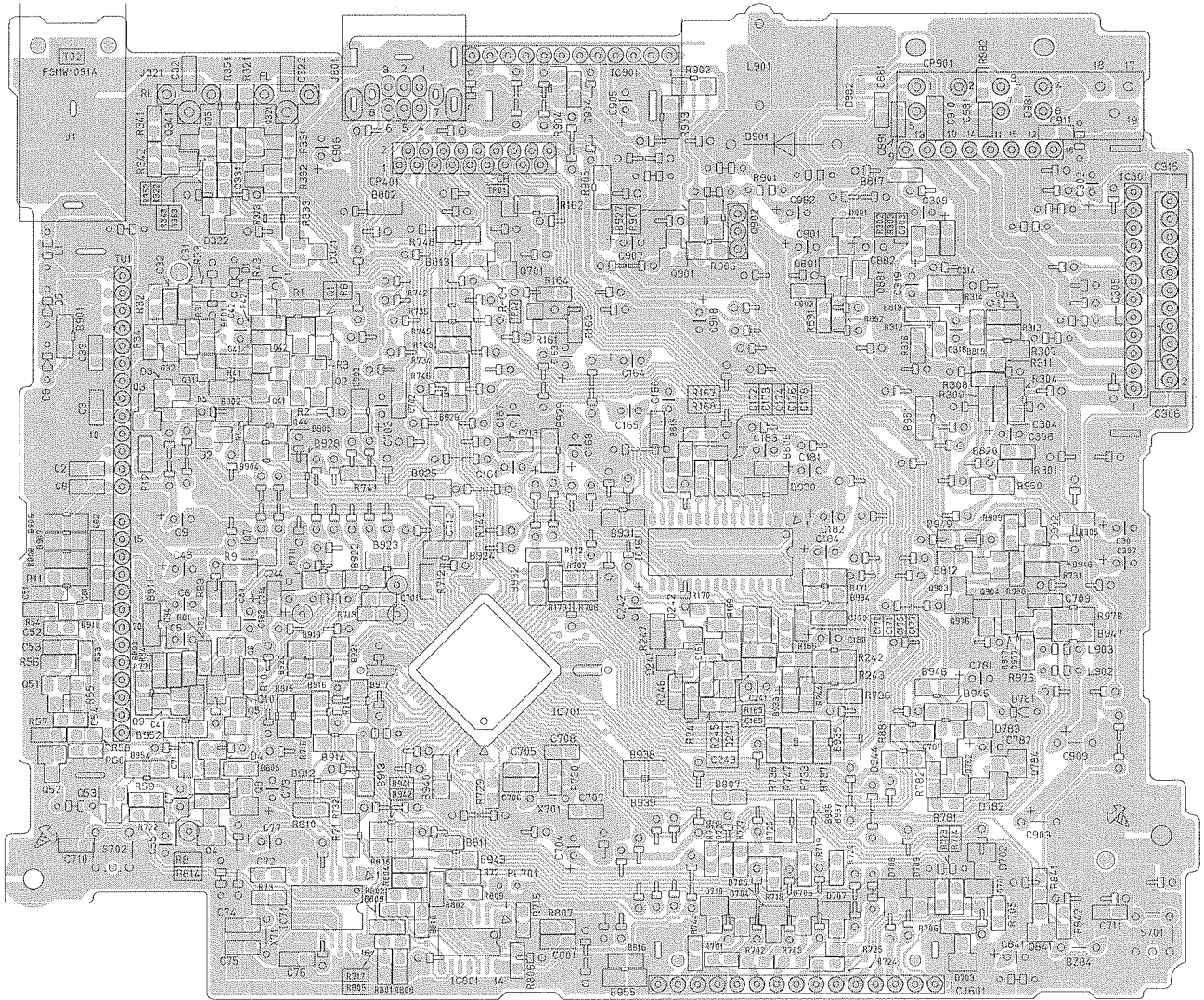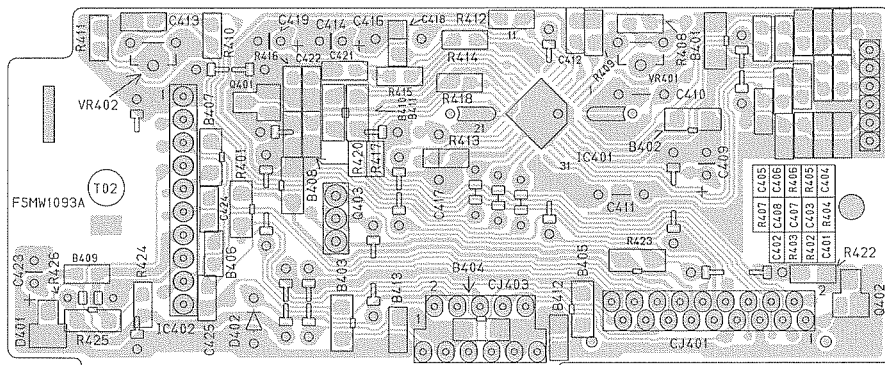
■ecah control board

■ LCD & Key control board (Forward side)
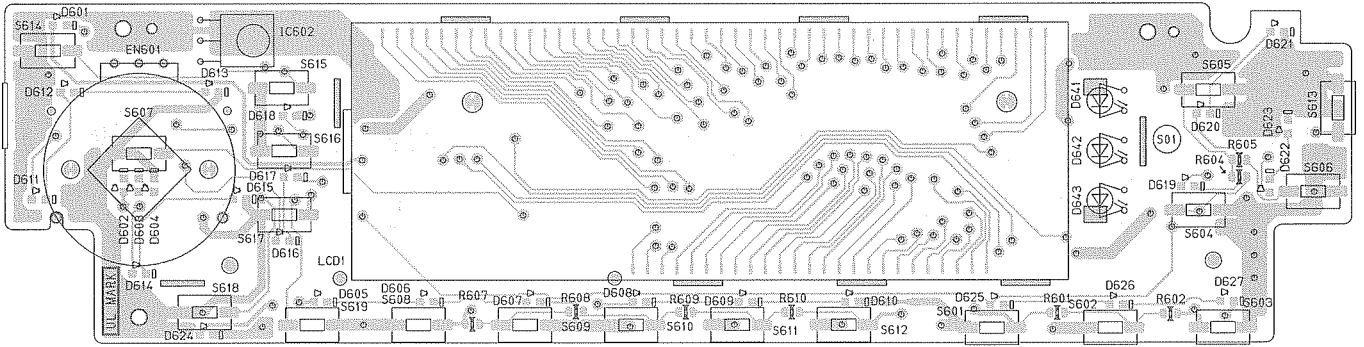
■ LCD & Key control board (Reverse side)

■ Reel board

3-1
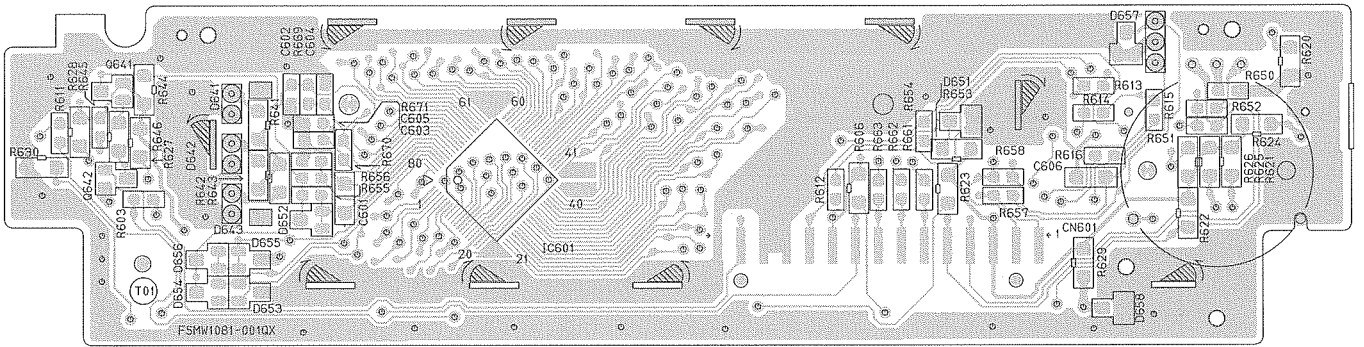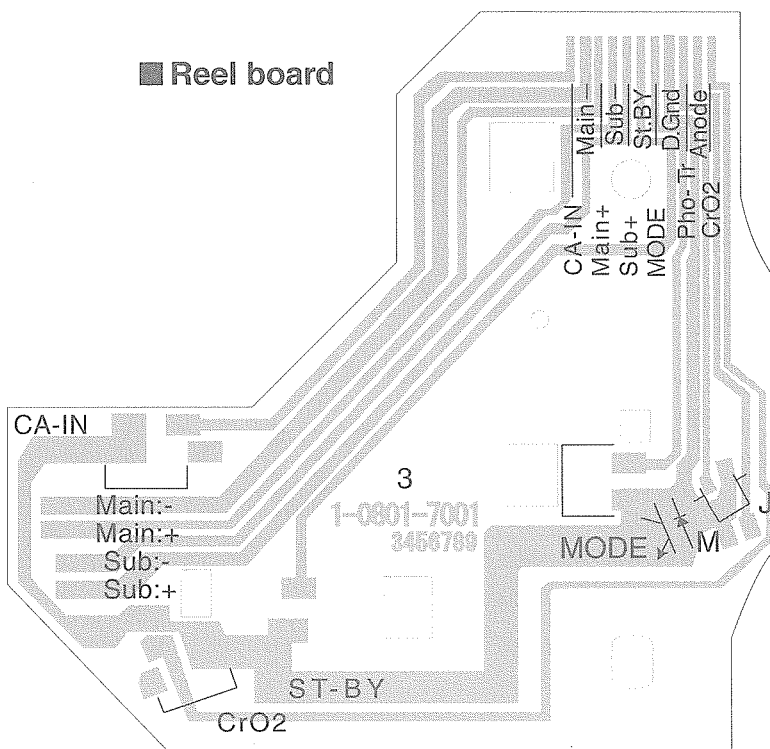
PARTS LIST

[KS-FX850R]
[KS-FX835R]
[KS-FX820R]

* All printed circuit boards and its assemblies are not available as service parts.

