

PS-LX230/LX230C/LX231

SERVICE MANUAL



PS-LX230C



PS-LX231

VL-45G cartridge is supplied with PS-LX230C, while VL-42G cartridge is supplied with PS-LX231. Cartridge is not supplied with PS-LX-230.

PS-LX230:

US Model

PS-LX230C:

*US Model
Canadian Model*

PS-LX231:

*AEP Model
UK Model
E Model*

SPECIFICATIONS

Turntable

Platter	30.0 cm (12 in.), aluminum-alloy diecast
Motor	DC servo motor
Drive system	Belt drive
Control system	DC servo control system
Speed	33 $\frac{1}{3}$ rpm, 45 rpm
Starting characteristics	Comes to nominal speed within $\frac{1}{2}$ rotation (33 $\frac{1}{3}$ rpm)
Wow and flutter	0.045% (WRMS), $\pm 0.06\%$ (DIN)
Signal-to-noise ratio	70 dB (DIN-B)
Automatic system	Return, reject
Suspension system	High elasticity gel insulator

Tonearm

Type	PS-LX230/230C: Statically balanced PS-LX231: Dynamically balanced
Pivot-to stylus length	216.5 mm (8 $\frac{1}{2}$ in.)

Cartridge

PS-LX230: Not supplied

PS-LX230C: VL-45G

Type	Moving magnet type
Frequency response	20Hz to 20 kHz
Channel separation	20 dB at 1 kHz
Output voltage	3.5 mV at 1 kHz, 5 cm/sec., 45°
Load impedance	50 to 100 kilohms
Tracking force	1.25 g
Stylus	Sony ND-145G (conical 0.6 mil diamond)
Weight	6 g

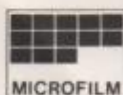
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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

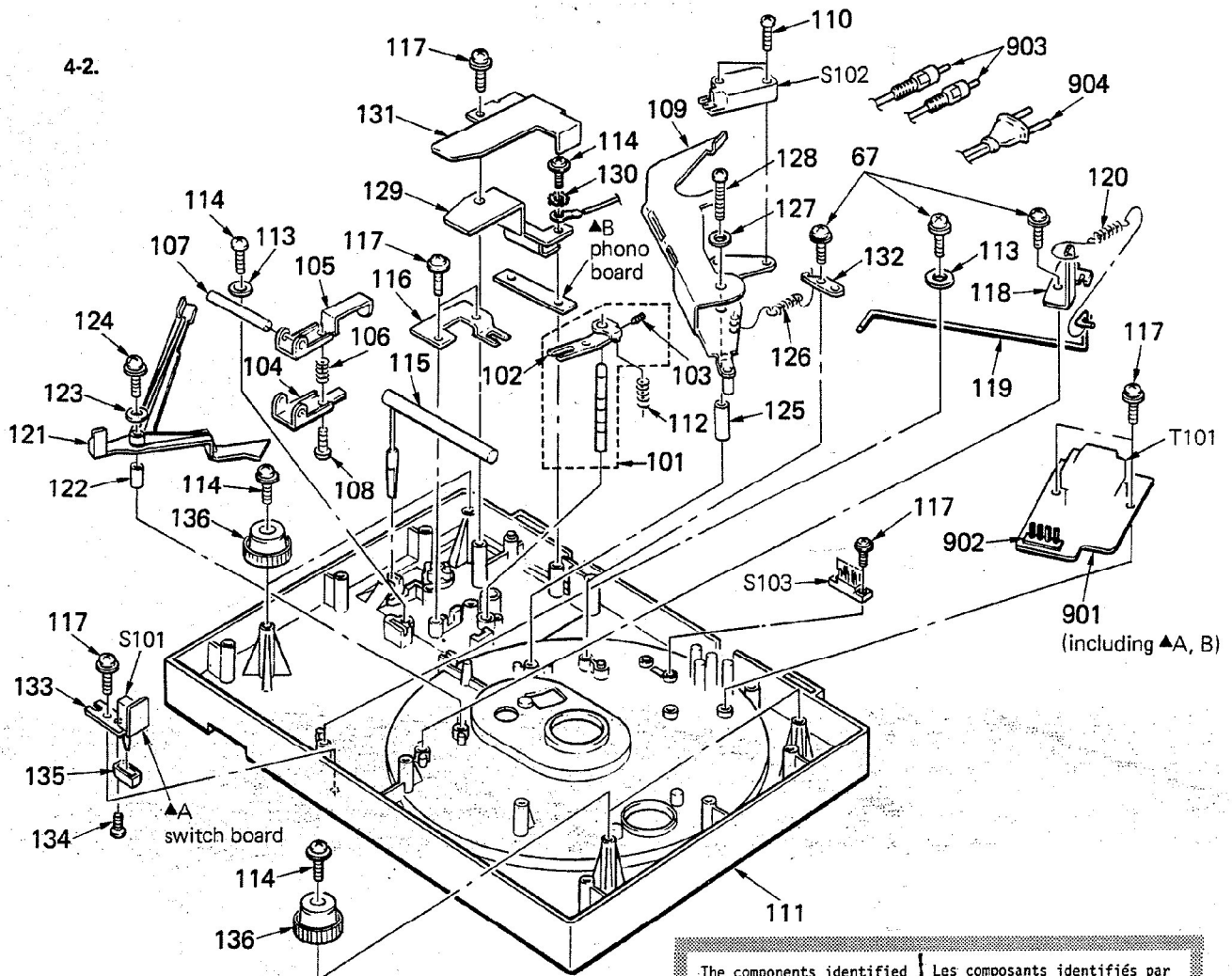
LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.



