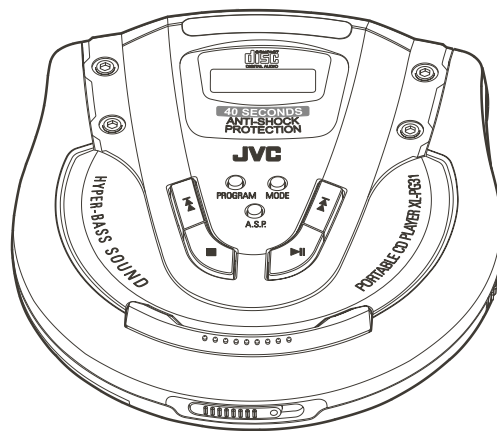


JVC

SERVICE MANUAL

PORTABLE CD PLAYER

XL-PG31/PG51 XL-PV310



Model composition explanation

MODEL

XL-PG31: BASE MODEL

XL-PV310: XL-PG31 + CAR KIT

XL-PG51 : XL-PG31 + REMOTE + R.BATTERY

Areas suffix

B	-----	U.K.
C	-----	Canada
E	-----	Continental Europe
J	-----	U.S.A.
U	-----	Other Areas

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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 manufacturer's 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 (\triangle) 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 re-assembling.

5. Leakage current check (Electrical shock hazard testing)

After re-assembling 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.

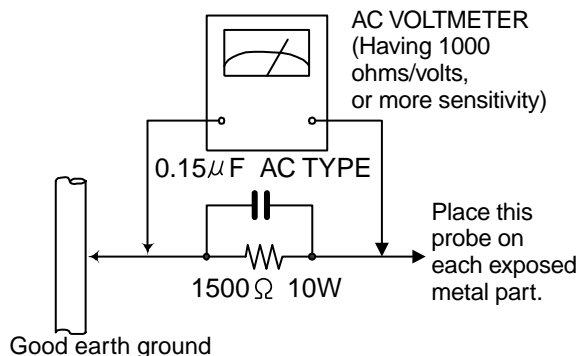
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.)

- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10W resistor paralleled by a 0.15 μ F 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. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



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.

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 performing repair of this system.

Important for laser products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The compact disc player uses invisible laserradiation 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.

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 herein 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.

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

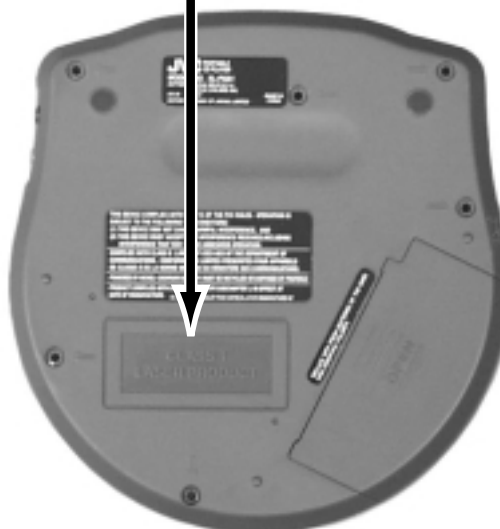
VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

ADVARSEL : Usynlig laserstrålning ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstrålning ved åbning,når sikkerhedsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF ENGRAVING

CLASS 1
LASER PRODUCT



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.

1.1. Grounding to prevent damage by static electricity

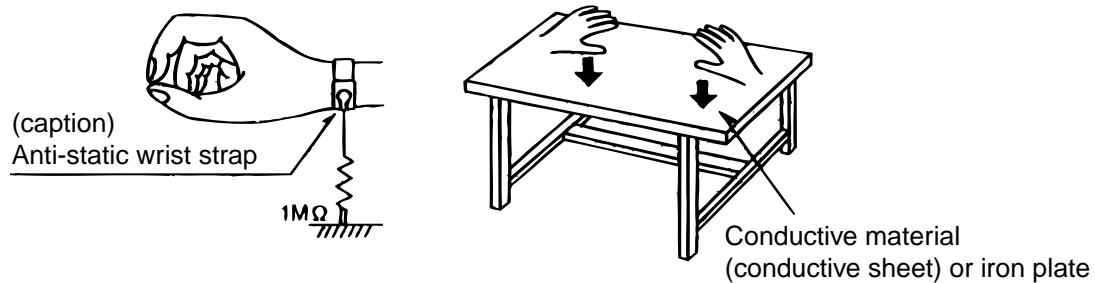
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as DVD players. Be careful to use proper grounding in the area where repairs are being performed.