Areas suffix

E ----------- Continental Europe

- Contents -

-MEMO-

Exploded view of general assembly and parts list
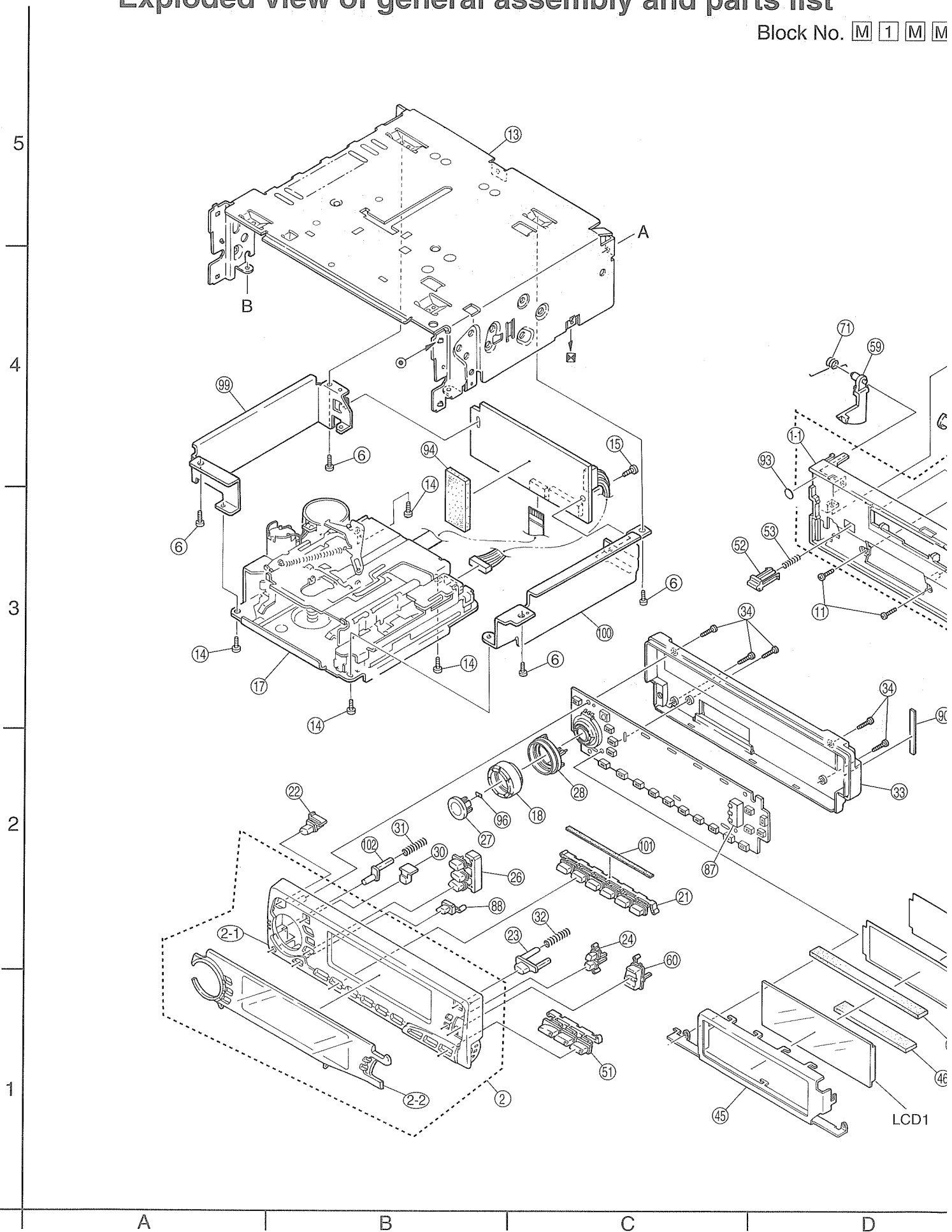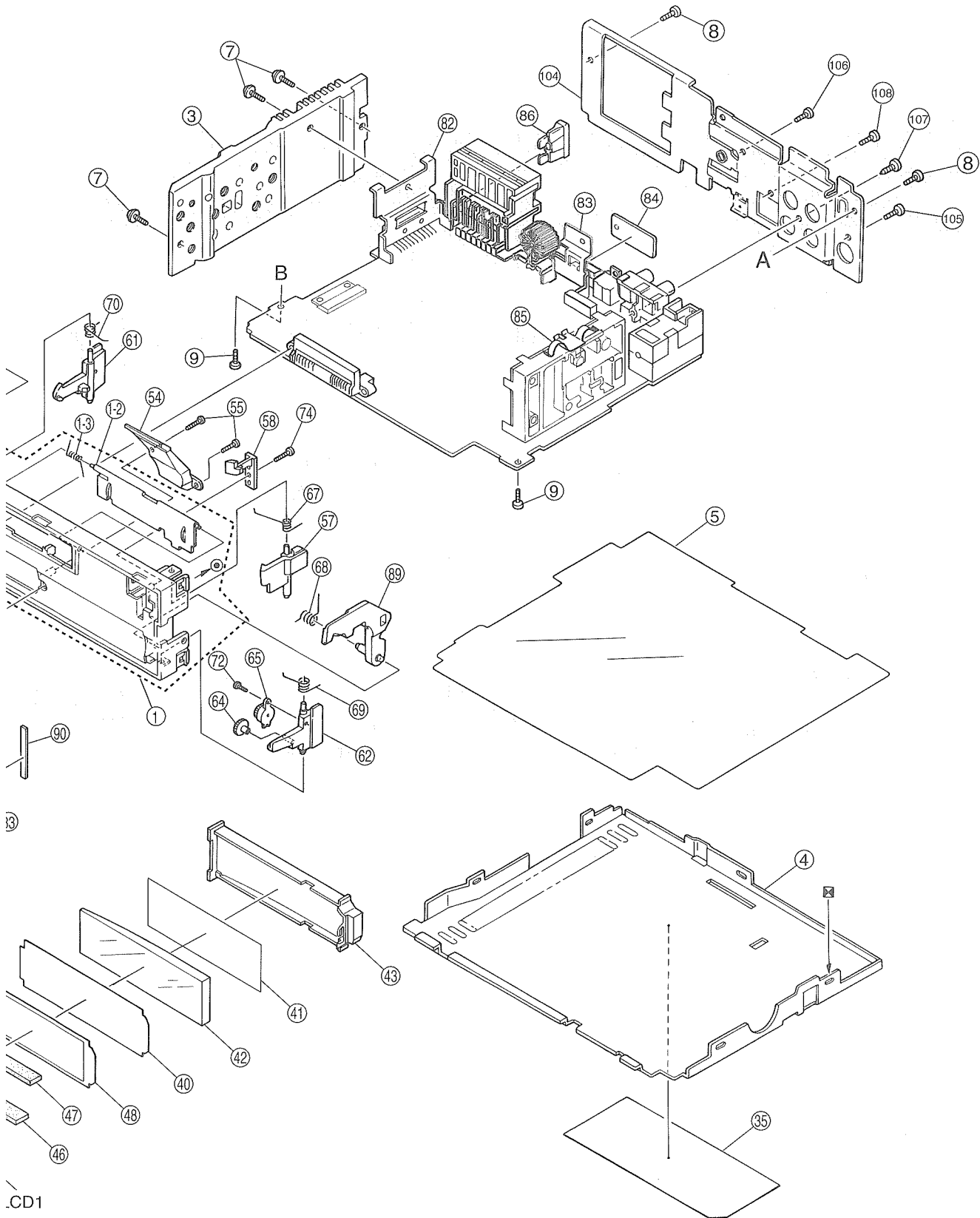
M M

.CD1

Parts list (General assembly)