MICROFILM

STEREO TURNTABLE SYSTEM
SONY

AUD



The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

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

No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
101	A-4637-063-A	ROD ASSY (P), PUSH	102,103	124	7-685-152-14	SCREW +P 3X25 TYPE2 SLIT	
102	*4-876-317-00	GUIDE, LIFTER		125	4-875-207-00	SLEEVE	
103	7-621-741-09	SET-SCT, HEX. 2.6X8 WP		126	4-870-785-00	SPRING, TENSION (MAIN LEVER)	
104	*4-903-321-01	LEVER (G), LIFTER		127	3-610-931-11	SPACER, SHAFT, DRUM, HEAD	
105	*4-903-317-01	LEVER (F), LIFTER		128	7-685-666-21	SCREW +BVTP 4X30 TYPE2 SLIT	
106	4-881-642-00	SPRING, COMPRESSION		129	*4-889-524-01	PLATE (LOWER), SHIELD	
107	*4-881-611-00	SHAFT, LEVER, LIFTER		130	7-623-422-07	LW 3, TYPE B	
108	7-621-775-50	SCREW +B 2.6X10		131	*4-889-526-01	PLATE (UPPER), SHIELD	
109	*X-4877-805-6	LEVER ASSY, MAIN		132	*4-870-752-00	HOLDER, SPRING	
110	7-682-150-01	SCREW +P 3X12		133	*4-889-527-01	BRACKET, SWITCH	
111	4-889-531-41	FRAME		134	7-621-775-08	SCREW +B 2.6X3	
112	4-903-331-01	SPRING (LIFTER), COMPRESSION		135	4-870-730-21	KNOB, SPEED	
113	*4-301-647-00	WASHER, SPECIAL		136	X-4903-301-1	INSULATOR ASSY	
114	3-703-136-00	SCREW +PTPH 3X12		901	*1-614-795-11	PC BOARD, SYSTEM CONTROL	
115	4-877-824-00	CAM, LIFTER		902	*1-535-117-00	TERMINAL	
116	*4-903-320-01	RETAINER (D), LIFTER		903	1-551-294-00	CORD (WITH PLUG)	
117	3-703-137-00	SCREW +PTPH 3X10		904	▲.1-534-817-XX	(AEP).....CORD, POWER, EURO PLUG	
118	*4-875-205-00	PLATE, FIXED			▲.1-551-628-00	(US,Canadian)....CORD, POWER	
119	4-875-204-00	SPRING			▲.1-556-562-00	(UK).....CORD, POWER	
120	3-491-240-00	SPRING, TENSION			▲.1-551-188-XX	(E).....CORD, POWER	
121	*4-858-240-00	LEVER (M), CLUTCH		S101	1-570-166-11	SWITCH, PUSH (1 KEY)	
122	4-861-933-00	SLEEVE (D)		S102	1-570-489-11	SWITCH, MICRO	
123	4-812-554-00	WASHER		S103	▲.1-552-535-00	(E)....SWITCH, VOLTAGE SELECTOR	
				T101	▲.1-448-043-11	(US,Canadian)....TRANSFORMER, POWER	
				T101	▲.1-448-044-11	(AEP,UK).....TRANSFORMER, POWER	
				T101	▲.1-448-045-11	(E).....TRANSFORMER, POWER	

