

# JVC

## SERVICE MANUAL

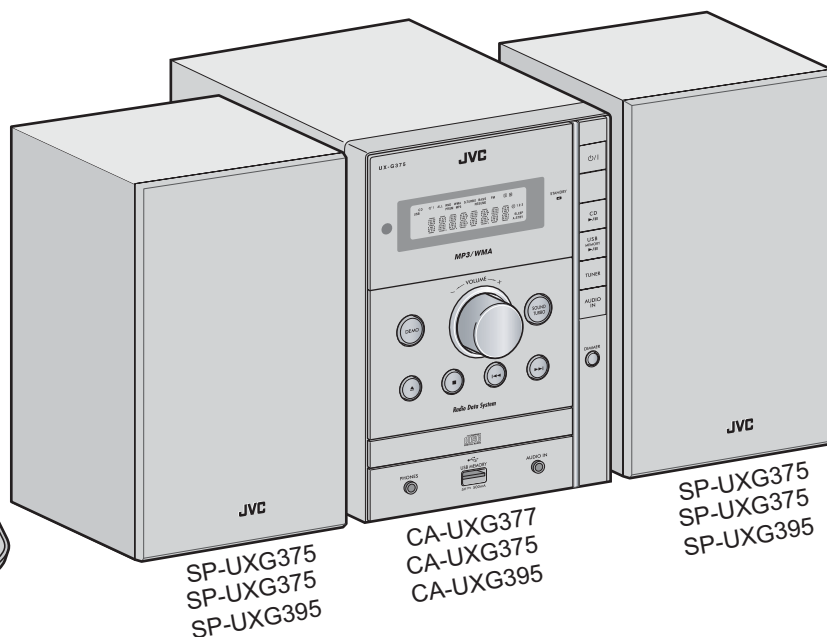
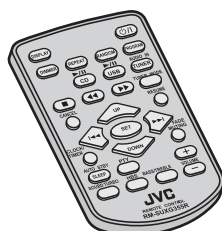
### MICRO COMPONENT SYSTEM

**UX-G375A, UX-G375B, UX-G375E, UX-G375EN,  
UX-G375EV, UX-G375UP, UX-G375US,  
UX-G375UT, UX-G375UW, UX-G377E,  
UX-G377EN, UX-G377EV, UX-G377UT,  
UX-G395BE, UX-G395BEN, UX-G395BEY,  
UX-G395WE, UX-G395WEN, UX-G395WEY**

**MP3/WMA**  
**Radio Data System**  
Europe only

COMPACT  
disc  
DIGITAL AUDIO

PG  
For  
Russia



Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

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# SPECIFICATION

## For Europe

Amplifier section		
OUTPUT POWER	60 W (30 W + 30 W) at 6 Ω (10% THD)	
Speakers/Impedance	6 Ω - 16 Ω	
Audio input	AUDIO IN	500 mV/47 kΩ (at “LEVEL 1”)
		250 mV/47 kΩ (at “LEVEL 2”)
		125 mV/47 kΩ (at “LEVEL 3”)
Digital input	USB MEMORY	
Tuner section		
FM tuning range	87.50 MHz - 108.00 MHz	
CD player section		
Dynamic range	88 dB	
Signal-to-noise ratio	85 dB	
Wow and flutter	Immeasurable	
USB section		
USB specification	Compatible with USB 2.0 Full Speed	
Compatible device	Mass storage class	
Compatible file system	FAT16, FAT32	
Output power	DC 5 V 500 mA	
General		
Power requirements	AC 230 V , 50 Hz	
Power consumption	30 W (power on)	
	1.00 W or less (standby)	
Dimensions (W × H × D)	165 mm × 251 mm × 245 mm	
Mass	1.9 kg	
Speakers		
Speaker units	10 cm cone × 1	
Impedance	6 Ω	
Dimensions (approx.)	140 mm × 251 mm × 141 mm (W/H/D)	
Mass (approx.)	1.3 kg each	

Designs & specifications are subject to change without notice.