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	ZCKSFX850R-FB	FRONT CHASSIS	1	KS-FX850R	
		ZCKSFX820R-FB	FRONT CHASSIS	1	KS-FX820R/835R	
	1-1	FSJC1060-001	FRONT CHASSIS	1		
	1-2	FSJC3014-001	CASSETTE LID	1	KS-FX850R	
		FSJC4003-031	CASSETTE LID	1	KS-FX820R/835R	
	1-3	VKW4947-002	DOOR SPRING	1		
	2	ZCKSFX820R-NPA	NOSE PIECE	1	KS-FX820R	
		ZCKSFX850R-NPA	NOSE PIECE	1	KS-FX850R	
		ZCKSFX835R-NPA	NOSE PIECE	1	KS-FX835R	
	2-1	FSJC1058-001	FRONT PANEL	1		
	2-2	FSJD3024-00B	FINDER LENS	1	KS-FX850R	
		FSJD3024-00C	FINDER LENS	1	KS-FX820R	
		FSJD3024-00D	FINDER LENS	1	KS-FX835R	
	3	FSMH3001-002	HEAT SINK	1		
	4	FSKM3011-002	BOTTOM COVER	1		
	5	FSMA3005-001	INSULATOR	1		
	6	QYSDST2604Z	SCREW	4	CHASSIS+MECHA.B	
	7	FSKZ4005-001	SCREW	3		
	8	QYSDST2606Z	SCREW	2	CHASSIS+REAR BK	
	9	QYSDST2606Z	SCREW	2	CHASSIS+MAIN PW	
	11	QYSDSF2006M	SCREW	2		
	13	FSJC1056-002	CHASSIS BASE	1		
	14	QYSDST2606Z	SCREW	4	MECHA+M.BKT	
	15	QYSDST2606Z	SCREW	1	PCB+MECHA	
	17	--------------	CDS-801 JV	1	CASSETTE MECHA	
	18	FSXK3003-005	VOL.KNOB	1	JOG DIAL	
	21	FSXP2045-002	PRESET BUTTON	1	1-6 LASER CUT	
	22	FSXP3053-002	POWER BUTTON	1		
	23	FSXP3058-001	EJECT BUTTON	1		
	24	FSXP3062-001	PUSH BUTTON(R)	1	MO/RND RPT	
	26	FSXP2041-003	PUSH BUTTON(L)	1	DISP TP PTY	
	27	FSXP3061-001	SEL BUTTON	1		
	28	FSJK3027-001	RIM LENS	1	FOR KNOB	
	30	FSJK4009-001	REMOTE LENS	1	FOR REMOTE CON.	
	31	VKW3001-330	COMP.SPRING	1	FOR EJECT BUTTO	
	32	VKW3001-330	COMP.SPRING	1	FOR DETACH BUTT	
	33	FSJC1059-001	REAR COVER	1		
	34	VKZ4777-001	MINI SCREW	5	FRONT+SW.PWB	
	35	FSYN3113-005	NAME PLATE	1	KS-FX850R	
		FSYN3110-D005	NAME PLATE	1	KS-FX835R	
		FSYN3111-D005	NAME PLATE	1	KS-FX820R	
	40	FSYH4061-002	LIGHTNG SHEET	1	KS-FX820R	
	41	FSYH4080-001	LIGHTNG SHEET	1	KS-FX835R	
	42	FSJK3028-001	LCD LENS	1		
	43	FSKS3013-001	LENS CASE	1		
	45	FSYH3024-001	LCD CASE	1		
	46	QNZ0450-001	RUBB.CONNECTOR	1		
	47	QNZ0449-001	RUBB.CONNECTOR	1		

Parts list (General assembly)

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	48	FSYH4061-001	LIGHTNG SHEET	1		
	51	FSXP2038-001	OPERAT.BUTTON	1	LENS+D.FUNC CAP	
	52	FSXP3060-001	RELEASE LEVER	1		
	53	FSKW3002-016	COMP.SPRING	1	FOR RELEASE KNO	
	54	VJK3707-001	LIGHT LENS	1		
	55	QYSPSGU1745N	MINI SCREW	2	FOR LIGHT LENS	
	57	VKS3793-001	LOCK LEVER(TOP)	1		
	58	FSKS3015-001	LOCK LEVER(O.L)	1		
	59	VKS3798-002	RELEASE LEVER	1		
	60	FSXP2043-001	UP DOWN BUTTON	1		
	61	VKS3794-003	LOCK LEVER(L)	1		
	62	VKS3795-002	LOCK LEVER(R)	1		
	64	VKS5563-001	GEAR	1		
	65	VKZ4786-002	OIL DAMPER	1		
	67	FSKW4012-002	T.SPRING	1	FOR L.LEVER(TOP	
	68	FSKW4013-002	T.SPRING	1	FOR OPEN LEVER	
	69	VKW5262-001	T.SPRING	1	FOR L.LEVER(R)	
	70	VKW5263-002	T.SPRING	1	FOR L.LEVER(L)	
	71	VKW5264-005	T.SPRING	1	FOR RELEASE LEV	
	72	QYSDSF2006M	SCREW	1	DAMPER+L.LEVER(	
	74	VKZ4777-001	MINI SCREW	1	LOCK LEVER(O.L.	
	82	FSKL4018-00B	IC BRACKET	1		
	83	FSKL4023-001	P.W.B.BRACKET	1		
	84	FSKL4014-001	HEAT SINK	1		
	85	VMA4652-001SS	EARTH PLATE	1		
⚠	86	QMFZ021-100-J1	FUSE	1		
	87	FSKS3017-002	LED HOLDER	1		
	88	FSXP4006-001	SCM BUTTON	1		
	89	FSKS3014-001	OPEN LEVER	1		
	90	FSYH4036-035	SHEET	1	SLIDING SHEET	
	93	FSYH4036-049	KNOB SHEET	1		
	94	FSYH4036-050	MECHA SHEET	1		
	96	FSYH4036-032	SHEET	1		
	99	FSKL2001-001	MECHA BRACKET	1		
	LCD1	QLD0113-001	LCD MODULE	1	KS-FX850R	
		QLD0124-001	LCD MODULE	1	KS-FX820R	
		QLD0123-001	LCD MODULE	1	KS-FX835R	
	100	FSKL2002-001	MECHA BRACKET	1		
	101	FSYH4036-031	SHEET	1		
	102	FSXP3059-001	DETACH BUTTON	1		
	104	FSKM3012-011	REAR BRACKET	1		
	105	QYSDST2606Z	SCREW	1	REAR BKT+ANT JA	
	106	QYSDST2606Z	SCREW	1	REAR BKT+REG B	
	107	QYSDSF3006Z	SCREW	1	REAR BKT+PIN JA	
	108	QYSDST2606Z	SCREW	1	REAR BKT+CD IN	

Cassette mechanism assembly and parts list

CDS-801

■ Parts list (Cassette mechanism)

Block No. M2MM

⚠	Item	Parts number	Parts name	Q'ty		Description	Area
	1	X-0801-1003S	MAIN CHASSIS AS	1			
	2	X-0801-1002S	SLIDE CHASSIS A	1			
	3	X-0801-1008S	SIDE BKT ASS'Y	1			
	4	X-0801-1010S	EJECT CAM LIMIT	1			
	5	X-0801-1013S	CASSETTE HANGER	1			
	9	1-0801-6002S	FLYWHEEL ASSY F	1			
	10	X-0801-2003S	GEAR BASE ASS'Y	1			
	11	X-0801-2021S	PINCH ARM F ASS	1			
	12	X-0801-2022S	PINCH ARM R ASS	1			
	13	1-0801-6003S	FLYWHEEL ASSY R	1			
	16	X-0801-7006S	SUB MOTOR ASS'Y	1			
	17	X-0801-7057S	MAIN MOTOR ASSY	1			
	21	1-0801-1003S	DIRECTION PLATE	1			
	22	1-0801-1004S	DIRECTION LINK	1			
	23	1-0801-1005S	PINCH SPG ARM	1			
	24	1-0801-1006S	CASSETTE GUIDE	1			
	25	1-0801-1007S	LOAD ARM	1			
	26	1-0801-1009S	HEAD SUPT SPG	1			
	27	1-0801-1011S	EJECT CAM PLATE	1			
	28	1-0801-1012S	CASSETTE HOLDER	1			
	30	1-0801-1020S	REINFORCE BRKT	1			
	32	1-0101-2056S	IDLE PULLEY(A1)	1			
	33	1-0801-2004S	REDUCTION GEARA	1			
	34	1-0801-2005S	REDUCTION GEARB	1			
	35	1-0801-2006S	SPG HOLDER F	1			
	36	1-0801-2007S	FRICTION GEARPL	1			
	37	1-0801-2008S	FRICTION GEARFF	1			
	38	1-0801-2009S	MODE GEAR	1			
	39	1-0801-2010S	REEL SPINDLE	2			
	40	1-0801-2011S	REEL DRIVER	2			
	41	1-0801-2014S	GEAR BASE ARM	1			
	42	1-0801-2015S	GEAR BASE LINK	1			
	43	1-0801-2016S	TAKE UP GEAR	1			
	44	1-0801-2017S	REFLECTOR GEAR	1			
	45	1-0801-2018S	MODE RACK	1			
	46	1-0801-2019S	MODE SW ACTUATR	1			
	47	1-0801-2020S	TAPE GUIDE	1			
	48	1-0801-2023S	LOAD RACK	1			
	49	1-0801-2024S	RACK LINK	1			
	50	1-0801-2025S	CASSETTE CATCH	1			
	51	1-0801-2030S	SPG HOLDER R	1			
	55	1-0801-3005S	RACK COLLAR	1			
	59	1-0801-4001S	PINCH ARM SPG	1			
	60	1-0801-4002S	TU SPG	1			
	61	1-0801-4003S	FF SPG	1			
	63	1-0801-4005S	EJECTCAM PLT SP	1			
	64	1-0801-4006S	HOLDER CUSH SPG	1			
	65	1-0801-4007S	GEAR BASE SPG	1			

■ Parts list (Cassette mechanism)

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	66	1-0801-4008S	REEL DRIVER SPG	2		
	67	1-0801-4009S	LOAD ARM SPG	1		
	68	1-0801-4011S	HOLDER STAB SPG	1		
	71	1-0801-5001S	BELT	1		
	72	1-0801-5002S	FELT	1	7.5*18.5*1.0	
	73	1-0801-5003S	AZIMUTH SCR	2		
	74	1-0801-5004S	FELT	1	11*18.5*1.0	
	75	1-0801-5005S	REEL WASHER	2		
	76	21732-6280-36S	LUG PLATE	1		
	82	1-0801-7001S	REEL PCB DL	1		
	84	1-0801-7003S	SW(MATSUSHITA)	2	(ESE22MH2L)	
	85	1-0801-7005S	SW	1	(ALPS SPPB64)	
	86	1-0801-7024S	PHOTO SENSOR	1	(ON2170-QR FS)	
	87	1-0801-7026S	FLAT CABLE 10P	1		
	91	1-0801-7014S	HEAD	1	(MITSUMIP-5544)	
	93	10801-7009-0S	M.MOTOR WIRE	1	BLACK	
	94	10801-7009-1S	M.MOTOR WIRE	1	RED	
	95	10801-7010-0S	S.MOTOR WIRE	1	ORANGE	
	96	10801-7010-1S	S.MOTOR WIRE	1	BROWN	
	97	10801-7015-0S	HEAD WIRE BLACK	1		
	98	10801-7015-1S	HEAD WIRE BROWN	1		
	99	10801-7015-2S	HEAD WIRE RED	1		
	100	10801-7015-3S	HEAD WIRE ORANG	1		
	101	10801-7015-4S	HEAD WIRE YELLO	1		
	102	10801-7015-5S	HEAD WIRE WHITE	1		
	103	1-0801-7016S	HEAD PCB	1		
	104	1-0801-7025S	CONN S6B-PH-K-S	1		
	105	21382-3060-C2S	+PLAIN B-TYPE	1	M2.3*6.0	
	106	2-1032-0025-C2S	+SCREW PLAIN	2	M2*2.5	
	107	21332-0035-P1S	S-TYPE PRECISIO	2	M2*3.5	
	108	21112-6035-C2S	+SCREW PLAIN	1	M2.6*3.5	
	109	2-1816-0032-E8S	LMW-S	2	1.6*3.2*0.35	
	110	21812-0032-D2S	PSW-S	1	1.2*3.2*0.25	
	111	1-0036-5024S	PSW-S(REEL B)	2	1.5*3.2*0.25	
	113	2-1821-0040-D1S	PSW	2	2.1*4.0*0.25	
	114	21821-0040-D2S	PSW-S	1	2.1*4.0*0.25	
	117	2-1711-5040-16S	E-RING	1	1.5	