1.1.1. Ground the workbench

1. 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.

1.1.2. Ground yourself

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



1.1.3. Handling the optical pickup

1. 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.)
2. 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.

1.2. 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

Disassembly Method

■ Removing the cabinet

- 1). Remove 6 screws A from bottom cabinet.
(See Fig.1)

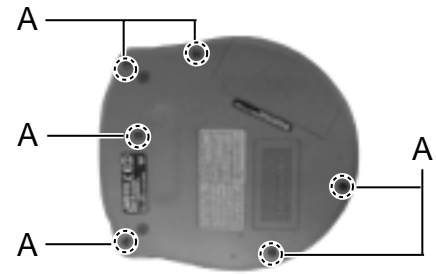


Fig.1

- 2). Remove 1 screw B from battery compartment.
(See Fig.2)
- 3). The bottom cabinet comes off.



Fig.2

■ Remove main parts

- 1). Disconnect the membrane C.
(See Fig.3)

Caution: Pay attention not damage the membrane C during disconnection.

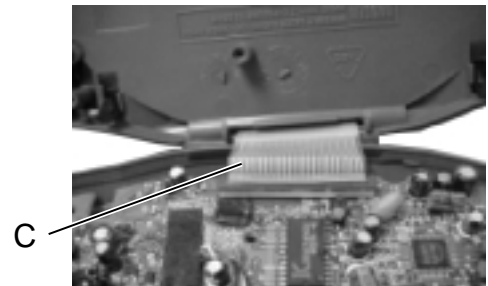


Fig.3

- 2). Remove the screw D on rechargeable battery plate.
(See Fig.4)

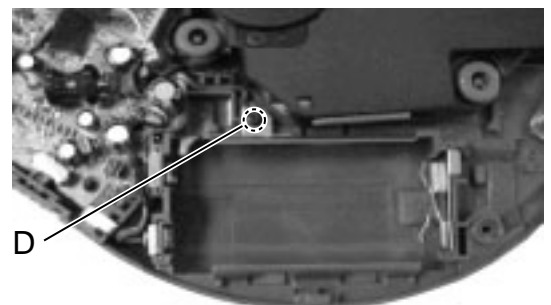


Fig.4

- 3). Remove "+" E battery plate and "-" F battery plate.
(See Fig.5)

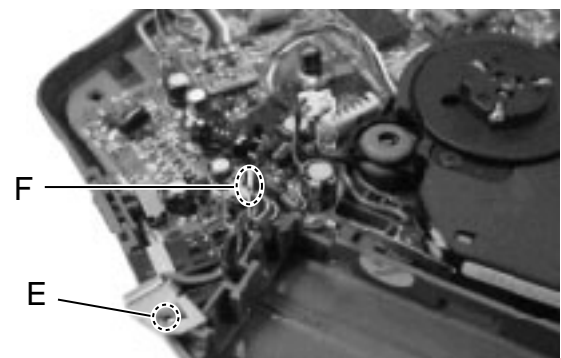


Fig.5

4). Disconnect the door switch G .
(See Fig. 6)

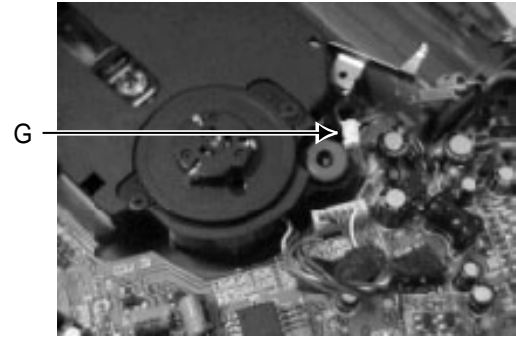


Fig. 6

5). Diconnect the Header H of CD Mechanism.
(See Fig. 7)

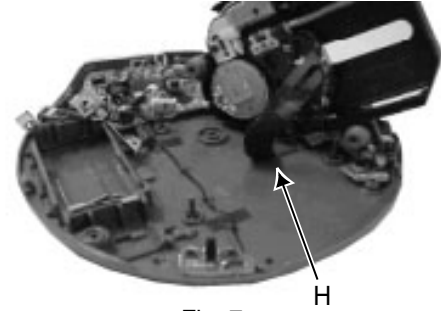


Fig. 7

6). Diconnect FCC cable H from PC board.
(See Fig. 8 & Fig.9)