**For Asia**

Amplifier section		
OUTPUT POWER	60 W (30 W + 30 W) at 6 Ω (10% THD)	
Speakers/Impedance	6 Ω - 16 Ω	
Audio input	AUDIO IN	500 mV/47 kΩ (at “LEVEL 1”)
		250 mV/47 kΩ (at “LEVEL 2”)
		125 mV/47 kΩ (at “LEVEL 3”)
Digital input	USB MEMORY	
Tuner section		
FM tuning range	87.50 MHz - 108.00 MHz	
	531 kHz - 1 710 kHz (in 9 kHz spacing)	
	530 kHz - 1 710 kHz (in 10 kHz spacing)	
	531 kHz - 1 602 kHz (in 9 kHz spacing) (only Saudi Arabia)	
	530 kHz - 1 600 kHz (in 10 kHz spacing) (only Saudi Arabia)	
CD player section		
Dynamic range	88 dB	
Signal-to-noise ratio	85 dB	
Wow and flutter	Immeasurable	
USB section		
USB specification	Compatible with USB 2.0 Full Speed	
Compatible device	Mass storage class	
Compatible file system	FAT16, FAT32	
Output power	DC 5 V 500 mA	
General		
Power requirements	AC 110 V-127 V/AC 220 V-240 V adjustable with the voltage selector, 50 Hz/60 Hz	
	AC 240 V , 50 Hz (only Australia)	
Power consumption	30 W (power on)	
	1.00 W or less (standby)	
Dimensions (W × H × D)	165 mm × 251 mm × 245 mm	
Mass	1.9 kg	
Speakers		
Speaker units	10 cm cone × 1	
Impedance	6 Ω	
Dimensions (approx.)	140 mm × 251 mm × 141 mm (W/H/D)	
Mass (approx.)	1.3 kg each	

Designs & specifications are subject to change without notice.

# SECTION 1

## PRECAUTION

### 1.1 Safety Precautions

- (1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (▲) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
- (4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.

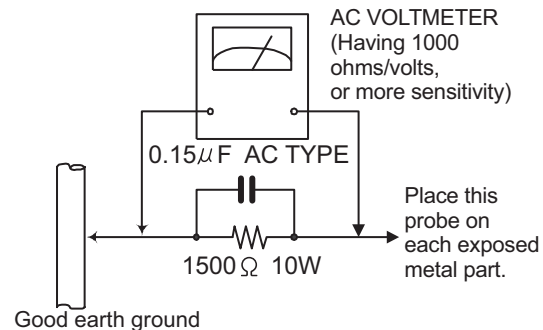
(5) Leakage shock hazard testing

After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method  
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000Ω per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC

voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



### 1.2 Warning

- (1) This equipment has been designed and manufactured to meet international safety standards.
- (2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- (3) Repairs must be made in accordance with the relevant safety standards.
- (4) It is essential that safety critical components are replaced by approved parts.
- (5) If mains voltage selector is provided, check setting for local voltage.

### 1.3 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 pre-forming repair of this system.**

### 1.4 Critical parts for safety

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (■), diode (■) and ICP (●) or identified by the "▲" mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer.  
(This regulation dose not Except the J and C version)

### 1.5 Safety Precautions (U.K only)

- (1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits.
- (2) Any unauthorised design alterations or additions will void the manufacturer's guarantee; furthermore the manufacturer cannot accept responsibility for personal injury or property damage resulting therefrom.
- (3) Essential safety critical components are identified by (  ) on the Parts List and by shading on the schematics, and must never be replaced by parts other than those listed in the manual. Please note however that many electrical and mechanical parts in the product have special safety related characteristics. These characteristics are often not evident from visual inspection. Parts other than specified by the manufacturer may not have the same safety characteristics as the recommended replacement parts shown in the Parts List of the Service Manual and may create shock, fire, or other hazards.
- (4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

#### 1.5.1 Warning

- (1) Service should be performed by qualified personnel only.
- (2) This equipment has been designed and manufactured to meet international safety standards.
- (3) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- (4) Repairs must be made in accordance with the relevant safety standards.
- (5) It is essential that safety critical components are replaced by approved parts.
- (6) If mains voltage selector is provided, check setting for local voltage.



**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.

## 1.6 Preventing static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

### 1.6.1 Grounding to prevent damage by static electricity

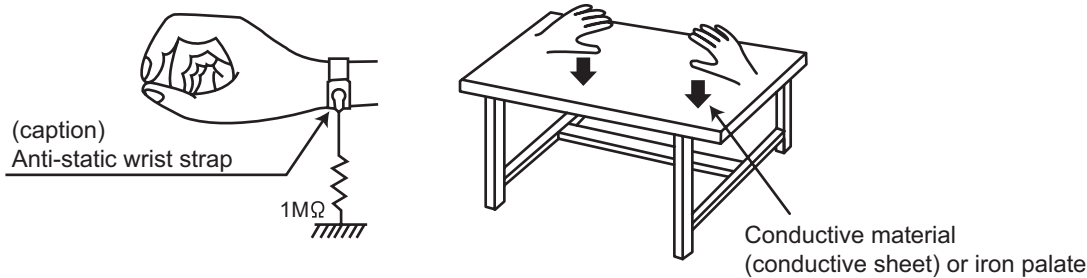
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as laser products. Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

(2) Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



(3) Handling the optical pickup

- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

## 1.7 Handling the traverse unit (optical pickup)

(1) Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.