Grease point 1/2
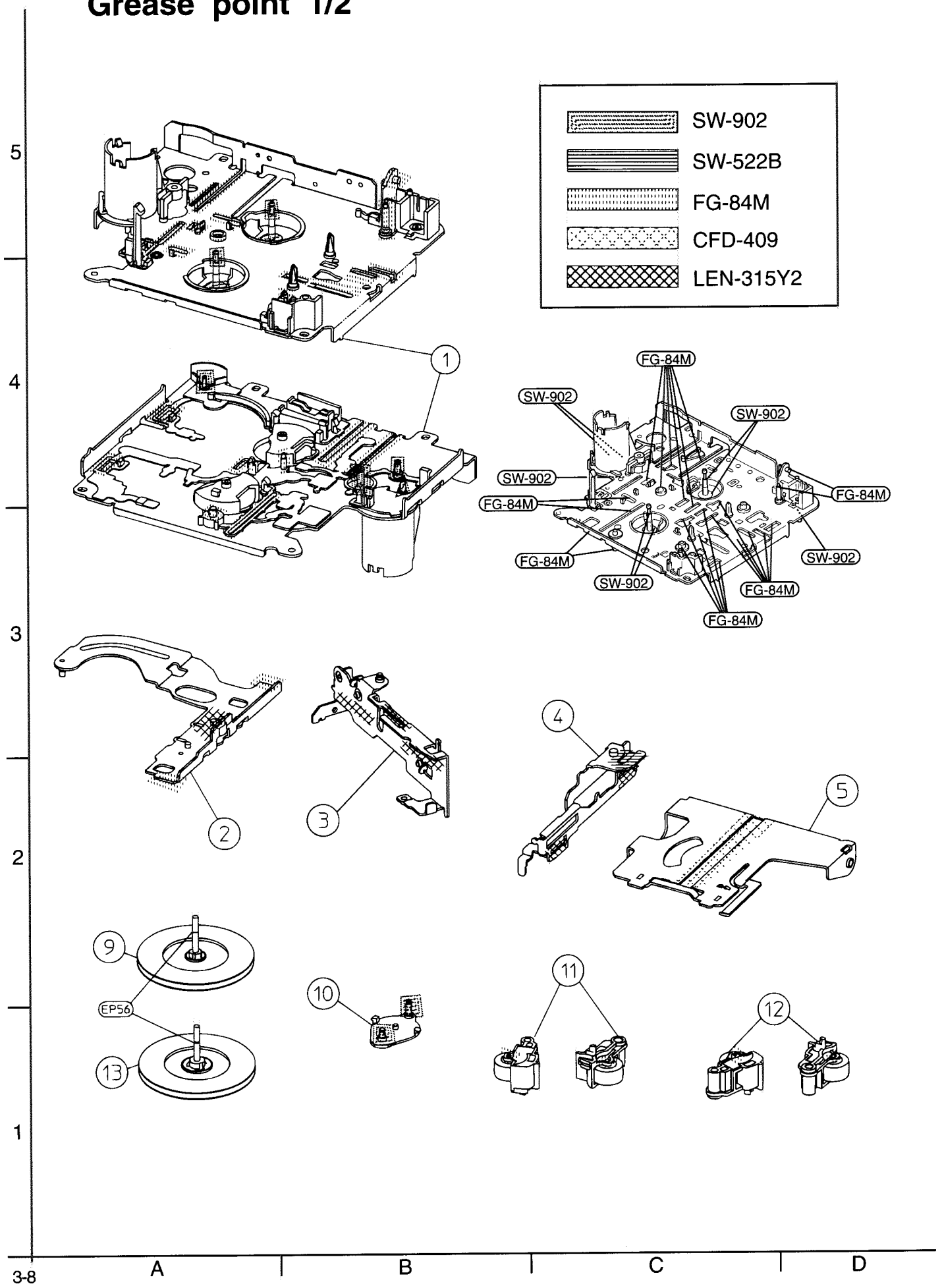
SW-902	
SW-522B	
FG-84M	
CFD-409	
LEN-315Y2	

Grease point 2/2
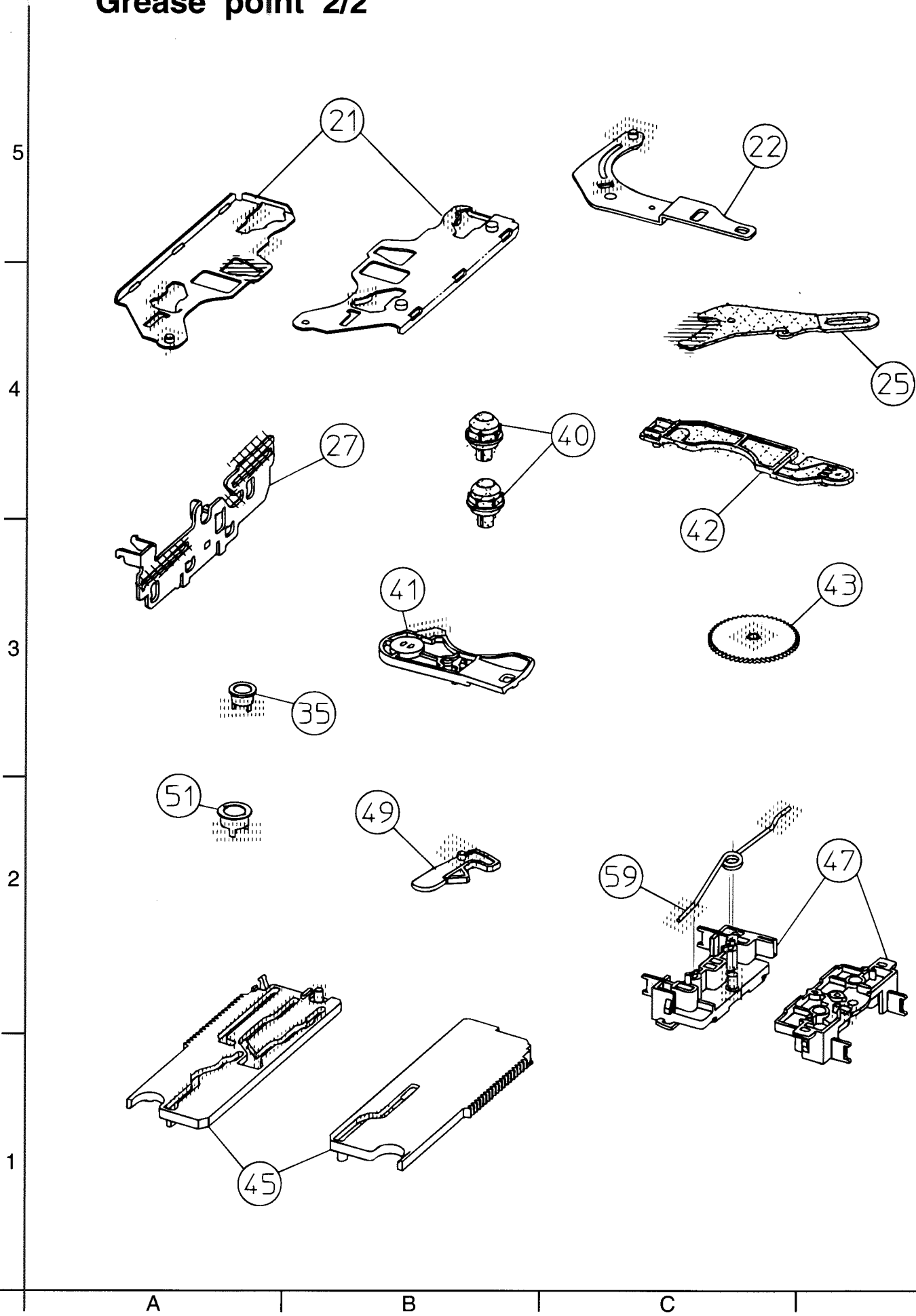
KS-FX850R/KS-FX820R/KS-FX835R
Electrical parts list