SECTION 4

EXPLODED VIEWS AND PARTS LIST

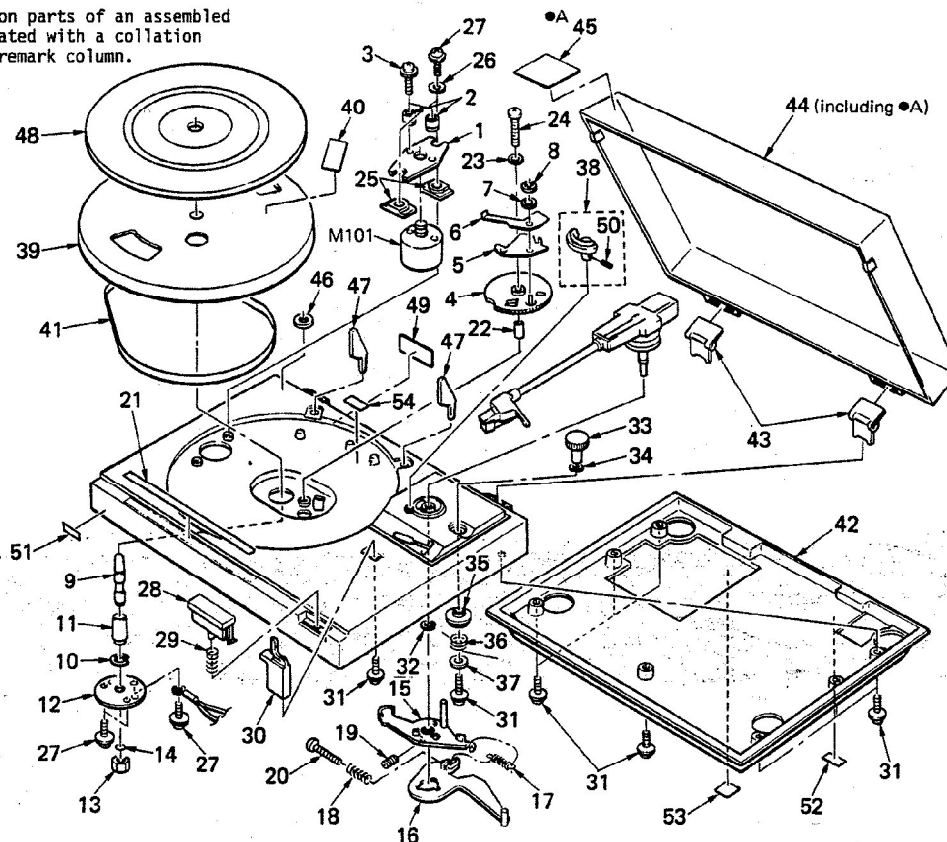
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