(2) Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.

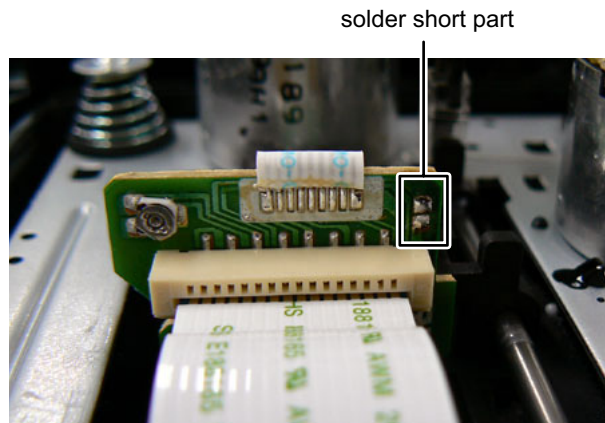
(3) Handle the flexible cable carefully as it may break when subjected to strong force.

(4) It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

## 1.8 Attention when traverse unit is decomposed

**\*Please refer to "Disassembly method" in the text for the pickup unit.**

- Apply solder to the short land sections before the card wire is disconnected from the connector on the servo board. (If the card wire is disconnected without applying solder, the pickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land sections after connecting the card wire.



## 1.9 Important for laser products

### 1.CLASS 1 LASER PRODUCT

#### 2.CAUTION :

(For U.S.A.) Visible and/or invisible class II laser radiation when open. Do not stare into beam.

(Others) Visible and/or invisible class 1M laser radiation when open. Do not view directly with optical instruments.

**3.CAUTION :** Visible and/or invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

**4.CAUTION :** This laser product uses visible and/or invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

(For U.S.A.)

**CAUTION :** Visible and/or invisible class II laser radiation when open. Do not stare into beam.

(Others)

**CAUTION :** Visible and/or invisible class 1M laser radiation when open. Do not view directly with optical instruments

**ACHTUNG:** Sichtbare und/oder unsichtbare Laserstrahlung der Klasse 1M bei offenen Abdeckungen. Nicht direkt mit optischen Instrumenten betrachten.

**ATTENTION:** Rayonnement laser visible et/ou invisible de classe 1M une fois ouvert. Ne pas regarder directement avec des instruments optiques.

**VOORZICHTIG:** Zichtbare en/of onzichtbare klasse 1M laserstralen indien geopend. Bekijk niet direct met optische instrumenten.

**ATTENZIONE:** Radiazione laser in classe 1M visibile e/o invisibile quando aperto. Non osservare direttamente con strumenti ottici.

**WARNING:** Synlig och/eller osynlig laserstrålning, klass 1M, när denna del är öppnad. Betrakta ej strålen med optiska instrument.

**VARO!** Avattaessa olet alttiina näkyvälle ja/tai näkymättömälle luokan 1M lasersäteilylle. Älä tarkastele sitä optisen laitteen läpi.

**ADVARSEL:** Synlig og/eller usynlig klasse 1M-laserstrålning ved åbning. Se ikke direkte med optiske instrumenter.

**AVISO:** Radiación láser de clase 1M visible y/o invisible cuando está abierto. No mirar directamente con instrumental óptico.

**PRECAUÇÃO:** Radiação laser de classe 1M visível e/ou invisível quando aberto. Não olhe diretamente com instrumentos ópticos.

**5.CAUTION :** If safety switches malfunction, the laser is able to function.

**6.CAUTION :** Use of controls, adjustments or performance of procedures other than those specified here in may result in hazardous radiation exposure.



**CAUTION** Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

**PRECAUÇÃO:** Radiação laser de classe 1M visível e/ou invisível quando aberto. Não olhe diretamente com instrumentos ópticos.

**ПРЕДУПРЕЖДЕНИЕ:** В открытом состоянии происходит видимое и/или невидимое излучение лазера класса 1M. Не смотрите непосредственно в оптические инструменты.