■ Electrical parts list (Main board)   Block No. 01

⚠	Item	Parts number	Parts name	Remarks	Area
	BZ841	QAN0009-001Z	BUZZER	KS-FX850R	
	C 1	QERF1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 2	NDC21HJ-470X	C CAPACITOR		
	C 3	NCB21EK-473X	C CAPACITOR		
	C 4	NCB21EK-104X	C CAPACITOR		
	C 5	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 6	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 7	QERF1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C 8	NDC21HJ-470X	C CAPACITOR		
	C 9	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 31	NCB21EK-123X	C CAPACITOR		
	C 32	NCB21EK-563X	C CAPACITOR		
	C 33	NDC21HJ-151X	C CAPACITOR		
	C 41	NCB21HK-102X	C CAPACITOR		
	C 42	QEQF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 43	QERF1HM-474Z	E CAPACITOR	.47MF 20% 50V	
	C 71	NCB21EK-223X	C CAPACITOR		
	C 72	NCB21HK-561X	C CAPACITOR		
	C 73	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 74	NDC21HJ-820X	C CAPACITOR		
	C 75	NDC21HJ-470X	C CAPACITOR		
	C 76	NCB21HK-103X	C CAPACITOR		
	C 77	QER41CM-476	E CAPACITOR	47MF 20% 16V	
	C 81	NCB21EK-183X	C CAPACITOR		
	C 82	NCB21HK-183X	C CAPACITOR		
	C 161	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 162	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 163	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 164	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 165	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 166	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 167	QER41CM-476	E CAPACITOR	47MF 20% 16V	
	C 168	QERF1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 169	NCB21HK-822X	C CAPACITOR		
	C 170	NCB21CK-154X	C CAPACITOR		
	C 171	NCB21CK-224X	C CAPACITOR		
	C 172	NCB21HK-822X	C CAPACITOR		
	C 173	NCB21CK-154X	C CAPACITOR		
	C 174	NCB21CK-224X	C CAPACITOR		
	C 175	NCB21EK-333X	C CAPACITOR		
	C 176	NCB21EK-333X	C CAPACITOR		
	C 177	NCB21HK-562X	C CAPACITOR		
	C 178	NCB21HK-562X	C CAPACITOR		
	C 180	QERF1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 181	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 182	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 183	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 184	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 241	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 242	QERF1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 243	NCB21EK-473X	C CAPACITOR		
	C 244	QERF1HM-224Z	E CAPACITOR	.22MF 20% 50V	
	C 301	QER41CM-106	E CAPACITOR	10MF 20% 16V	
	C 302	QER41CM-106	E CAPACITOR	10MF 20% 16V	
	C 303	NCS21HJ-471X	C CAPACITOR		
	C 304	NCS21HJ-471X	C CAPACITOR		
	C 305	NCB21EK-104X	C CAPACITOR		
	C 306	NCB21EK-104X	C CAPACITOR		
	C 307	QERF1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 308	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 309	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 313	NCS21HJ-471X	C CAPACITOR		
	C 314	NCS21HJ-471X	C CAPACITOR		
	C 315	NCB21EK-104X	C CAPACITOR		
	C 318	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 319	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 701	NCB21HK-102X	C CAPACITOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	C 702	NCB21EK-104X	C CAPACITOR		
	C 703	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 704	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 705	NCB21EK-104X	C CAPACITOR		
	C 706	NDC21HJ-270X	C CAPACITOR		
	C 707	NDC21HJ-270X	C CAPACITOR		
	C 708	NCB21EK-104X	C CAPACITOR		
	C 709	NCB21EK-104X	C CAPACITOR		
	C 712	NCB21EK-473X	C CAPACITOR		
	C 713	NCB21HK-102X	C CAPACITOR		
	C 714	NCB21HK-331X	C CAPACITOR	KS-FX850R	
	C 781	QERF1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 782	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 801	NCB21EK-473X	C CAPACITOR		
	C 841	QERF1HM-104Z	E CAPACITOR	KS-FX850R	
	C 881	NCB21EK-104X	C CAPACITOR	KS-FX850R	
	C 882	QERF1CM-226Z	E CAPACITOR	KS-FX850R	
	C 891	NCB21EK-104X	C CAPACITOR		
	C 901	QER41CM-106	E CAPACITOR	10MF 20% 16V	
	C 902	NCB21EK-473X	C CAPACITOR		
	C 903	QETB1CM-228	E CAPACITOR	2200MF 20% 16V	
	C 904	NCB21EK-473X	C CAPACITOR		
	C 905	QERF1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C 906	QEKJ1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 907	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 908	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 909	QETN0JM-228Z	E CAPACITOR	2200MF 20% 6.3V	
	C 911	NCS21HJ-151X	C CAPACITOR	KS-FX850R	
	C 981	NCB21EK-104X	C CAPACITOR		
	C 982	QER41CM-106	E CAPACITOR	10MF 20% 16V	
	CJ601	QNZ0007-002	CAR CONNECTOR		
	CP401	QGB1214J1-18S	CONNECTOR		
	CP901	QNZ0112-001	CAR CONNECTOR		
	D 2	MA152WK-X	SI DIODE		
	D 3	MA152WK-X	SI DIODE		
	D 4	MA152WK-X	SI DIODE		
	D 5	1SS133-T2	SI DIODE		
	D 6	1SS133-T2	SI DIODE		
	D 161	MA152WK-X	SI DIODE		
	D 241	MA152WA-X	DIODE		
	D 242	MA152WA-X	DIODE		
	D 321	MA152WA-X	DIODE		
	D 322	MA152WA-X	DIODE		
	D 701	MA3056/M/-X	ZENER DIODE		
	D 702	MA3056/M/-X	ZENER DIODE		
	D 703	MA3056/M/-X	ZENER DIODE		
	D 704	MA3056/M/-X	ZENER DIODE		
	D 705	MA3056/M/-X	ZENER DIODE		
	D 706	MA3056/M/-X	ZENER DIODE		
	D 707	MA3056/M/-X	ZENER DIODE		
	D 708	MA3056/M/-X	ZENER DIODE		
	D 709	MA3056/M/-X	ZENER DIODE		
	D 710	MA3056/M/-X	ZENER DIODE	KS-FX850R	
	D 781	MTZJ11C-T2	Z.DIODE I.M		
	D 782	MA152WA-X	DIODE		
	D 783	MA152WA-X	DIODE		
	D 891	MA152WA-X	DIODE		
	D 901	1N5401-TU-15	DIODE		
	D 902	MA152WA-X	DIODE		
	D 981	CRS03-W	SB DIODE		
	D 982	CRS03-W	SB DIODE		
	IC 71	SAA6579T-X	IC		
	IC161	TEA6320T-X	IC		
	IC301	HA13158A	IC		
	IC701	UPD178018AGC551	I.C(MICRO-COMP)		
	IC801	HD74HC126FP-X	IC		
	IC901	BA4905-V3	IC		