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

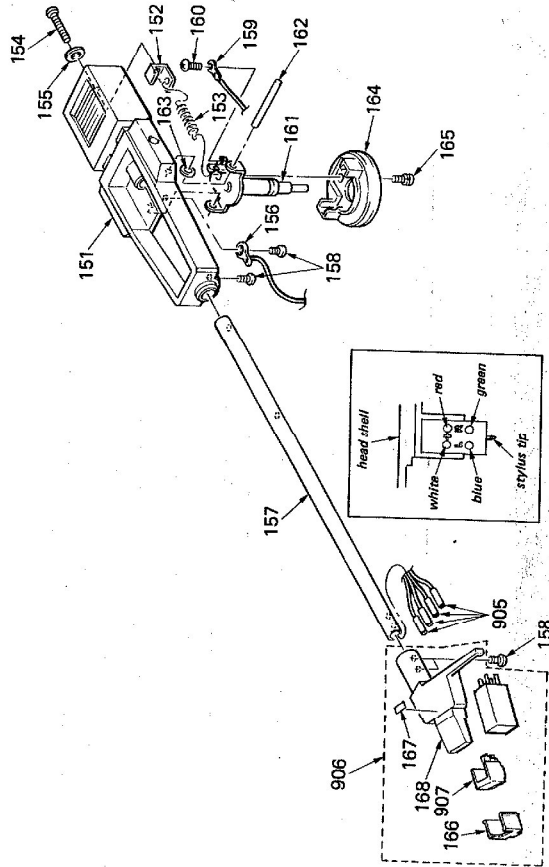
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No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	*4-908-151-01	BRACKET (C), MOTOR		30	4-875-208-31	REST, ARM	
2	4-909-061-01	CUSHION, MOTOR		31	3-703-136-00	SCREW +PTPH 3X12	
3	4-909-062-01	SCREW, MOTOR		32	7-624-133-54	STOP RING 10, TYPE-CE	
4	4-903-339-01	GEAR, DRIVE		33	4-881-633-00	(LX231).....KNOB (I), IFC	
5	X-4852-007-2	CLUTCH (B) ASSY		4-903-333-01	(LX230/LX230C)....KNOB, IFC		
6	4-852-013-05	CLUTCH (A)		34	4-844-041-00	WASHER, (N)	
7	7-688-003-11	W 3, MIDDLE		35	4-903-323-01	CAM, IFC	
8	7-624-190-81	STOP RING 2, TYPE-CS		36	4-874-250-00	SPRING	
9	4-889-523-01	SHAFT, CENTER		37	0-056-028-00	WASHER, PLAIN, 14 DIA.	
10	7-624-133-34	STOP RING 8, TYPE-CE		38	X-4903-302-1	PLATE ASSY, UP AND DOWN	50
11	4-908-102-01	BEARING		39	*X-4903-416-1	TURNTABLE ASSY	
12	4-908-101-01	HOLDER, BEARING		40	4-858-264-21	LABEL, CAUTION	
13	4-908-104-01	NUT, BEARING		41	4-880-655-01	BELT	
14	4-908-141-01	RETAINER (S), THRUST		42	4-889-532-01	(AEP,UK,E).....PLATE, BOTTOM	
15	4-875-214-00	LEVER, SWITCH		4-889-532-11	(US,Canadian)....PLATE, BOTTOM		
16	*4-858-234-00	LEVER, RETURN		43	4-857-653-00	HINGE, DUST COVER	
17	3-536-780-00	SPRING, TENSION		44	X-4903-415-1	COVER ASSY, DUST	45
18	4-836-836-00	SPRING, COMPRESSION		45	3-703-705-41	STICKER, SONY SYMBOL (30)	
19	3-701-508-00	SET SCREW, DOUBLE POINT 3X6		46	3-701-806-00	ADAPTOR, 45, (E)	
20	7-682-553-09	SCREW +B 3X20		47	4-874-262-00	GUIDE, RECORD	
21	4-889-525-31	(LX231).....PANEL, CONTROL		48	4-913-521-01	(Canadian,AEP,UK,E)....SHEET, TURNTABLE	
22	4-889-525-41	(LX230/LX230C)....PANEL, CONTROL		4-913-521-11	(US).....SHEET, TURNTABLE		
23	4-861-933-00	SLEEVE (D)		49	*4-903-462-01	(UK).....LABEL, MODEL NUMBER	
24	4-812-554-00	WASHER		*4-903-463-01	(AEP).....LABEL, MODEL NUMBER		
25	7-685-152-14	SCREW +P 3X25 TYPE2 SLIT		*4-903-464-01	(US,Canadian)....LABEL, MODEL NUMBER		
26	4-908-120-01	RUBBER, FLOATING		*4-903-473-01	(E).....LABEL, MODEL NUMBER		
27	*4-301-647-00	WASHER, SPECIAL		7-621-738-08	SET-SCT, HEX. 2.6X4, FLAT POINT		
28	3-703-137-00	SCREW +PTPH 3X10		50	3-701-690-00	(UK)....LABEL (MADE IN JAPAN)	
29	4-881-608-21	KNOB, REJECT		51	3-703-845-01	(US,Canadian,UK)....LABEL, MAIN CAUTION	
30	3-533-014-00	SPRING, COMPRESSION		52	4-876-344-00	(AEP)....LABEL, CAUTION, POWER CORD	
				53	*4-881-683-00	(E).....LABEL, VOLTAGE	
				54	*4-835-126-01	MOTOR, DC (DNR-7600A)	