**UWAGA:** Otwarcie spowoduje narażenie na widzialne i/lub niewidzialne promieniowanie lasera klasy 1M. Nie patrzeć bezpośrednio w przyrządy optyczne.

**UPOZORNĚNÍ:** Při otevření vydává viditelné popř. neviditelné laserové ozaření třídy 1M. Nedívejte se do otvoru přímo s optickými nástroji.

**FIGYELMEZTETÉS:** Látható és/vagy láthatatlan 1M osztályú sugárzás nyitott állapotban. Ne nézze közvetlenül optikai műszerekkel.

**注意:** 打開蓋板可能會產生可見或不可見的 1M 級鐳射。不要使用光學儀器直接進行窺視。

**注意:** 打开盖板可能会产生可见或不可见的 1M 级鐳射。不要使用光学仪器直接进行窺視。

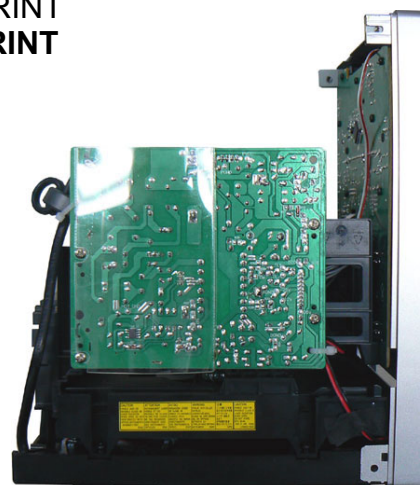
**تنبيه:** يوجد إشعاع ليزري مرئي و/أو غير مرئي من الفئة 1M عندما يكون الجهاز مفتوحاً. تجنب النظر مباشرة داخل الجهاز باستخدام أدوات بصرية.

**احتياط:** هنگامی که باز گردد، تشعشع مرئی و یا نامرئی کلاس 1M لیزر وجود دارد. با لوازم چشمی مستقیماً به آن نگاه نکنید.

**주의:** 개방하면 가시 및/또는 비가시 클래스 1M 레이저 방사선이 나옵니다. 광학 기구로 직접 들여다보지 마십시오.

## REPRODUCTION AND POSITION OF LABELS and PRINT WARNING LABEL and PRINT

<b>CAUTION</b> VISIBLE AND/OR INVISIBLE CLASS 1M LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1:2001 (ENG)	<b>ATTENTION</b> RAYONNEMENT LASER VISIBLE ET/OU INVISIBLE DE CLASSE 1M UNE FOIS OUVERT. NE PAS REGARDER DIRECTEMENT AVEC DES INSTRUMENTS OPTIQUES. (FRA)	<b>AVISO</b> RADIACIÓN LASER DE CLASE 1M VISIBLE Y/O INVISIBLE CUANDO ESTÁ ABIERTO. NO MIRAR DIRECTAMENTE CON INSTRUMENTAL ÓPTICO. (ESP)	<b>WARNING</b> SYNLIG OCH/ELLER OSYNLIG LASERSTRÅLNING, KLASS 1M, NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT. (SWE)	<b>注意</b> ここを覗くと可視 及び/または不可視 のクラス 1M レーザー放射が 出ます。 光学装置で直接 見ないでください。 (JPN)	<b>CAUTION</b> VISIBLE AND/OR INVISIBLE CLASS 1 LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA 21 CFR (ENG) LV44603-003A
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## SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

## SECTION 3 DISASSEMBLY

### 3.1 Main body (Used model: UX-G377E)

#### 3.1.1 Removing the Top cover (See Fig.1, 2, 3, 4)

- (1) Remove the four screws **A** attaching the Top cover. (See Fig.1)