■ Electrical parts list (Main board)   Block No. 01

⚠	Item	Parts number	Parts name	Remarks	Area
	J 1	QNZ0009-001	CAR ANT JACK		
	J 321	QNN0175-001	PIN JACK		
	J 801	QNZ0095-001	CONNECTOR		
	L 1	QQL231K-4R7Y	INDUCTOR		
	L 901	QQR0703-001	CHOKE COIL		
	L 902	QQL231K-470Y	INDUCTOR		
	L 903	QQL231K-470Y	INDUCTOR		
	PL701	QLL0033-001	LAMP		
	Q 1	DTC114EKA-X	TRANSISTOR		
	Q 2	2SA1037AK/RS/-X	TRANSISTOR		
	Q 3	2SA1037AK/RS/-X	TRANSISTOR		
	Q 4	DTA114EKA-X	DIGITAL.TRANSIS		
	Q 5	DTA114EKA-X	DIGITAL.TRANSIS		
	Q 6	2SC2412K/R/-X	TRANSISTOR		
	Q 7	2SC2412K/R/-X	TRANSISTOR		
	Q 8	2SC2412K/R/-X	TRANSISTOR		
	Q 9	DTC114EKA-X	TRANSISTOR		
	Q 10	DTA114EKA-X	DIGITAL.TRANSIS		
	Q 31	2SC3661-X	TRANSISTOR		
	Q 32	2SC3661-X	TRANSISTOR		
	Q 41	2SC2412K/R/-X	TRANSISTOR		
	Q 42	2SC2412K/R/-X	TRANSISTOR		
	Q 241	2SD601A/R/-X	TRANSISTOR		
	Q 321	2SD1048/6-7/-X	TRANSISTOR		
	Q 331	2SD1048/6-7/-X	TRANSISTOR		
	Q 341	2SD1048/6-7/-X	TRANSISTOR		
	Q 351	2SD1048/6-7/-X	TRANSISTOR		
	Q 701	2SC2412K/R/-X	TRANSISTOR		
	Q 781	DTA114EKA-X	DIGITAL.TRANSIS		
	Q 782	DTA114EKA-X	DIGITAL.TRANSIS		
	Q 784	DTC114EKA-X	TRANSISTOR		
	Q 841	DTC114EKA-X	TRANSISTOR	KS-FX850R	
	Q 881	DTC114EKA-X	TRANSISTOR	KS-FX850R	
	Q 891	UN2211-X	TRANSISTOR		
	Q 901	DTC114EKA-X	TRANSISTOR		
	Q 902	2SA1706/ST/-T	TRANSISTOR		
	Q 903	DTC114EKA-X	TRANSISTOR		
	Q 904	2SA1037AK/RS/-X	TRANSISTOR		
	Q 976	UN2211-X	TRANSISTOR		
	Q 977	2SA1037AK/RS/-X	TRANSISTOR		
	R 1	NRS181J-330X	MG RESISTOR		
	R 2	NRSA02J-472X	MG RESISTOR		
	R 3	NRSA02J-473X	MG RESISTOR		
	R 4	NRSA02J-332X	MG RESISTOR		
	R 5	NRSA02J-473X	MG RESISTOR		
	R 6	NRS181J-120X	MG RESISTOR		
	R 8	NRSA02J-472X	MG RESISTOR		
	R 9	NRSA02J-472X	MG RESISTOR		
	R 10	NRSA02J-472X	MG RESISTOR		
	R 11	NRS181J-223X	MG RESISTOR		
	R 12	NRSA02J-0R0X	MG RESISTOR		
	R 31	NRSA02J-102X	MG RESISTOR		
	R 32	NRSA02J-392X	MG RESISTOR		
	R 33	NRSA02J-102X	MG RESISTOR		
	R 34	NRSA02J-102X	MG RESISTOR		
	R 41	NRSA02J-152X	MG RESISTOR		
	R 42	NRSA02J-102X	MG RESISTOR		
	R 43	NRSA02J-103X	MG RESISTOR		
	R 44	NRS181J-102X	MG RESISTOR		
	R 71	NRS181J-222X	MG RESISTOR		
	R 72	NRSA02J-222X	MG RESISTOR		
	R 73	NRSA02J-222X	MG RESISTOR		
	R 81	NRSA02J-103X	MG RESISTOR		
	R 82	NRSA02J-103X	MG RESISTOR		
	R 83	NRSA02J-223X	MG RESISTOR		
	R 84	NRSA02J-223X	MG RESISTOR		
	R 161	NRSA02J-0R0X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R 162	NRS181J-0R0X	MG RESISTOR		
	R 165	NRSA02J-223X	MG RESISTOR		
	R 166	NRSA02J-222X	MG RESISTOR		
	R 167	NRSA02J-223X	MG RESISTOR		
	R 168	NRSA02J-222X	MG RESISTOR		
	R 169	NRSA02J-224X	MG RESISTOR		
	R 170	NRSA02J-224X	MG RESISTOR		
	R 171	NRS181J-100X	MG RESISTOR		
	R 172	NRSA02J-271X	MG RESISTOR		
	R 173	NRSA02J-271X	MG RESISTOR		
	R 241	NRSA02J-473X	MG RESISTOR		
	R 242	NRS181J-184X	MG RESISTOR		
	R 243	NRS181J-123X	MG RESISTOR		
	R 244	NRSA02J-223X	MG RESISTOR		
	R 245	NRSA02J-101X	MG RESISTOR		
	R 246	NRSA02J-102X	MG RESISTOR		
	R 247	NRSA02J-274X	MG RESISTOR		
	R 301	NRSA02J-273X	MG RESISTOR		
	R 302	NRSA02J-273X	MG RESISTOR		
	R 303	NRSA02J-823X	MG RESISTOR		
	R 304	NRS181J-823X	MG RESISTOR		
	R 305	NRSA02J-472X	MG RESISTOR		
	R 306	NRSA02J-473X	MG RESISTOR		
	R 307	NRS181J-473X	MG RESISTOR		
	R 308	NRSA02J-473X	MG RESISTOR		
	R 309	NRSA02J-473X	MG RESISTOR		
	R 311	NRSA02J-273X	MG RESISTOR		
	R 312	NRSA02J-273X	MG RESISTOR		
	R 313	NRSA02J-823X	MG RESISTOR		
	R 314	NRSA02J-823X	MG RESISTOR		
	R 321	NRS181J-101X	MG RESISTOR		
	R 322	NRSA02J-102X	MG RESISTOR		
	R 323	NRS181J-222X	MG RESISTOR		
	R 331	NRSA02J-101X	MG RESISTOR		
	R 332	NRSA02J-102X	MG RESISTOR		
	R 333	NRS181J-222X	MG RESISTOR		
	R 341	NRSA02J-101X	MG RESISTOR		
	R 342	NRSA02J-102X	MG RESISTOR		
	R 343	NRSA02J-222X	MG RESISTOR		
	R 351	NRS181J-101X	MG RESISTOR		
	R 352	NRSA02J-102X	MG RESISTOR		
	R 353	NRSA02J-222X	MG RESISTOR		
	R 701	NRSA02J-271X	MG RESISTOR		
	R 702	NRSA02J-271X	MG RESISTOR		
	R 703	NRSA02J-271X	MG RESISTOR		
	R 704	NRSA02J-103X	MG RESISTOR		
	R 705	NRSA02J-103X	MG RESISTOR		
	R 706	NRSA02J-103X	MG RESISTOR		
	R 707	NRSA02J-472X	MG RESISTOR		
	R 708	NRSA02J-472X	MG RESISTOR		
	R 711	NRS181J-473X	MG RESISTOR		
	R 712	NRSA02J-473X	MG RESISTOR		
	R 713	NRSA02J-103X	MG RESISTOR		
	R 714	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 715	NRSA02J-472X	MG RESISTOR		
	R 716	NRS181J-472X	MG RESISTOR		
	R 717	NRSA02J-472X	MG RESISTOR		
	R 718	NRSA02J-103X	MG RESISTOR		
	R 719	NRSA02J-103X	MG RESISTOR		
	R 720	NRSA02J-103X	MG RESISTOR		
	R 721	NRS181J-103X	MG RESISTOR		
	R 722	NRSA02J-103X	MG RESISTOR		
	R 723	NRSA02J-472X	MG RESISTOR		
	R 724	NRSA02J-472X	MG RESISTOR		
	R 725	NRSA02J-472X	MG RESISTOR		
	R 726	NRSA02J-472X	MG RESISTOR		
	R 727	NRSA02J-472X	MG RESISTOR		

KS-FX850R/KS-FX820R/KS-FX835R

■ Electrical parts list (Main board)   Block No. 01

⚠	Item	Parts number	Parts name	Remarks	Area
	R 728	NRSA02J-472X	MG RESISTOR		
	R 729	NRSA02J-473X	MG RESISTOR		
	R 730	NRSA02J-391X	MG RESISTOR		
	R 731	NRSA02J-103X	MG RESISTOR		
	R 732	NRSA02J-473X	MG RESISTOR		
	R 733	NRS181J-473X	MG RESISTOR		
	R 734	NRSA02J-473X	MG RESISTOR	KS-FX820R/835R	
	R 735	NRS181J-473X	MG RESISTOR		
	R 736	NRSA02J-473X	MG RESISTOR	KS-FX820R/835R	
	R 737	NRS181J-473X	MG RESISTOR	KS-FX820R/835R	
	R 738	NRSA02J-473X	MG RESISTOR		
	R 739	NRSA02J-104X	MG RESISTOR		
	R 740	NRSA02J-473X	MG RESISTOR	KS-FX820R/835R	
	R 741	NRSA02J-473X	MG RESISTOR	KS-FX850R	
	R 742	NRS181J-563X	MG RESISTOR		
	R 743	NRSA02J-473X	MG RESISTOR		
	R 744	NRSA02J-103X	MG RESISTOR	KS-FX850R	
	R 745	NRSA02J-473X	MG RESISTOR		
	R 747	NRSA02J-473X	MG RESISTOR		
	R 748	NRS181J-243X	MG RESISTOR		
	R 781	NRSA02J-102X	MG RESISTOR		
	R 782	NRSA02J-273X	MG RESISTOR		
	R 801	NRSA02J-104X	MG RESISTOR		
	R 802	NRSA02J-334X	MG RESISTOR		
	R 803	NRSA02J-101X	MG RESISTOR		
	R 804	NRSA02J-223X	MG RESISTOR		
	R 805	NRSA02J-104X	MG RESISTOR		
	R 806	NRSA02J-103X	MG RESISTOR		
	R 807	NRSA02J-104X	MG RESISTOR		
	R 808	NRSA02J-104X	MG RESISTOR		
	R 809	NRSA02J-101X	MG RESISTOR		
	R 810	NRSA02J-334X	MG RESISTOR		
	R 841	NRSA02J-102X	MG RESISTOR	KS-FX850R	
	R 842	NRSA02J-222X	MG RESISTOR	KS-FX850R	
	R 881	NRS181J-473X	MG RESISTOR	KS-FX850R	
	R 882	NRSA02J-472X	MG RESISTOR	KS-FX850R	
	R 891	NRSA02J-473X	MG RESISTOR		
	R 892	NRSA02J-102X	MG RESISTOR		
	R 901	QRE141J-470Y	C RESISTOR	47 5% 1/4W	
	R 902	NRS181J-103X	MG RESISTOR		
	R 903	NRS181J-472X	MG RESISTOR		
	R 904	NRS181J-183X	MG RESISTOR		
	R 905	NRS181J-103X	MG RESISTOR		
	R 906	NRS181J-102X	MG RESISTOR		
	R 907	NRS181J-473X	MG RESISTOR		
	R 908	NRSA02J-222X	MG RESISTOR		
	R 909	NRSA02J-473X	MG RESISTOR		
	R 976	NRSA02J-104X	MG RESISTOR		
	R 977	NRSA02J-273X	MG RESISTOR		
	R 978	NRS181J-123X	MG RESISTOR		
	S 701	QSW0451-001	DETECT SW		
	S 702	QSW0451-001	DETECT SW		
	TU 1	QAU0156-001	TUNER		
	X 701	QAX0406-001Z	CRYSTAL		