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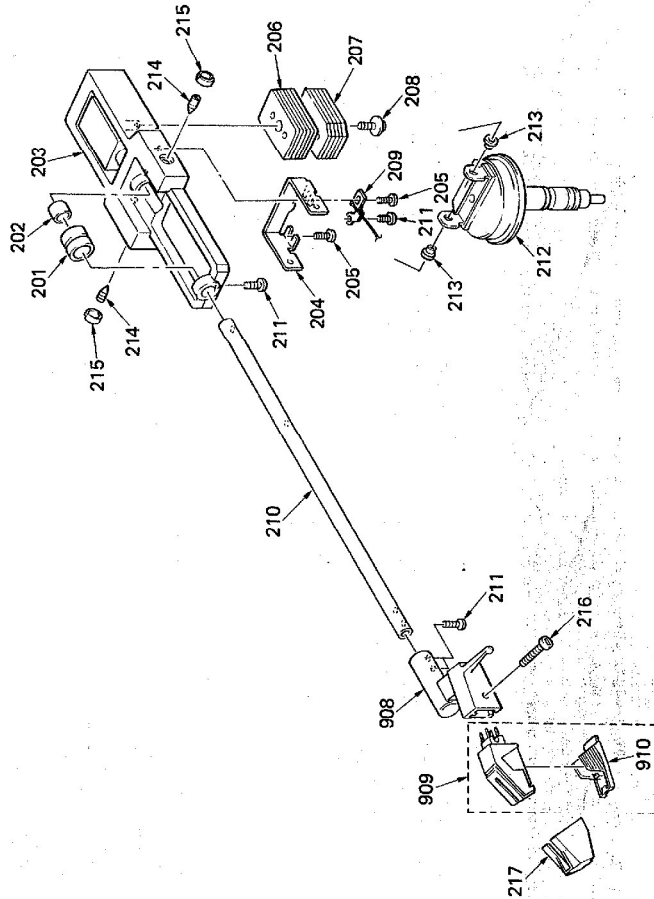
FOR PS-LX231



No.	Part No.	Description	Remarks
151	4-889-529-11	JOINT, PIPE	
152	4-868-016-00	HOOK, SPRING	
153	4-889-510-00	SPRING, TENSION	
154	7-682-555-09	SCREW #8 3X30	
155	7-689-003-11	M 3, MIDDLE	
156	7-623-505-01	PIPE, ARM	
157	4-889-528-11	LUG, 2	
158	7-621-771-06	SCREW #8 2X5	
159	7-623-508-01	LUG, 3	
160	7-602-545-09	SCREW #8 3X4	
161	4-881-605-01	SPRING, ROTARY	
162	4-880-519-00	PIPE, HORIZONTAL	
163	3-701-437-01	WASHER	
164	4-880-431-11	JOINT, CENTER	
165	7-682-549-09	SCREW #PS 3/16	
166	3-706-412-00	RELAY, CARTRIDGE	
167	3-706-412-00	SHELL	
168	3-706-412-11	SHELL	
905	1-557-042-11	LEAD (WITH TERMINAL) RED	
	1-557-042-21	LEAD (WITH TERMINAL) GREEN	
	1-557-042-31	LEAD (WITH TERMINAL) BLUE	
	1-557-042-41	LEAD (WITH TERMINAL) WHITE	
906	1-549-109-21	CARTRIDGE (WITH SHELL) (VL-42C18)	166-168, 907
907	1-549-112-00	STYLUS (NO-142G)	

4.4.

FOR PS-LX230/LX230C



No.	Part No.	Description	Remarks
201	4-903-312-11	WEIGHT, SUB	
202	4-903-309-01	SHEET (S) 1/16"	
203	4-903-309-01	SHEET (S) 1/16"	
204	4-881-468-20	REINFORCEMENT (A)	
205	7-685-115-29	SCREW # 2X8 TYPE2 SLIT	
206	4-877-810-00	WEIGHT	
207	4-903-350-01	WEIGHT, SUPPORT	
208	4-903-350-01	WEIGHT, SUPPORT	
209	4-903-350-01	WEIGHT, SUPPORT	
210	4-903-307-11	PIPE, ARM	
211	7-621-771-06	SCREW #8 2X5	
212	X-4881-604-6	JOINT ASSY, CENTER	
213	4-881-618-00	BEARING, PIVOT	
214	4-881-618-01	BEARING, PIVOT	
215	2-203-519-00	NUT (A), LOCK, PIVOT	
216	4-887-481-01	(LX230C)...SCREW (B), CARTRIDGE FITTING	
217	4-903-347-00	(LX230C)...PROTECTOR	
908	1-562-517-41	CONNECTOR (WITH HEAD SHELL) 4P	
909	1-549-117-21	(LX230C)...CARTRIDGE (VL-456)(B)	910
910	1-549-118-00	(LX230C)...STYLUS (NO-145G)	