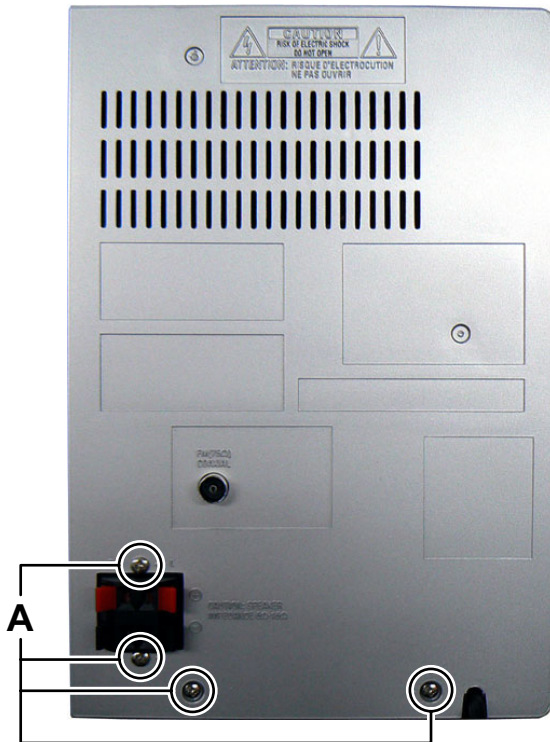


Fig.1

- (2) Remove the four screws **B** attaching the Top cover. (See Fig.2)

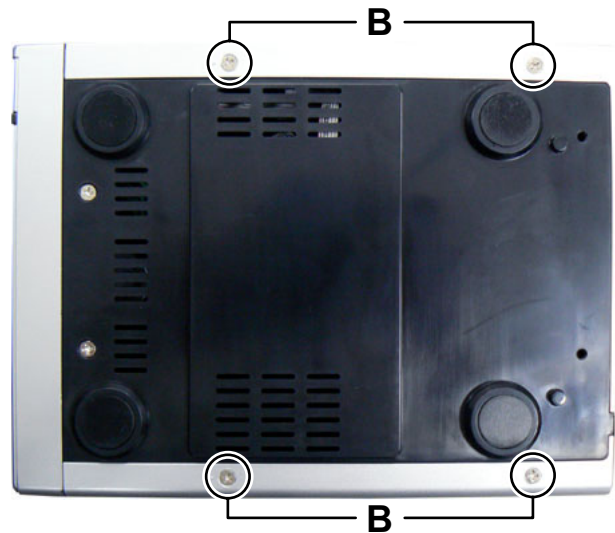


Fig.2

- (3) Remove the two screws **C** and two screws **D** attaching both side of the Top cover. (See Fig.3)

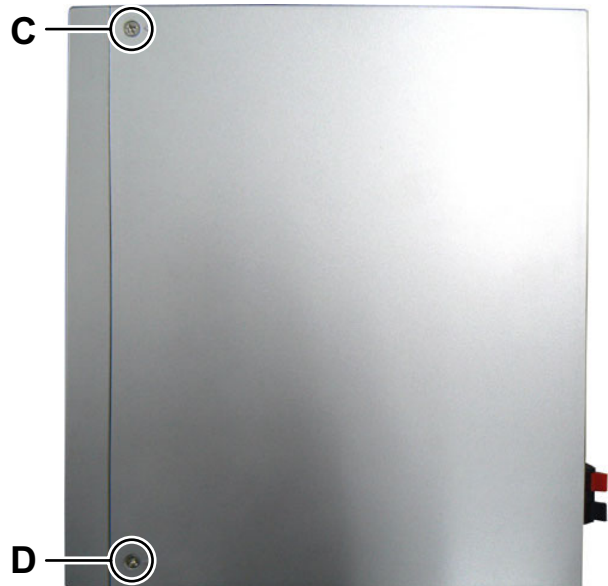


Fig.3



(4) Disengage two hooks **a** engaged Top cover. (See Fig.4)

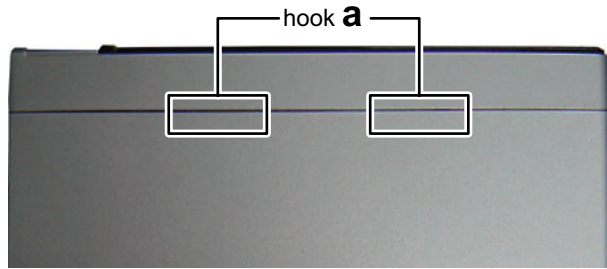


Fig.4

### 3.1.2 Removing the MCU board (See Fig.5)

- (1) Disconnect the connector wire from MCU board connected to connector **CN3** of the SMPS board.
- (2) Disconnect the card wire from Tuner pack connected to connector **CN201** of the MCU board.
- (3) Remove the three screws **E** attaching the MCU board.
- (4) Disconnect the card wire from Display board connected to connector **CN202** of the MCU board.
- (5) Disconnect the connector wire from CD board connected to connector **CN208** of the MCU board.
- (6) Disconnect the connector wire from USB board connected to connector **CN210** of the MCU board.
- (7) Disconnect the connector wire from SMPS board connected to connector **CN203** of the MCU board.
- (8) Disconnect the card wire from CD board connected to connector **CN207** of the MCU board.