■ **Electrical parts list (Mecha control board)**   Block No. 02

⚠	Item	Parts number	Parts name	Remarks	Area
	C 401	NDC21HJ-101X	C CAPACITOR		
	C 402	NDC21HJ-101X	C CAPACITOR		
	C 403	NDC21HJ-101X	C CAPACITOR		
	C 404	NDC21HJ-101X	C CAPACITOR		
	C 405	NDC21HJ-101X	C CAPACITOR		
	C 406	NDC21HJ-101X	C CAPACITOR		
	C 407	NDC21HJ-101X	C CAPACITOR		
	C 408	NDC21HJ-101X	C CAPACITOR		
	C 409	QERF1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 410	QFV61HJ-153Z	TF CAPACITOR	.015MF 5% 50V	
	C 411	QFV61HJ-153Z	TF CAPACITOR	.015MF 5% 50V	
	C 412	NCB21EK-104X	C CAPACITOR		
	C 413	NCB21EK-104X	C CAPACITOR		
	C 414	QERF1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 416	QFV61HJ-104Z	TF CAPACITOR	DOLBY	
	C 417	QFV61HJ-104Z	TF CAPACITOR	DOLBY	
	C 418	NDC21HJ-221X	C CAPACITOR		
	C 419	QERF1HM-474Z	E CAPACITOR	.47MF 20% 50V	
	C 421	NCB21HK-103X	C CAPACITOR		
	C 422	NCB21EK-104X	C CAPACITOR		
	C 423	QER41CM-106	E CAPACITOR	10MF 20% 16V	
	C 424	NCB21EK-104X	C CAPACITOR		
	C 425	NCB21HK-103X	C CAPACITOR		
	CN401	QGB1214K1-18S	CONNECTOR		
	CN402	VMP3501-001	CONN.WIRE ASSY		
	CN403	QGF1219F1-10S	CONN.TERMINAL		
	D 401	MA3047/H/-X	ZENER DIODE		
	D 402	DSK10C-T1	DIODE		
	IC401	CXA2560Q	IC		
	IC402	LB1641	IC		
	Q 402	DTC114EKA-X	TRANSISTOR		
	Q 403	2SB1322/RS/-T	TRANSISTOR		
	R 401	NRS181J-391X	MG RESISTOR		
	R 402	NRSA02J-104X	MG RESISTOR		
	R 403	NRSA02J-104X	MG RESISTOR		
	R 404	NRSA02J-104X	MG RESISTOR		
	R 405	NRSA02J-104X	MG RESISTOR		
	R 406	NRSA02J-181X	MG RESISTOR		
	R 407	NRSA02J-181X	MG RESISTOR		
	R 412	NRSA02J-101X	MG RESISTOR		
	R 413	NRSA02J-183X	MG RESISTOR		
	R 414	NRSA02J-392X	MG RESISTOR		
	R 415	NRSA02J-223X	MG RESISTOR		
	R 416	NRSA02J-125X	MG RESISTOR		
	R 417	NRSA02J-103X	MG RESISTOR		
	R 418	NRSA02J-153X	MG RESISTOR		
	R 422	NRSA02J-332X	MG RESISTOR		
	R 423	NRS181J-473X	MG RESISTOR		
	R 424	NRSA02J-332X	MG RESISTOR		
	R 425	NRS181J-330X	MG RESISTOR		
	R 426	QUY150-050Y	BUS WIRE		
	VR401	QVP0006-333Z	SEMI.V.RESISTOR	DOLBY	
	VR402	QVP0006-333Z	SEMI.V.RESISTOR	DOLBY	

KS-FX850R/KS-FX820R/KS-FX835R

■ Electrical parts list (Front board)　　　Block No. 03

⚠	Item	Parts number	Parts name	Remarks	Area
	C 601	NBE20JM-475X	TS E CAPACITOR		
	C 602	NCB21HK-103X	C CAPACITOR		
	C 603	NCS21HJ-221X	C CAPACITOR		
	C 604	NCB21CK-224X	C CAPACITOR		
	C 605	NCB21CK-224X	C CAPACITOR		
	C 606	NBE20JM-475X	TS E CAPACITOR		
	CN601	QNZ0006-001	CAR CONNECTOR		
	D 601	SML-310LT/MN/-X	LED		
	D 602	SML-310VT/JK/-X	LED	KS-FX835R	
	D 602	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 603	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 603	SML-310VT/JK/-X	LED	KS-FX835R	
	D 604	SML-310VT/JK/-X	LED	KS-FX835R	
	D 604	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 605	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 605	SML-310VT/JK/-X	LED	KS-FX835R	
	D 606	SML-310VT/JK/-X	LED	KS-FX835R	
	D 606	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 607	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 607	SML-310VT/JK/-X	LED	KS-FX835R	
	D 608	SML-310VT/JK/-X	LED	KS-FX835R	
	D 608	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 609	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 609	SML-310VT/JK/-X	LED	KS-FX835R	
	D 610	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 610	SML-310VT/JK/-X	LED	KS-FX835R	
	D 611	SML-310VT/JK/-X	LED	KS-FX835R	
	D 611	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 612	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 612	SML-310VT/JK/-X	LED	KS-FX835R	
	D 613	SML-310VT/JK/-X	LED	KS-FX835R	
	D 613	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 614	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 614	SML-310VT/JK/-X	LED	KS-FX835R	
	D 615	SML-310VT/JK/-X	LED	KS-FX835R	
	D 615	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 616	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 616	SML-310VT/JK/-X	LED	KS-FX835R	
	D 617	SML-310VT/JK/-X	LED	KS-FX835R	
	D 617	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 618	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 618	SML-310VT/JK/-X	LED	KS-FX835R	
	D 619	SML-310VT/JK/-X	LED	KS-FX835R	
	D 619	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 620	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 620	SML-310VT/JK/-X	LED	KS-FX835R	
	D 621	SML-310VT/JK/-X	LED	KS-FX835R	
	D 621	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 622	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 622	SML-310VT/JK/-X	LED	KS-FX835R	
	D 623	SML-310VT/JK/-X	LED	KS-FX835R	
	D 623	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 624	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 624	SML-310VT/JK/-X	LED	KS-FX835R	
	D 625	SML-310VT/JK/-X	LED	KS-FX835R	
	D 625	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 626	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 626	SML-310VT/JK/-X	LED	KS-FX835R	
	D 627	LNJ308G81/1-3/X	LED	KS-FX850R/820R	
	D 627	SML-310VT/JK/-X	LED	KS-FX835R	
	D 641	NSPB320BS/VP/	LED	KS-FX835R	
	D 641	NSPW310BS/BRS/	LED	KS-FX850R/820R	
	D 642	NSPW310BS/BRS/	LED	KS-FX850R/820R	
	D 642	NSPB320BS/VP/	LED	KS-FX835R	
	D 643	NSPB320BS/VP/	LED	KS-FX835R	
	D 643	NSPW310BS/BRS/	LED	KS-FX850R/820R	
	D 651	MA3051/M/-X	ZENER DIODE		

⚠	Item	Parts number	Parts name	Remarks	Area
	D 652	MA152WK-X	SI DIODE		
	D 653	MA152WA-X	DIODE		
	D 654	MA152WK-X	SI DIODE		
	D 655	MA152WA-X	DIODE		
	D 656	MA152WK-X	SI DIODE		
	D 657	MA3056/M/-X	ZENER DIODE		
	EN601	QSW0863-001	JOG SHUTTLE SW		
	IC601	LC75873NW	IC		
	IC602	RPM6938-SV4	IC		
	Q 641	2SB815/7/-X	TRANSISTOR	KS-FX850R	
	Q 642	UN2211-X	TRANSISTOR	KS-FX850R	
	R 601	NRSA02J-561X	MG RESISTOR		
	R 602	NRSA02J-821X	MG RESISTOR		
	R 603	NRSA02J-122X	MG RESISTOR		
	R 604	NRSA02J-182X	MG RESISTOR		
	R 605	NRSA02J-272X	MG RESISTOR		
	R 606	NRS181J-561X	MG RESISTOR		
	R 607	NRSA02J-821X	MG RESISTOR		
	R 608	NRSA02J-122X	MG RESISTOR		
	R 609	NRSA02J-182X	MG RESISTOR		
	R 610	NRSA02J-272X	MG RESISTOR		
	R 611	NRSA02J-392X	MG RESISTOR		
	R 612	NRSA02J-561X	MG RESISTOR		
	R 613	NRSA02J-821X	MG RESISTOR		
	R 614	NRSA02J-122X	MG RESISTOR		
	R 615	NRSA02J-182X	MG RESISTOR		
	R 616	NRSA02J-272X	MG RESISTOR		
	R 620	NRS181J-561X	MG RESISTOR		
	R 621	NRS181J-271X	MG RESISTOR		
	R 622	NRS181J-271X	MG RESISTOR		
	R 623	NRS181J-271X	MG RESISTOR		
	R 624	NRS181J-271X	MG RESISTOR		
	R 625	NRS181J-431X	MG RESISTOR		
	R 626	NRS181J-271X	MG RESISTOR		
	R 627	NRS181J-271X	MG RESISTOR		
	R 628	NRS181J-561X	MG RESISTOR	KS-FX850R	
	R 628	NRS181J-431X	MG RESISTOR	KS-FX820R/835R	
	R 629	NRS181J-561X	MG RESISTOR		
	R 630	NRS181J-271X	MG RESISTOR		
	R 641	NRS181J-471X	MG RESISTOR	KS-FX850R	
	R 641	NRS181J-512X	MG RESISTOR	KS-FX835R	
	R 641	NRS181J-102X	MG RESISTOR	KS-FX820R	
	R 642	NRS181J-102X	MG RESISTOR	KS-FX820R	
	R 642	NRS181J-512X	MG RESISTOR	KS-FX835R	
	R 642	NRS181J-471X	MG RESISTOR	KS-FX850R	
	R 643	NRS181J-471X	MG RESISTOR	KS-FX850R	
	R 643	NRS181J-512X	MG RESISTOR	KS-FX835R	
	R 643	NRS181J-102X	MG RESISTOR	KS-FX820R	
	R 644	NRS181J-471X	JOG RESISTOR		
	R 645	NRSA02J-473X	MG RESISTOR	KS-FX850R	
	R 646	NRS181J-102X	MG RESISTOR	KS-FX850R	
	R 650	NRSA02J-101X	MG RESISTOR		
	R 651	NRSA02J-473X	MG RESISTOR		
	R 652	NRSA02J-473X	MG RESISTOR		
	R 653	NRS181J-102X	MG RESISTOR		
	R 654	NRSA02J-221X	MG RESISTOR		
	R 655	NRSA02J-394X	MG RESISTOR		
	R 656	NRSA02J-334X	MG RESISTOR		
	R 657	NRSA02J-103X	MG RESISTOR		
	R 658	NRSA02J-470X	MG RESISTOR		
	R 661	NRSA02J-332X	MG RESISTOR		
	R 662	NRSA02J-332X	MG RESISTOR		
	R 663	NRSA02J-332X	MG RESISTOR		
	R 669	NRSA02J-103X	MG RESISTOR		
	R 670	NRSA02J-103X	MG RESISTOR		
	R 671	NRSA02J-103X	MG RESISTOR		
	S 601	NSW0066-001X	TACT SWITCH		