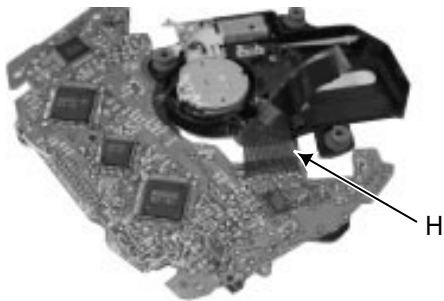


Fig. 8

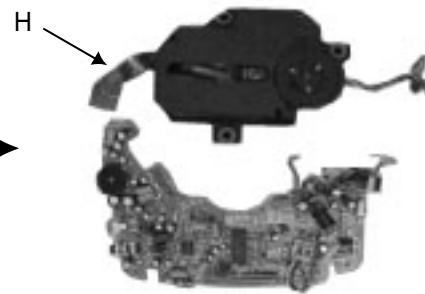


Fig. 9

7). Remove 2 screws I on door switch PC board.
(See Fig. 10)

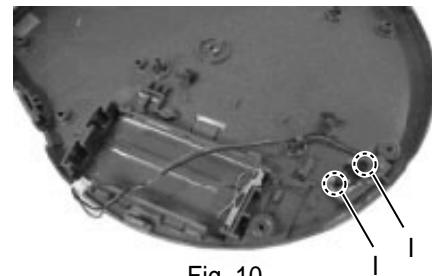


Fig. 10

8). Final disassembly condition.
(Fig. 11)



Fig. 11

Caution: No serviceable parts are provided inside AC Adaptor. Do not open it.

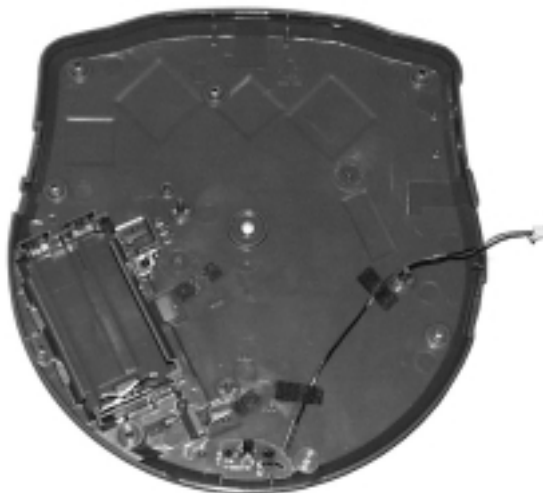
Service parts unit

■ Main board assembly



Parts Number	Parts name
00-00031-02	P.C.Board assembly

■ Bottom cabinet assembly



Parts Number	Parts name
00-00031-04	bottom cabinet assembly

■ **CD Mechanism assembly**



Parts Number	Parts name
98-01740-00	Mecahnism assembly

■ **Top cabinet assembly**



Model name	Parts Number	Parts name
XL-PG31	00-00031-03	Cabinet assembly
XL-PG51	00-00031-06	
XL-PV310	00-00031-07	

Accessories service parts list


△	Parts No.	Parts Name	DESCR PTION	XL-PG31					XL-PG51					XL-PV310					
				J	C	E	B	U	J	C	E	B	U	J	C	E	B	U	
△	15-00031-00	AC adaptor					1	1									1	1	
△	15-00031-01						1					1							
△	15-00031-02					1					1					1			
△	15-00031-03					1	1				1	1				1	1		
	73-00031-00	Over head head phone		1	1				1					1	1				
	73-00031-01	Inner headphone				1	1	1								1	1	1	
	73-00031-02	Fold headphone							1										
	73-00031-03	Armless headphone								1	1								
	93-00031-00	Rechargeable battery							1	1							1	1	
	93-00031-01					1	1	1			1							1	1
	15-00031-04	Car adaptor												1	1				
	15-00031-05																1	1	1
	00-00031-01	Remote control							1	1	1	1	1						
	00-00031-00	Cassette adaptor												1	1	1	1	1	
	88-00031-00	Instructions		1	1				1	1				1	1			1	
	88-00031-06							1	1				1					1	1
	88-00031-09						1					1						1	
	88-00031-10					1					1					1			
	88-00031-11					1	1				1	1				1	1		
	88-00031-12							1					1					1	
	88-00031-13							1					1					1	
	88-00310-00															1	1		1
	88-00310-01																	1	
	88-00310-02																	1	
	88-00310-03													1					
	88-00310-04													1	1				
	88-00310-05															1			

XL-PG31/XL-PG51
XL-PV310

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(No.20851)

 Printed in Japan
200007(V)