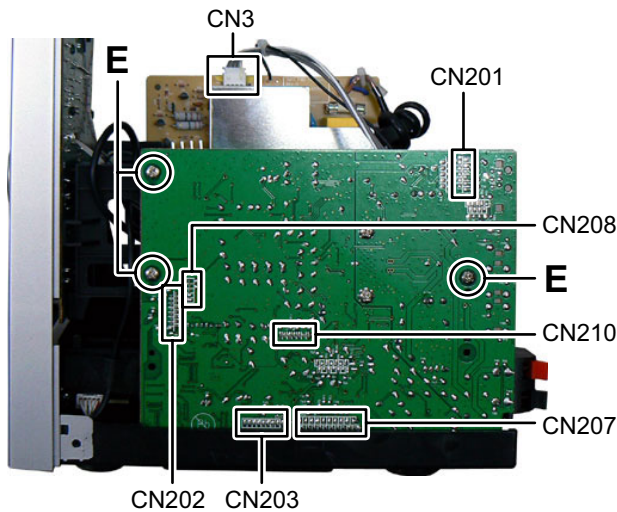


Fig.5

### 3.1.3 Removing the SMPS board (See Fig.6)

- (1) Disconnect the earth wire from Tuner pack connected to post pin **GND** of the SMPS board.
- (2) Remove the four screws **F** attaching the SMPS board.
- (3) Disconnect the connector wire from Display board connected to connector **CN5** of the SMPS board.
- (4) Disconnect the connector wire from USB board connected to connector **CN1** of the SMPS board.

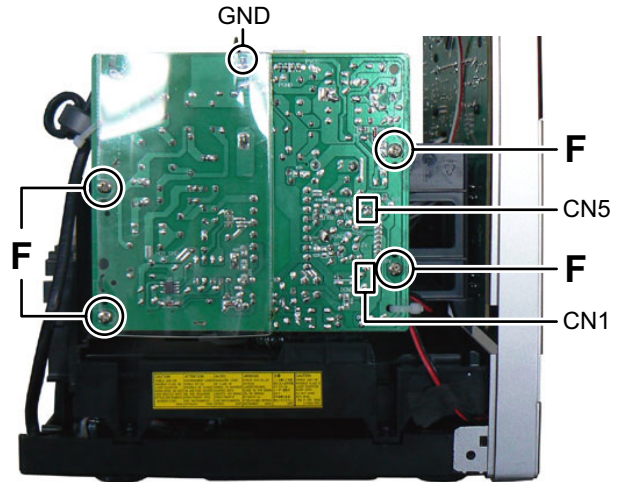


Fig.6

### 3.1.4 Removing the CD mechanism (See Fig.7, 8, 9, 10, 11)

- (1) Remove the two screws **G** attaching the Back PCB bracket. (See Fig.7)

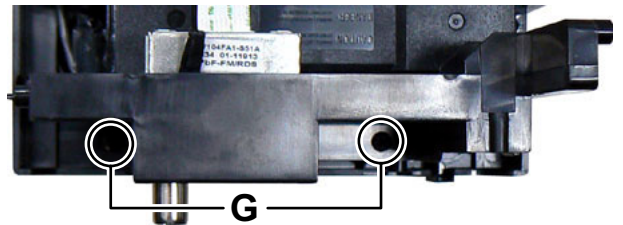


Fig.7

- (2) Remove the four screws **H** attaching the CD mechanism. (See Fig.8)

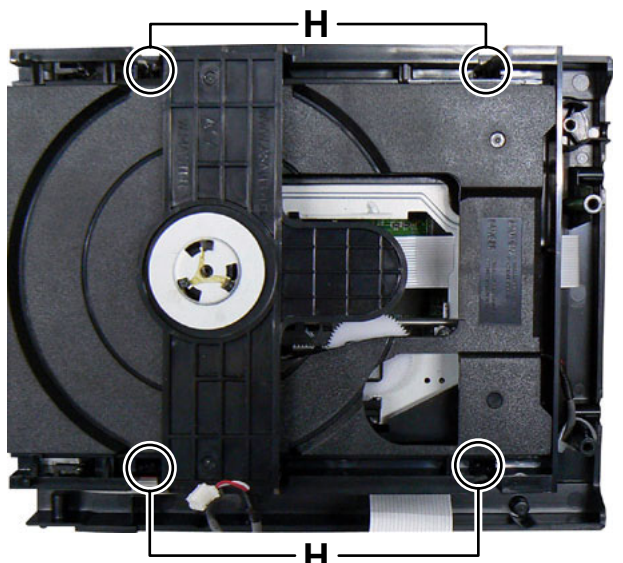


Fig.8

- (3) Disconnect the connector wire from CD board connected to connector of the Loader board. (See Fig.9)
- (4) Disconnect the connector wire from CD board connected to connector of Traverse mechanism. (See Fig.9)