■ Electrical parts list (Front board)   Block No. 03

⚠	Item	Parts number	Parts name	Remarks	Area
	S 602	NSW0066-001X	TACT SWITCH		
	S 603	NSW0066-001X	TACT SWITCH		
	S 604	NSW0066-001X	TACT SWITCH		
	S 605	NSW0066-001X	TACT SWITCH		
	S 606	NSW0066-001X	TACT SWITCH		
	S 607	NSW0066-001X	TACT SWITCH		
	S 608	NSW0066-001X	TACT SWITCH		
	S 609	NSW0066-001X	TACT SWITCH		
	S 610	NSW0066-001X	TACT SWITCH		
	S 611	NSW0066-001X	TACT SWITCH		
	S 612	NSW0066-001X	TACT SWITCH		
	S 613	NSW0066-001X	TACT SWITCH		
	S 614	NSW0066-001X	TACT SWITCH		
	S 615	NSW0066-001X	TACT SWITCH		
	S 616	NSW0066-001X	TACT SWITCH		
	S 617	NSW0066-001X	TACT SWITCH		
	S 618	NSW0066-001X	TACT SWITCH		
	S 619	NSW0066-001X	TACT SWITCH		

Packing materials and accessories parts list

Block No. Ⓜ ③ Ⓜ Ⓜ
Block No. Ⓜ ④ Ⓜ Ⓜ

(P4)
— A1,A2,A3,A18

(P1)

KIT2:A10,A11,A17

(P2)

A13

A16

(P3)

(P5)
KIT1:A5~A9

A20,A21

(P2)

(P6)
A14

A12

KS-FX850R/835R

(P4)

— A1

A16
: Trim Plate

A20
: Remocon

A21 : Battery

A14
: Car Cable

SCREW KIT 1

A9
: Hook

A8
:Washer

A5
: Plug nut

A6
: Mount bolt

A7: Lock nut

SCREW KIT 2

A10
: Screw

A17
: Sheet

A11
: Sheet
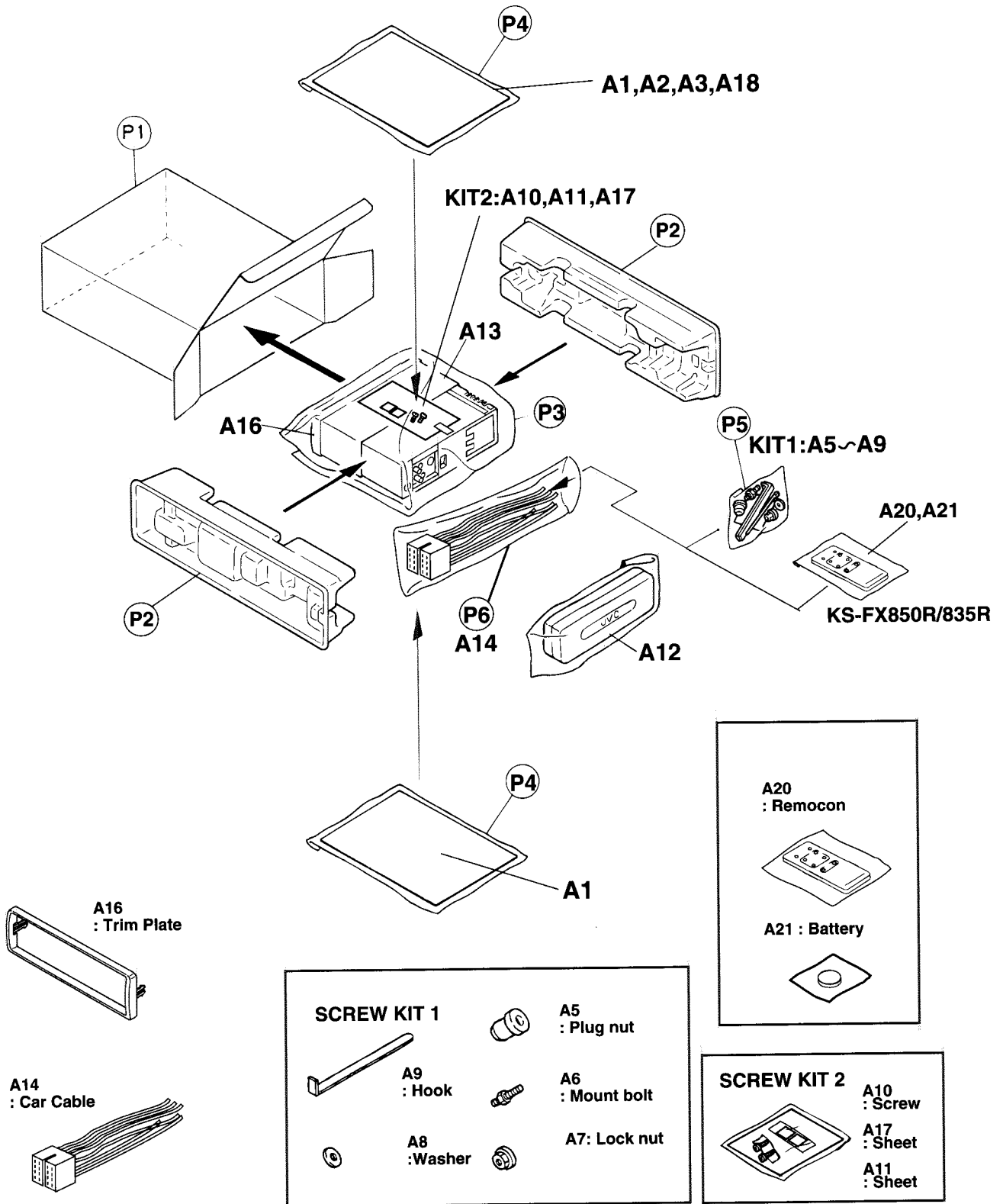
■ Packing parts list

Block No. M3MM

A	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	FSPE3001-174	PACKING CASE	1	KS-FX850R	
		FSPE3004-061	PACKING CASE	1	KS-FX820R	
		FSPE3004-060	PACKING CASE	1	KS-FX835R	
	P 2	FSPH1018-002	PAPER CUSHION	2		
	P 3	VPE3005-064	POLY BAG	1		
	P 4	QPA01703505P	POLY BAG	2	FOR INST. BOOK	
	P 5	QPA00801205	POLY BAG	1		
	P 6	QPA01003003	POLY BAG	1		

■ Accessories parts list

Block No. M4MM

A	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	FSUN3113-321	INST.BOOK	1	SPA ITA SWE FIN	
		FSUN3113-311	INST.BOOK	1	ENG GER FRE DUT	
	A 2	FSUN3113-T481	INSTRUCT.SHEET	1	SWE FIN	
		FSUN3113-T451	INSTRUCT.SHEET	1	DUT SPA ITA	
		FSUN3113-T211	INSTRUCT.SHEET	1	ENG GER FRE	
	A 3	BT-54013-1	WARRANTY CARD	1		
	A 5	VKZ4027-202	PLUG NUT	1		
	A 6	VKH4871-001SS	MOUNT BOLT	1		
	A 7	VKZ4328-001	LOCK NUT	1		
	A 8	WNS5000Z	WASHER	1		
	A 9	FSKL4010-002	HOOK	2		
	A 10	VKZ4777-001	MINI SCREW	2	THEFT PREVENTIO	
	A 11	FSYA4002-001	SHEET	1	THEFT PREVENTIO	
	A 12	FSJB3001-00A	HARD CASE	1		
	A 13	FSKM2004-002SSF	MOUNTING SLEEVE	1		
	A 14	QAM0160-001	CAR CABLE	1	KS-FX850R	
		QAM0158-001	CAR PLUG CORD	1	KS-FX820R/835R	
	A 16	FSJD2034-001	TRIM PLATE	1		
	A 17	FSYH4036-043	SHEET	2		
	A 18	VND3046-001	SERIAL TICKET	1		
	A 20	RM-RK31	REMOCON	1	KS-FX850R/835R	
	A 21	---------------	BATTERY	1	KS-FX850R/835R	
	KIT 1	KDGS717K-SCREW1	SCREW PARTS KIT	1	A5 - A9	
	KIT 2	KDSX959-SCREW2	SCREW PARTS KIT	1	A10 A11 A17	

KS-FX850R/KS-FX820R/KS-FX835R

JVC
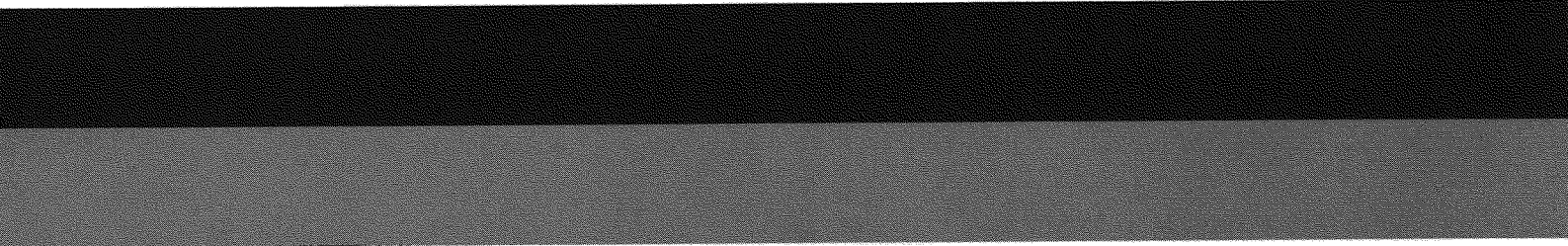
VICTOR COMPANY OF JAPAN, LIMITED

MOBILE ELECTRONICS DIVISION,10-1,1Chome,Ohwatari-machi,Maebashi-city,Japan