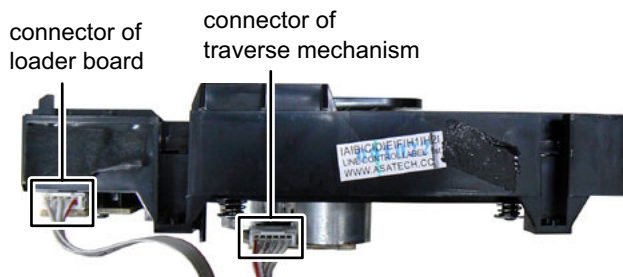


Fig.9

- (5) Solder the solder short part of the pickup. (See Fig.10)

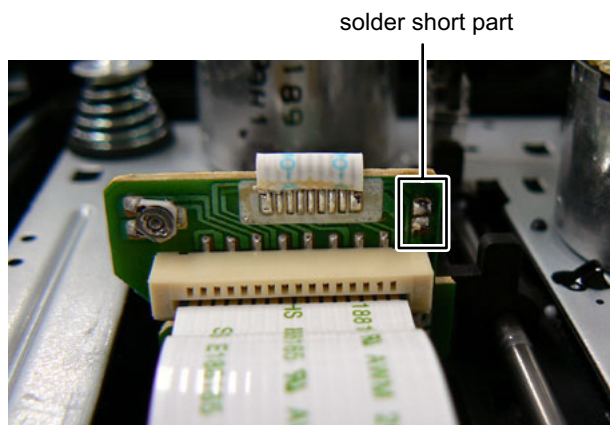


Fig.10

- (6) Disconnect the card wire from CD mechanism connected to connector [CN102](#) of the CD board. (See Fig.11)

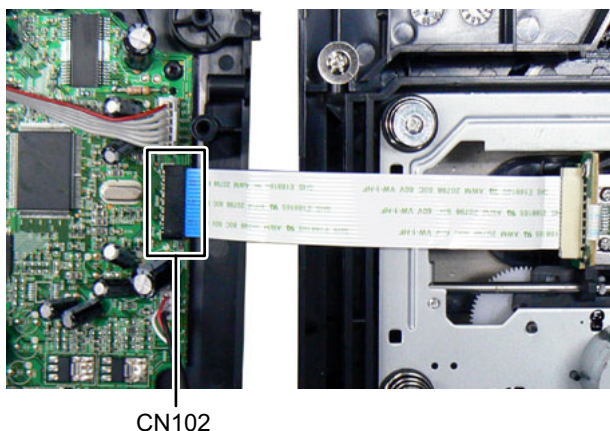


Fig.11

### 3.1.5 Removing the Front panel (See Fig.12, 13, 14)

- (1) Remove the two screws **J** attaching the Front panel. (See Fig.12)

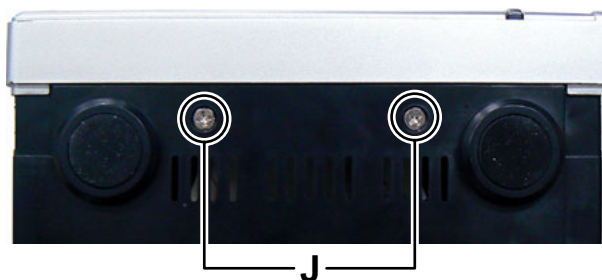


Fig.12

- (2) Disengage two hooks **b** engaged both side of the Front panel. (See Fig.13)

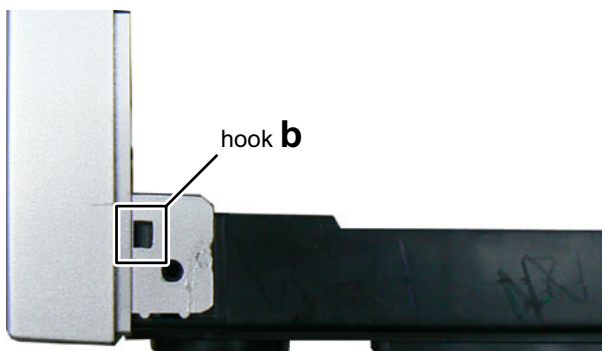


Fig.13

- (3) Disconnect the connector wire from USB board connected to connector [CN114](#) of the CD board. (See Fig.14)

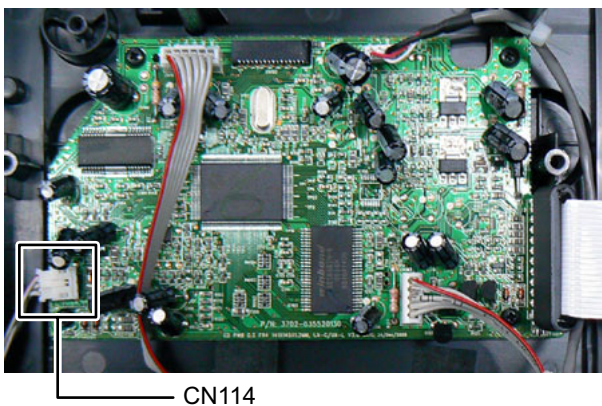


Fig.14

### 3.1.6 Removing the CD board (See Fig.15)

- (1) Remove the four screws **K** attaching the CD board.

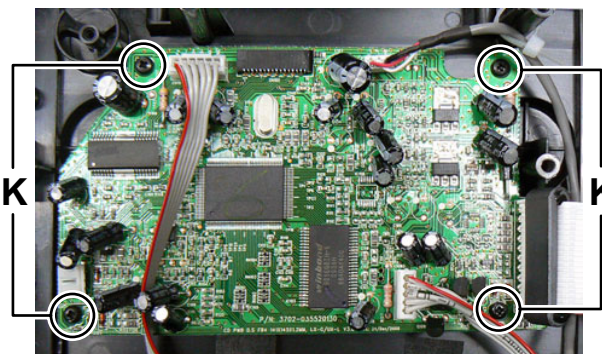


Fig.15



### 3.1.7 Removing the Display board (See Fig.16)

- (1) Remove the Volume knob.
- (2) Remove the thirteen screws **L** attaching the Display board.

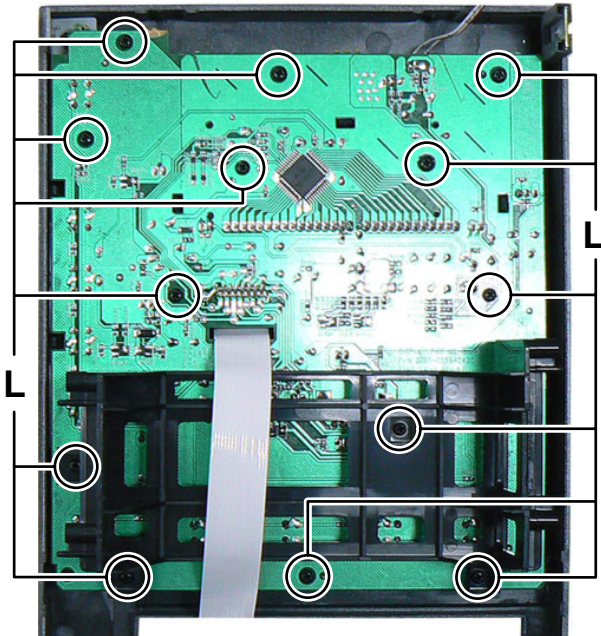


Fig.16

### 3.1.8 Removing the USB board (See Fig.17)

- (1) Remove the six screws **M** attaching the USB board.

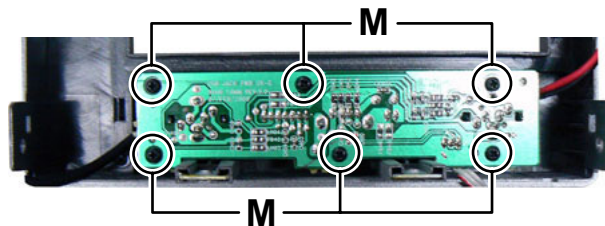


Fig.17

## SECTION 4 ADJUSTMENT

This service manual does not describe ADJUSTMENT.

## SECTION 5 TROUBLESHOOTING

This service manual does not describe TROUBLESHOOTING.



**Victor Company of Japan, Limited**  
Home & Mobile Electronics Business Group, Personal AV Operation 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan