

PS-LX230/LX230C/LX231

SERVICE MANUAL

PS-LX230:

US Model

PS-LX230C:

US Model

Canadian Model

PS-LX231:

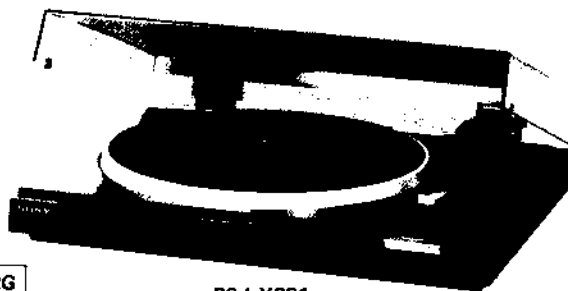
AEP Model

UK Model

E Model



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.

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

— Continued on page 2 —

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.

STEREO TURNTABLE SYSTEM SONY®



AUD

PS-LX230/LX230C/LX231

PS-LX231: VL-42G

Type	Moving magnet type
Frequency response	20 Hz to 20 kHz
Channel separation	16 dB at 1 kHz
Output voltage	2.5 mV at 1 kHz, 5 cm/sec.
Load impedance	50 to 100 kilohms
Tracking force	2 g
Stylus	Sony ND-142G (conical 0.6 mil diamond)
Weight	8 g

General

Power requirements

US, Canadian model: 120 Vac, 60 Hz
 AEP model: 220 Vac, 50/60 Hz (240 Vac adjustable by authorized Sony personnel)
 UK model: 240 Vac, 50/60 Hz (220 Vac adjustable by authorized Sony personnel)
 E model: 110–120 or 220–240 Vac adjustable, 50/60 Hz

Power consumption

5W

Dimensions

Approx. 430 × 110 × 360 mm (w/h/d)
 (17 × 4³/₁₆ × 14 in.)

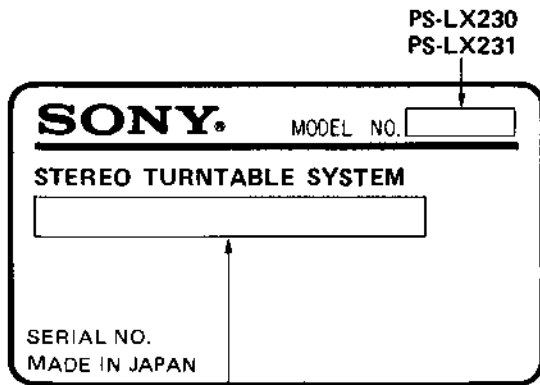
including projecting parts and controls

Weight

Approx. 3.5 kg (7 lbs 12 oz), net

MODEL IDENTIFICATION

— Specification Label —



US, Canadian model: AC: 120V60Hz 5W
 AEP model: AC: 220V~50/60Hz 5W
 UK model: AC: 240V~50/60Hz 5W
 E model: AC: 110–120V, 220–240V~50/60Hz 5W

SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

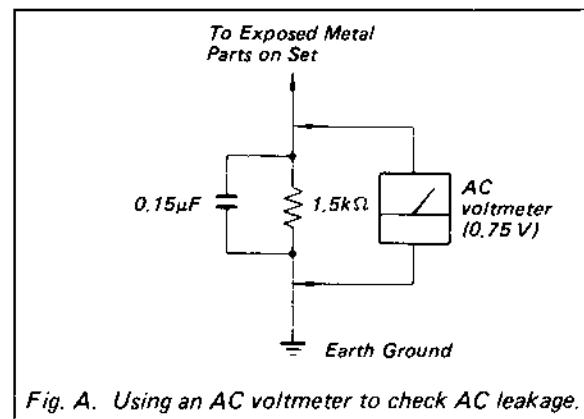


Fig. A. Using an AC voltmeter to check AC leakage.

FUNCTION OF CONTROLS

PS-LX230/LX230C

The **TD** label indicates that a cartridge is a standardized plug-in type.

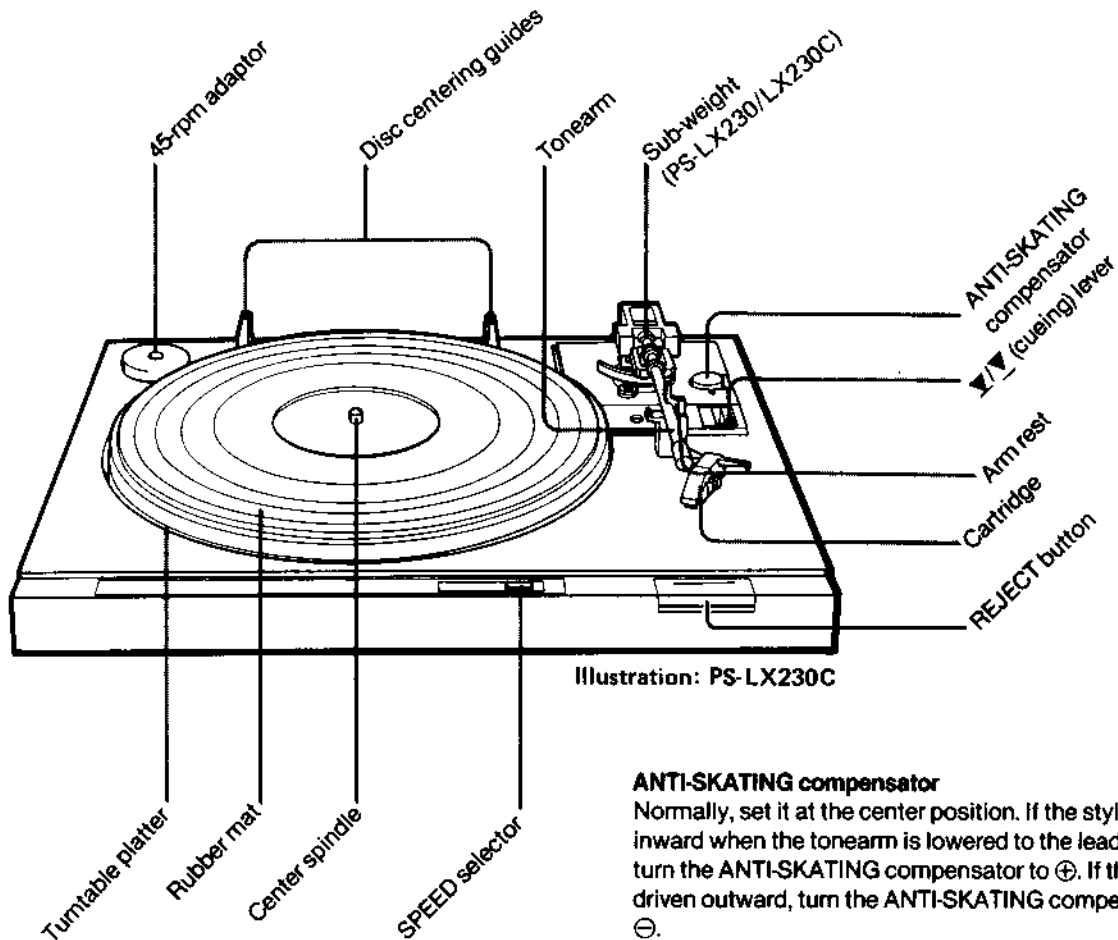
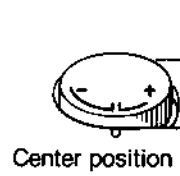


Illustration: PS-LX230C

ANTI-SKATING compensator

Normally, set it at the center position. If the stylus is driven inward when the tonearm is lowered to the lead-in groove, turn the ANTI-SKATING compensator to ⊕. If the stylus is driven outward, turn the ANTI-SKATING compensator to ⊖.



TRACKING FORCE FINE ADJUSTMENT (PS-LX230/LX230C)

Tracking force is a vertical force applied to the stylus tip so that it can accurately trace a record groove. In this turntable system, the correct tracking force is obtained when the sub-weight is at the ● position. The sub-weight must be adjusted if the following irregularity is noticed.

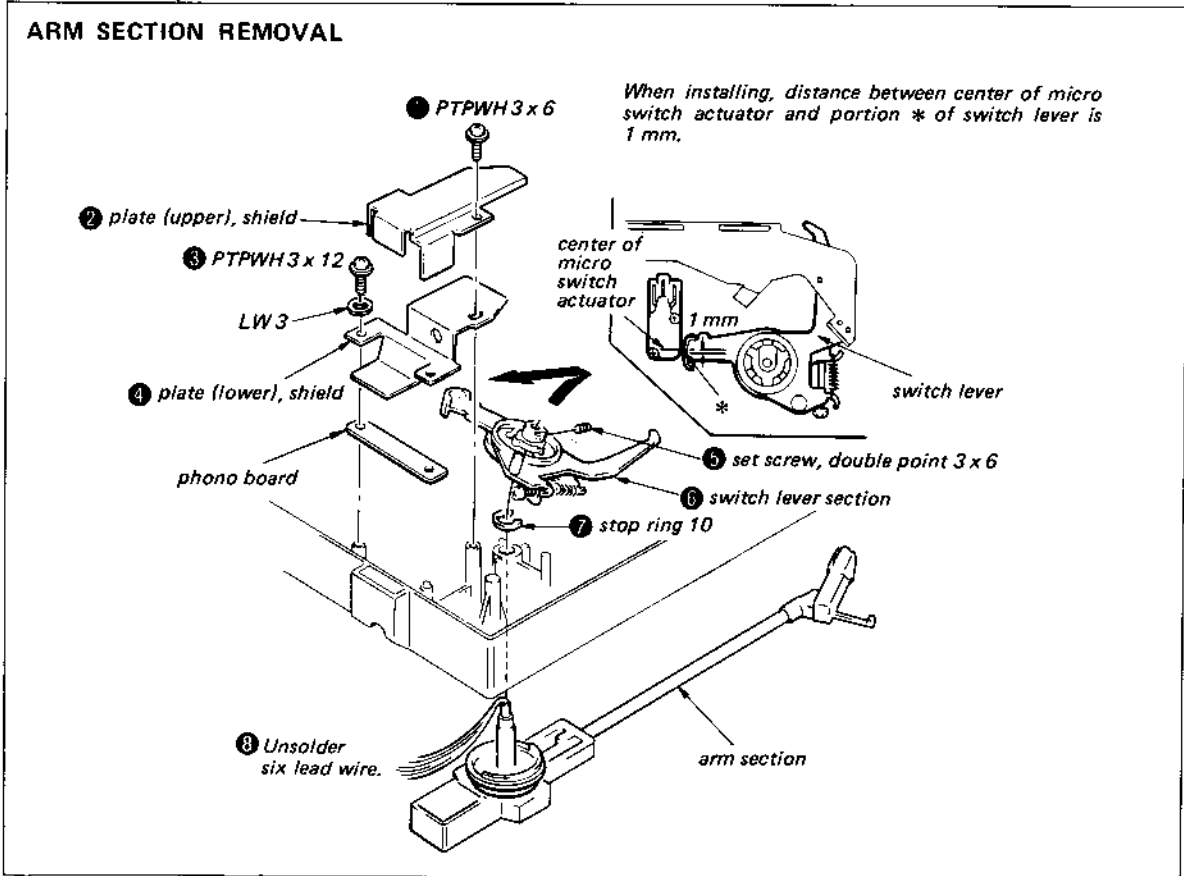
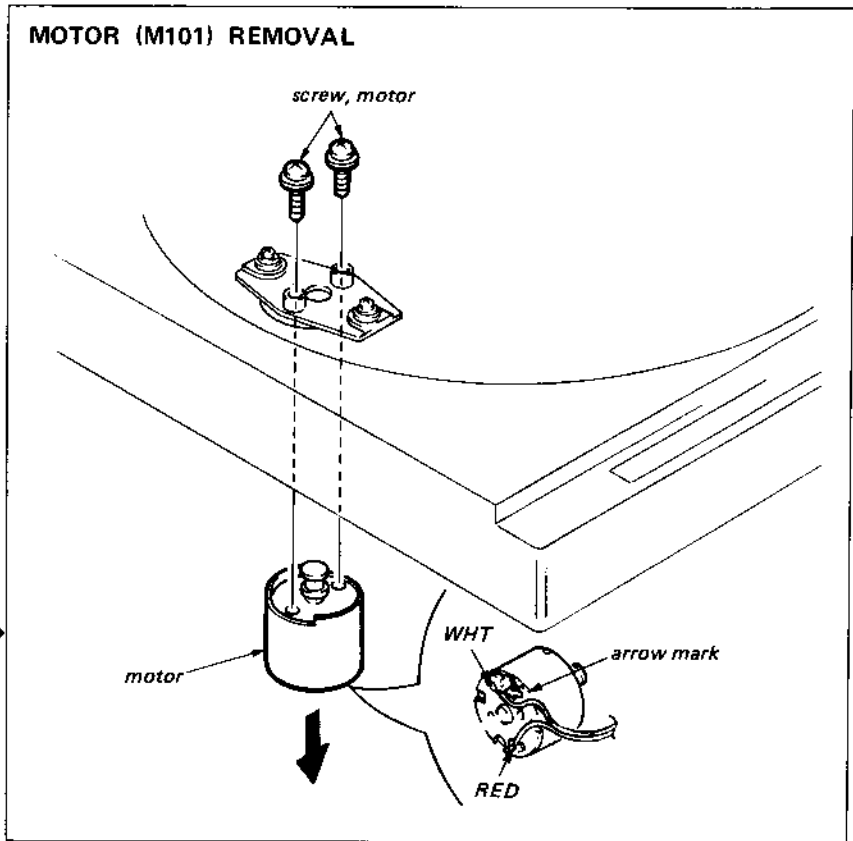
- If the stylus skips the grooves, set the sub-weight towards +.
- If the tracking force is too heavy, set the sub-weight towards -.

**SECTION 1
DISASSEMBLY**

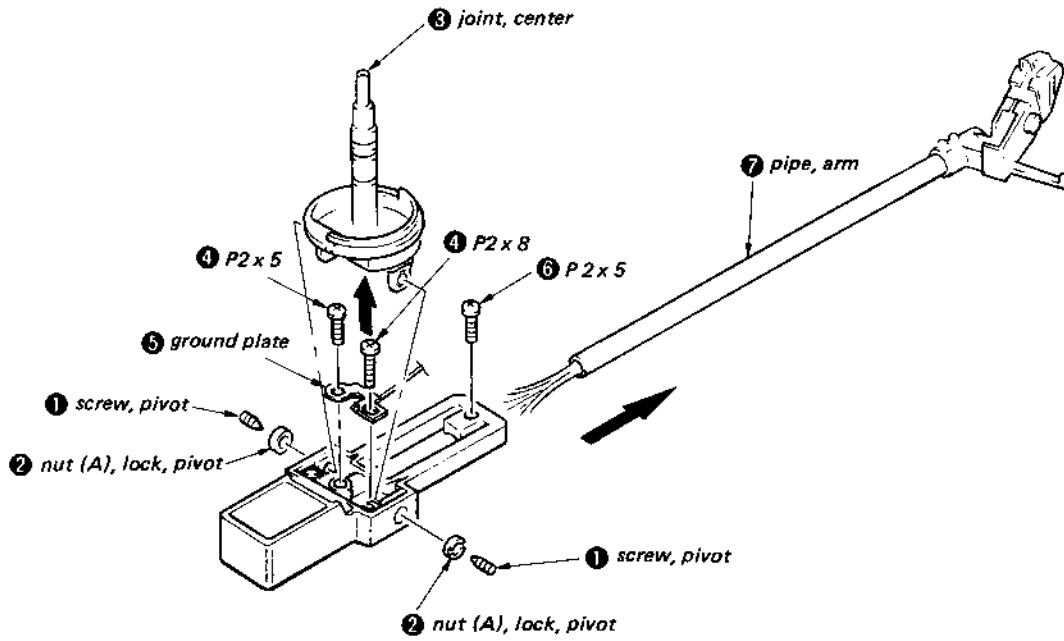
Note: Follow the disassembly procedure in the numerical order given.

Remove dust cover and turntable.

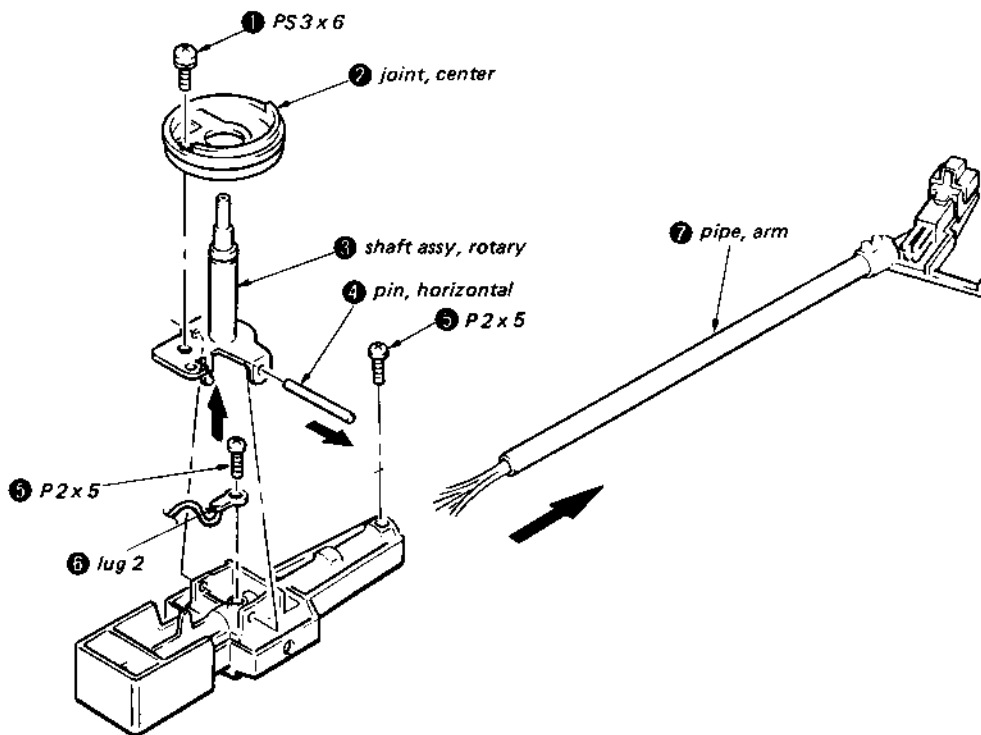
BOTTOM PLATE REMOVAL
Remove 7 screws (PTPWH 3 x 12) of bottom.



ARM PIPE REMOVAL (FOR PS-LX230/LX230C)

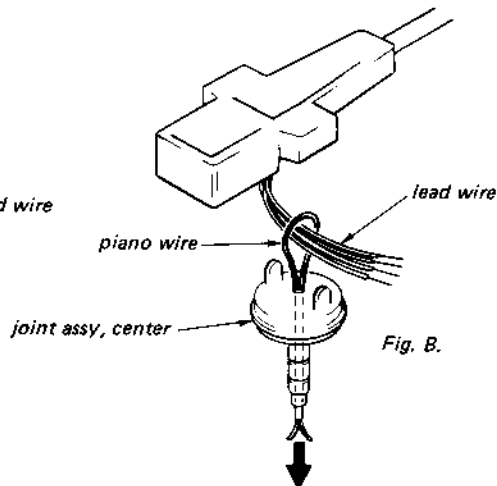
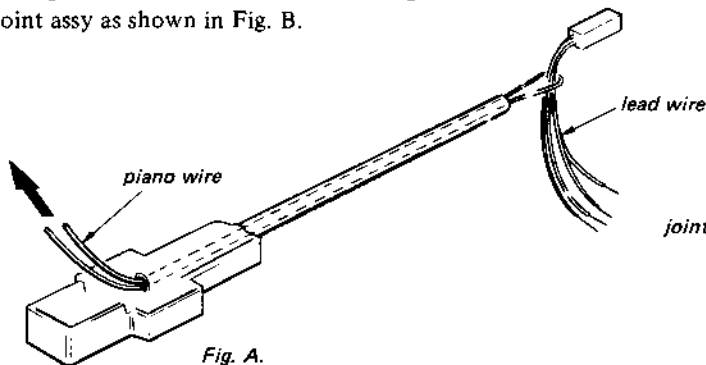


ARM PIPE REMOVAL (FOR PS-LX231)



LEAD WIRE INSTALLATION

1. Pass piano wire with lead wires through pipe as shown in Fig. A.
2. Pass piano wire with lead wires through center joint assy as shown in Fig. B.



**SECTION 2
ADJUSTMENTS**

Speed Adjustment

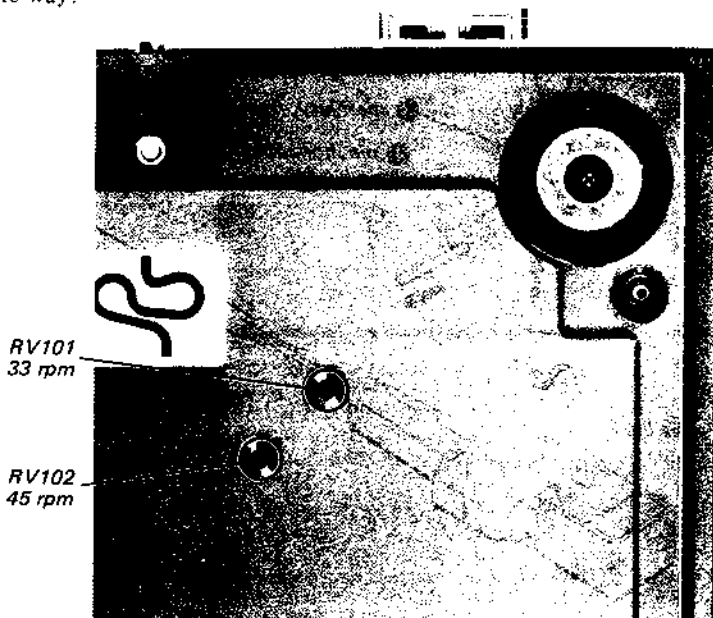
Note: Be sure to perform 45 rpm adjustment before 33 rpm.

— Using a stroboscope board —

1. Put a stroboscope board on the mat.
2. Set the SPEED switch to 45.
Depress the lifter knob to make a lift-up mode and move the arm on most outer-groove of a record.
Adjust RV102 so that the stripped pattern of stroboscope board is stationary.
3. Set the SPEED switch to 33.
Adjust RV101 in the same way.

— Using a test record —

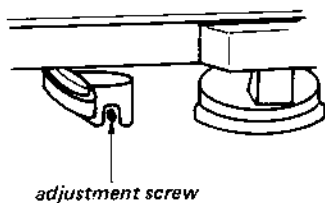
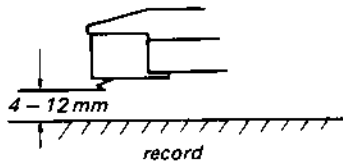
1. Put a test record (YFSC-16) on the mat.
2. Move the arm on a-2 (3 kHz) section and trace it.
3. Adjust RV102 so that the frequency is 4038 – 4062 Hz.
4. Set the SPEED switch to 33.
Adjust RV101 so that the frequency is 2991 – 3009 Hz.



Stylus Height Adjustment

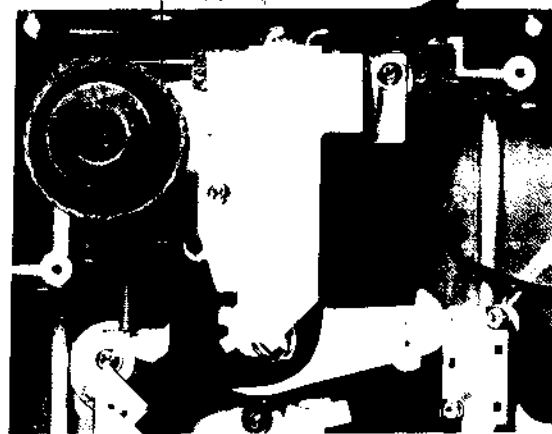
1. Put a test record (YFSC-16) or a record on the mat.
2. Depress the lifter knob to make a lifter-up mode and move the arm on most outer-groove of a record. Confirm that the stylus height from a record is within specification. If not, turn the adjustment screw.
3. Move the arm on most inner-groove of a record and confirm that the stylus height from a record is within specification. If not, turn the adjustment screw and repeat steps 2 and 3.

Specification: 4 – 12 mm ($\frac{3}{16}$ – $\frac{1}{2}$ inch)

**Automatic Return Position Adjustment**

1. Put a test record (YFSC-16) on the mat.
2. Set the SPEED switch to 33 and move the tonearm on a return check groove.
3. Turn the adjustment screw so that the tonearm starts to return at count of 4 – 10.

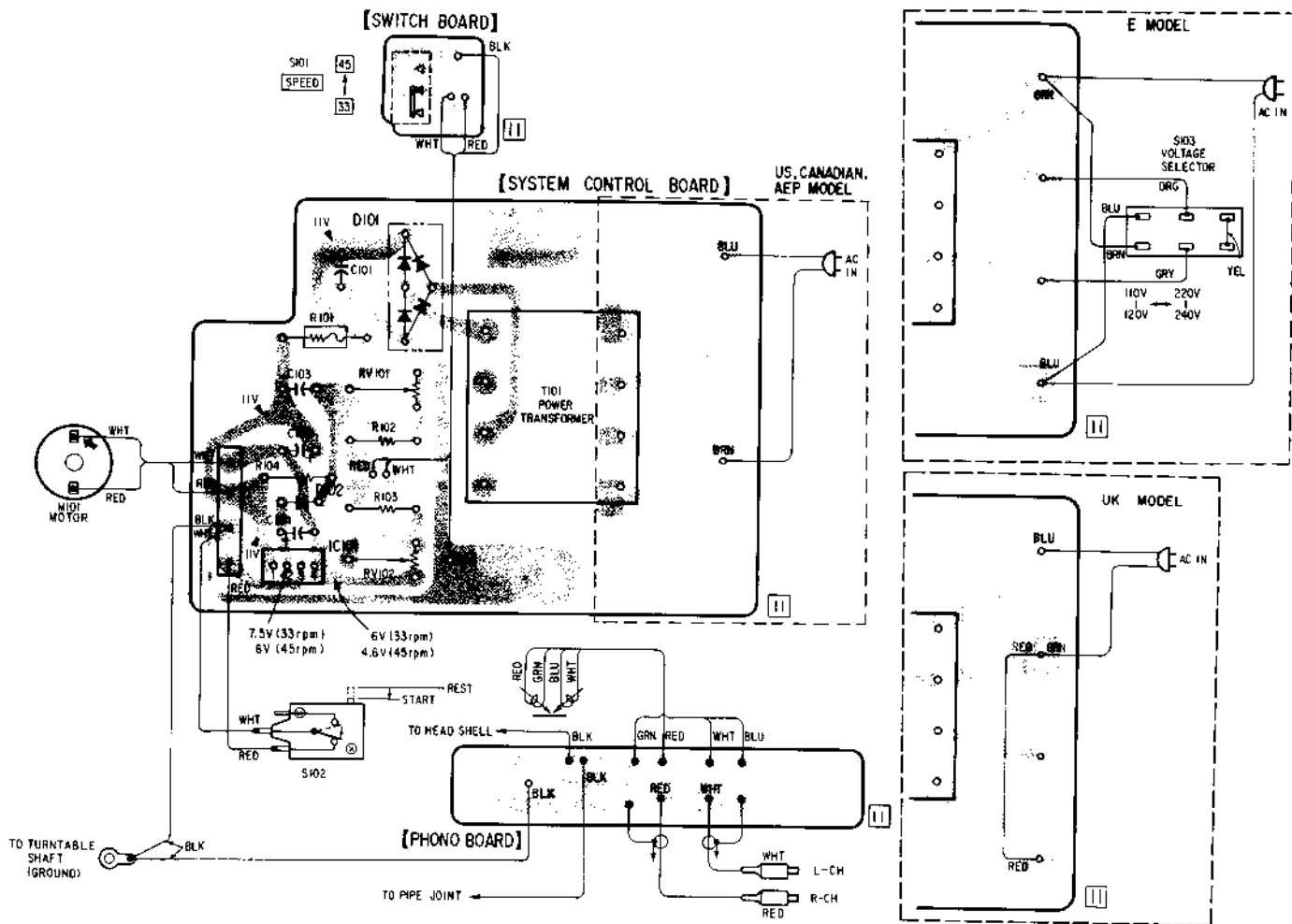
adjustment screw
count increase count decrease



SECTION 3
DIAGRAMS

3-1. MOUNTING DIAGRAM

- Conductor Side -

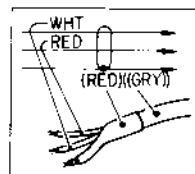


• Semiconductor Lead Layouts

μ PC1470H	1SS202-1	S1RBA10

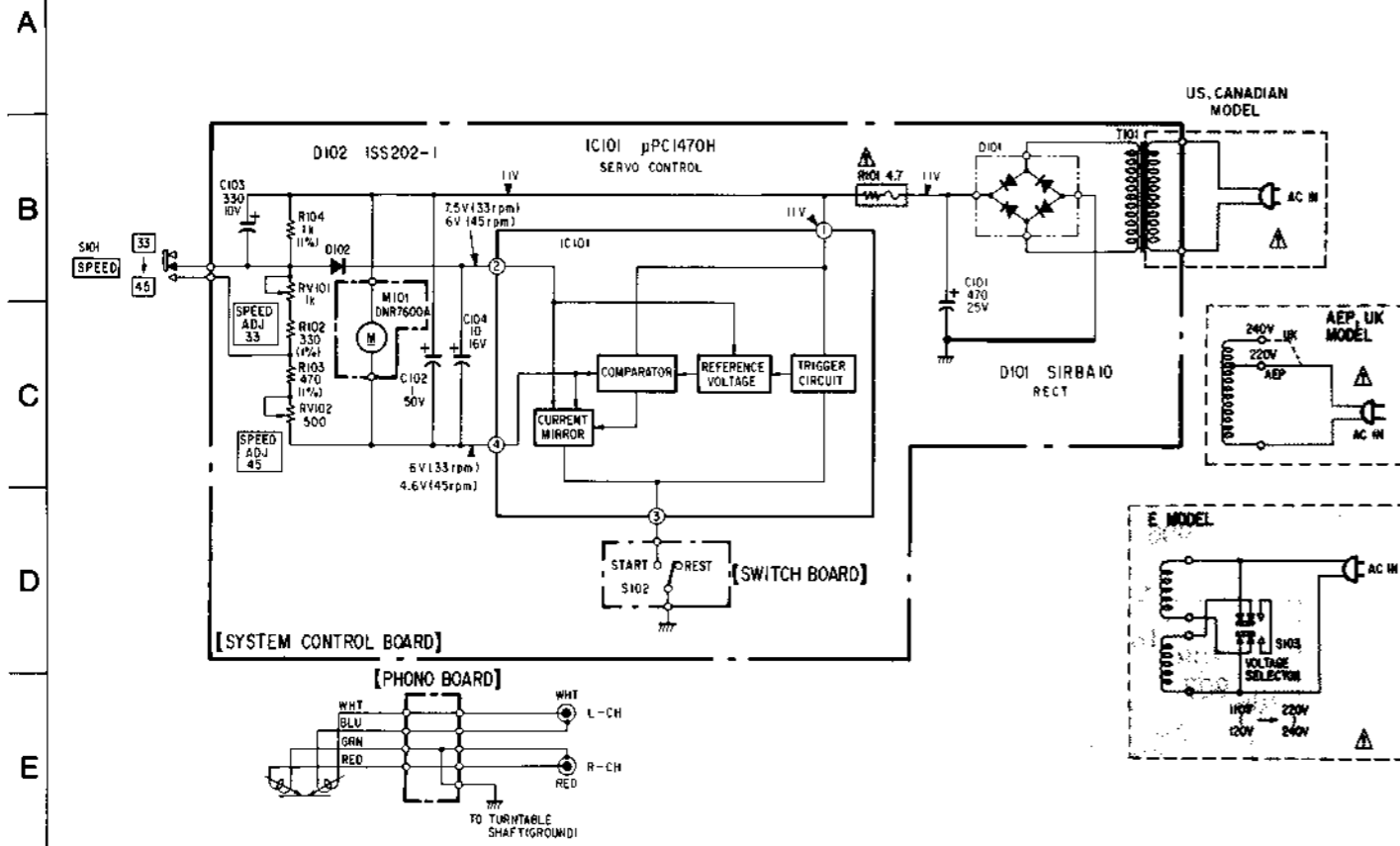
Note:

- Color code of sleeving over the end of the jacket.



SECTION 4
EXPLODED VIEWS AND PARTS LIST

3-2. SCHEMATIC DIAGRAM



- Note:**
- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - --- : fusible resistor.
 - (1%): tolerance identification.
 - \square : adjustment for repair.
 - Voltagess are dc with respect to ground unless otherwise noted.
 - Readings are taken under no-signal conditions with a VOM (50 $\text{k}\Omega/\text{V}$).
 - Voltage variations may be noted due to normal production tolerances.

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

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

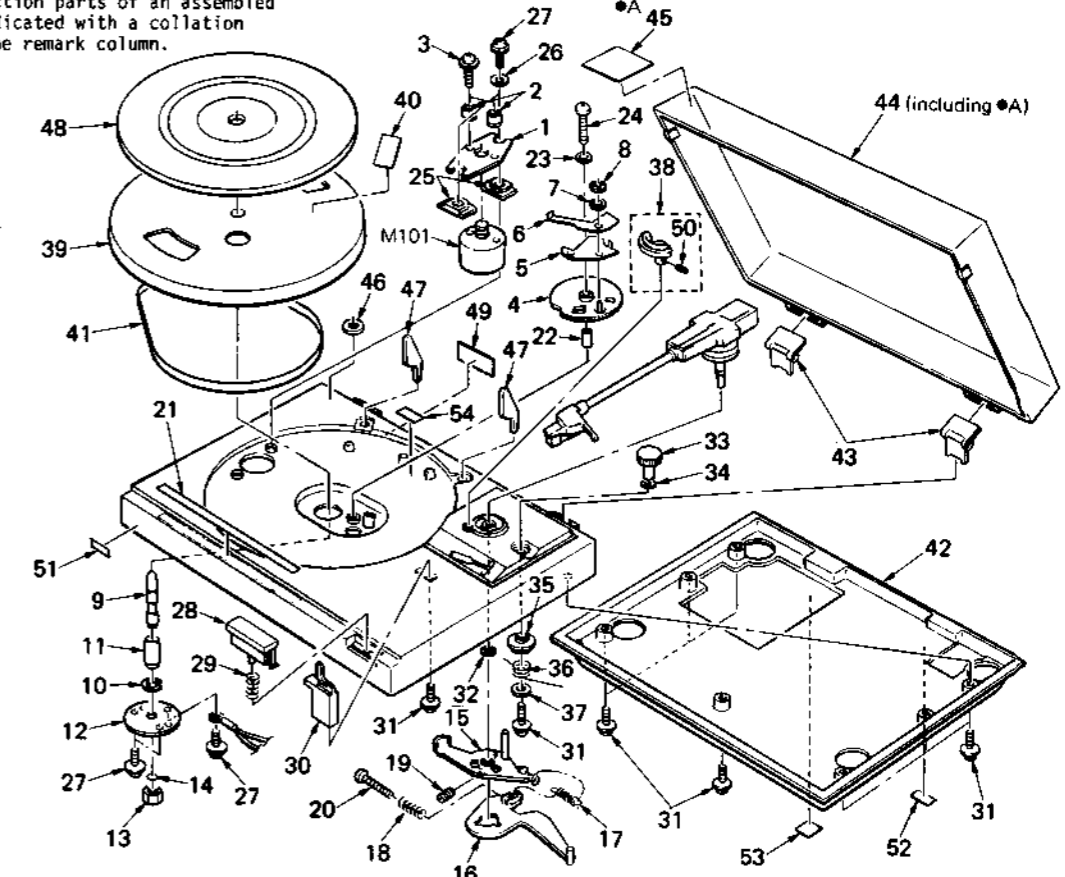
NOTE:

- 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.

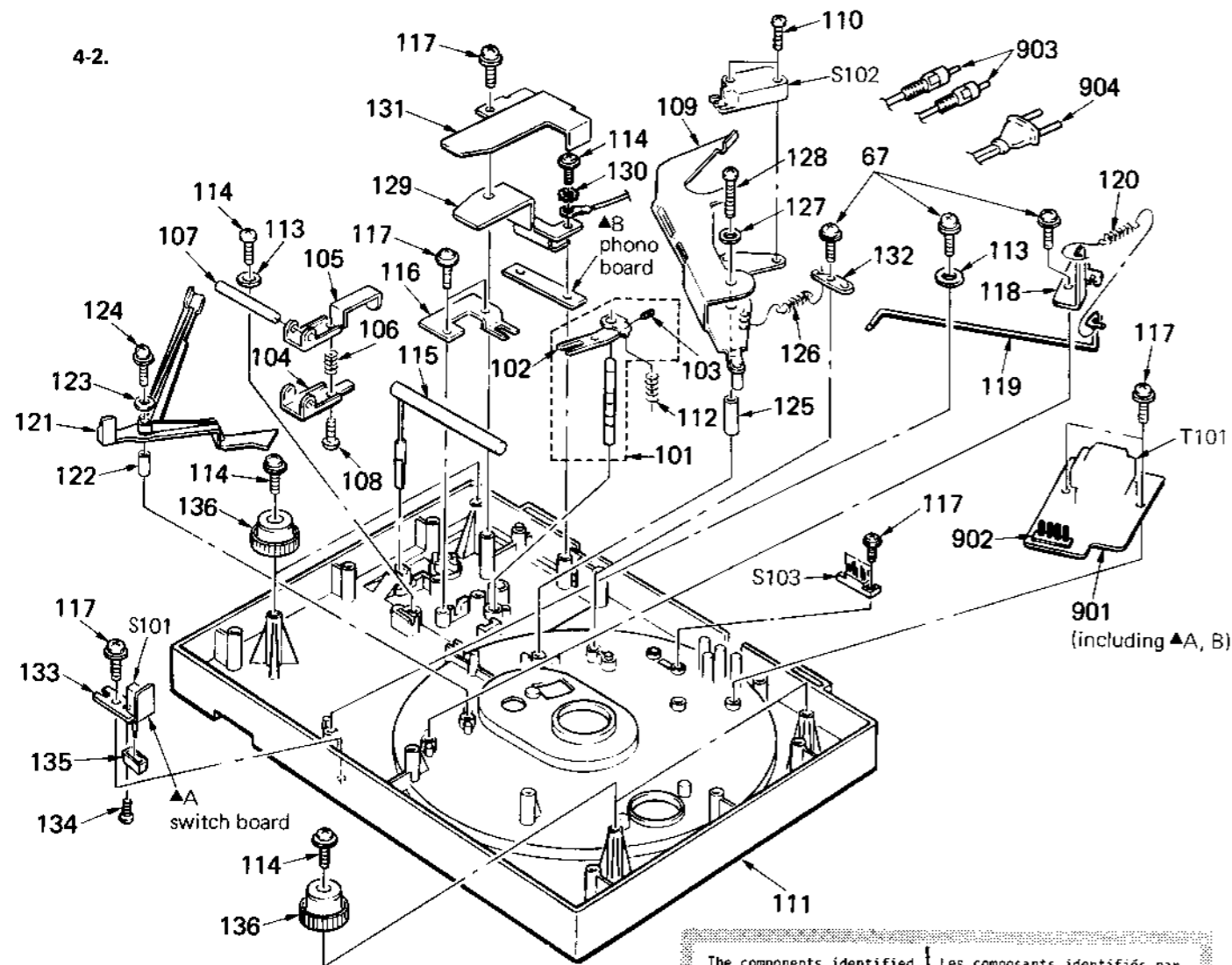
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4-1.

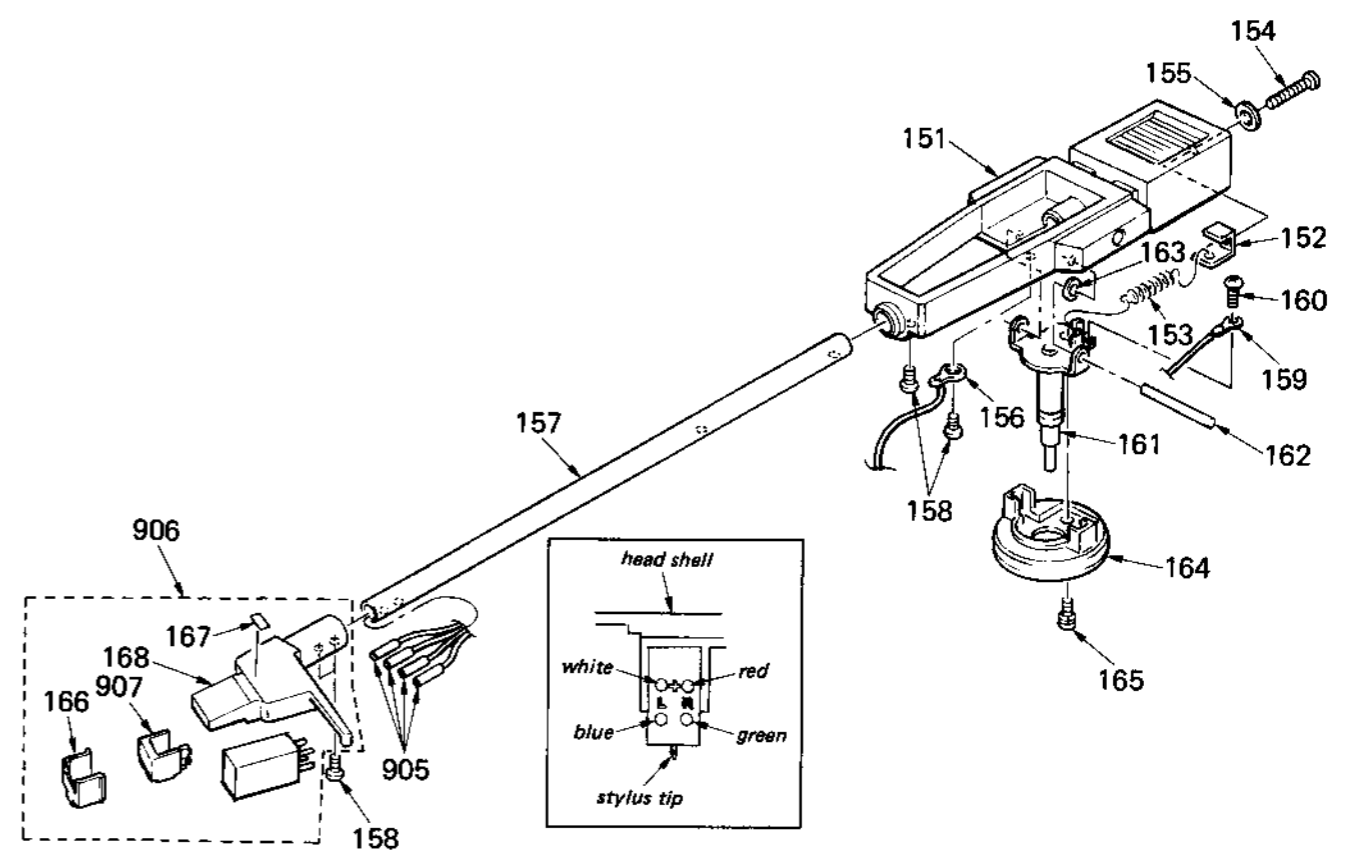


No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	*4-908-151-01	BRACKET (C), MOTOR		30	4-875-208-31	REST, ARM	
2	4-909-061-01	CUSHION, MOTOR		31	3-703-136-00	SCREW +PTPH 3X12	
3	4-909-062-01	SCREW, MOTOR		32	7-624-133-54	STOP RING 10, TYPE-CE	
4	4-903-339-01	GEAR, DRIVE		33	4-881-633-00	{LX231}.....KNOB (1), IFC	
5	X-4852-007-2	CLUTCH (B) ASSY		34	4-903-333-01	{LX230/LX230C}...KNOB, IFC	
6	4-852-013-05	CLUTCH (A)		35	4-844-041-00	WASHER, (N)	
7	7-688-003-11	W 3, MIDDLE		36	4-903-323-01	CAM, IFC	
8	7-624-190-81	STOP RING 2, TYPE-CS		37	4-874-250-00	SPRING	
9	4-889-523-01	SHAFT, CENTER		38	0-056-028-00	WASHER, PLAIN, 14 DIA.	
10	7-624-133-34	STOP RING 8, TYPE-CE		39	X-4903-302-1	PLATE ASSY, UP AND DOWN	50
11	4-908-102-01	BEARING		40	*X-4903-416-1	TURNTABLE ASSY	
12	4-908-101-01	HOLDER, BEARING		41	4-858-264-21	LABEL, CAUTION	
13	4-908-104-01	NUT, BEARING		42	4-880-655-01	BELT	
14	4-908-141-01	RETAINER (S), THRUST		43	4-889-532-01	{AEP,UK,E}.....PLATE, BOTTOM	
15	4-875-214-00	LEVER, SWITCH		44	4-889-532-11	{US,Canadian}...PLATE, BOTTOM	
16	*4-858-234-00	LEVER, RETURN		45	4-857-653-00	HINGE, DUST COVER	45
17	3-536-780-00	SPRING, TENSION		46	X-4903-415-1	COVER ASSY, DUST	
18	4-836-836-00	SPRING, COMPRESSION		47	3-703-705-41	STICKER, SONY SYMBOL (30)	
19	3-701-508-00	SET SCREW, DOUBLE POINT 3X6		48	3-701-806-00	ADAPTOR, 45, (E)	
20	7-682-553-09	SCREW +B 3X20		49	4-874-262-00	GUIDE, RECORD	
21	4-889-525-31	{LX231}.....PANEL, CONTROL		50	4-913-521-01	{Canadian,AEP,UK,E}...SHEET, TURNTABLE	
22	4-889-525-41	{LX230/LX230C}...PANEL, CONTROL		51	4-913-521-11	{US}.....SHEET, TURNTABLE	
23	4-861-933-00	SLEEVE (D)		52	4-903-462-01	{UK}.....LABEL, MODEL NUMBER	
24	4-812-554-00	WASHER		53	*4-903-463-01	{AEP}.....LABEL, MODEL NUMBER	
25	7-685-152-14	SCREW +P 3X25 TYPE2 SLIT		54	*4-903-464-01	{US,Canadian}...LABEL, MODEL NUMBER	
26	4-908-120-01	RUBBER, FLOATING		55	*4-903-464-01	{E}.....LABEL, MODEL NUMBER	
27	*4-301-647-00	WASHER, SPECIAL		56	*4-903-473-01	{E}.....LABEL, MODEL NUMBER	
28	3-703-137-00	SCREW +PTPH 3X10		57	7-621-738-08	SET-SCT, HEX, 2.6X4, FLAT POINT	
29	4-881-608-21	KNOB, REJECT		58	3-701-690-00	{UK}...LABEL (MADE IN JAPAN)	
	3-533-014-00	SPRING, COMPRESSION		59	3-703-845-01	{US,Canadian,UK}...LABEL, MAIN CAUTION	
				60	4-876-344-00	{AEP}...LABEL, CAUTION, POWER CORD	
				61	4-881-683-00	{E}...LABEL, VOLTAGE	
				62	8-835-126-01	MOTOR, DC (DNR-7600A)	



4-3.

FOR PS-LX231



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.

No.	Part No.	Description	Remarks
101	A-4637-063-A	ROD ASSY (P), PUSH	102,103
102	*4-876-317-00	GUIDE, LIFTER	
103	7-621-741-09	SET-SCT. HEX. 2.6X8 WP	
104	*4-903-321-01	LEVER (G), LIFTER	
105	*4-903-317-01	LEVER (F), LIFTER	
106	4-881-642-00	SPRING, COMPRESSION	
107	*4-881-611-00	SHAFT, LEVER, LIFTER	
108	7-621-775-50	SCREW +B 2.6X10	
109	*X-4877-805-6	LEVER ASSY, MAIN	
110	7-682-150-01	SCREW +P 3X12	
111	4-889-531-41	FRAME	
112	4-903-331-01	SPRING (LIFTER), COMPRESSION	
113	*4-301-647-00	WASHER, SPECIAL	
114	3-703-136-00	SCREW +PTPMH 3X12	
115	4-877-824-00	CAM, LIFTER	
116	*4-903-320-01	RETAINER (D), LIFTER	
117	3-703-137-00	SCREW +PTPMH 3X10	
118	*4-875-205-00	PLATE, FIXED	
119	4-875-204-00	SPRING	
120	3-491-240-00	SPRING, TENSION	
121	*4-858-240-00	LEVER (M), CLUTCH	
122	4-861-933-00	SLEEVE (D)	
123	4-812-554-00	WASHER	

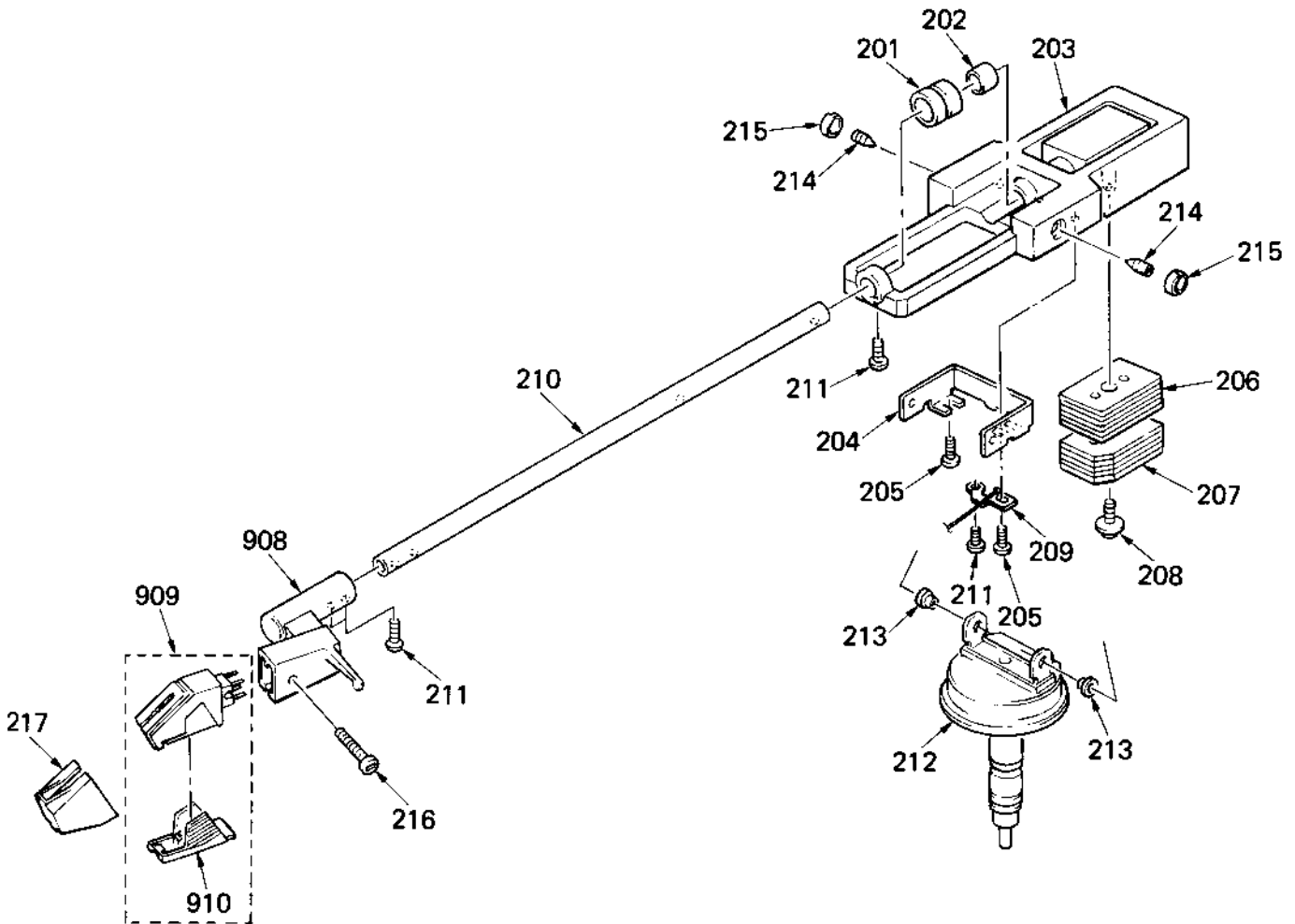
No.	Part No.	Description	Remarks
124	7-685-152-14	SCREW +P 3X25 TYPE2 SLIT	
125	4-875-207-00	SLEEVE	
126	4-870-785-00	SPRING, TENSION (MAIN LEVER)	
127	3-610-931-11	SPACER, SHAFT, DRUM, HEAD	
128	7-685-666-21	SCREW +BVTP 4X30 TYPE2 SLIT	
129	*4-889-524-01	PLATE (LOWER), SHIELD	
130	7-623-422-07	LW 3, TYPE B	
131	*4-889-526-01	PLATE (UPPER), SHIELD	
132	*4-870-752-00	HOLDER, SPRING	
133	*4-889-527-01	BRACKET, SWITCH	
134	7-621-775-08	SCREW +B 2.6X3	
135	4-870-730-21	KNOB, SPEED	
136	X-4903-301-1	INSULATOR ASSY	
901	*1-614-795-11	PC BOARD, SYSTEM CONTROL	
902	*1-535-117-00	TERMINAL	
903	1-551-294-00	CORD (WITH PLUG)	
904	A 1-534-817-XX	(AEP).....CORD, POWER, EURO PLUG	
	A 1-551-628-00	(US,Canadian)...CORD, POWER	
	A 1-556-562-00	(UK).....CORD, POWER	
	A 1-551-188-XX	(E).....CORD, POWER	
S101	1-570-166-11	SWITCH, PUSH (I KEY)	
S102	1-570-489-11	SWITCH, MICRO	
S103	A 1-552-535-00	(E).....SWITCH, VOLTAGE SELECTOR	
T101	A 1-448-043-11	(US,Canadian)...TRANSFORMER, POWER	
T101	A 1-448-044-11	(AEP,UK).....TRANSFORMER, POWER	
T101	A 1-448-045-11	(E).....TRANSFORMER, POWER	

No.	Part No.	Description
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 +B 3X30
155	7-688-003-11	W 3, MIDDLE
156	7-623-505-01	LUG, 2
157	4-889-528-11	PIPE, ARM
158	7-621-771-06	SCREW +B 2X5
159	7-623-508-01	LUG, 3
160	7-682-545-09	SCREW +B 3X4
161	X-4881-605-1	SHAFT ASSY, ROTARY
162	4-880-619-00	PIN, HORIZONTAL
163	3-701-437-01	WASHER

Remarks	No.	Part No.	Description	Remarks
	164	4-880-631-11	JOINT, CENTER	
	165	7-682-647-09	SCREW +PS 3X6	
	166	3-706-613-00	PROTECTOR	
	167	*3-706-612-00	LABEL, CARTRIDGE	
	168	3-706-614-11	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-42G)B 166-168,907	
	907	1-549-112-00	STYLUS (ND-142G)	

44.

FOR PS-LX230/LX230C



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
201	*4-903-312-11	WEIGHT, SUB		211	7-621-771-06	SCREW +B 2X5	
202	*4-903-308-01	SHEET (S)		212	X-4881-604-6	JOINT ASSY, CENTER	
203	4-903-336-11	JOINT, PIPE		213	4-881-618-00	BEARING, PIVOT	
204	*4-881-628-00	REINFORCEMENT (A)		214	2-203-518-61	SCREW, PIVOT	
205	7-685-105-29	SCREW +P 2X8 TYPE2 SLIT		215	2-203-519-00	NUT (A), LOCK, PIVOT	
206	4-877-810-00	WEIGHT		216	4-887-481-01	(LX230C)...SCREW (B), CARTRIDGE FITTING	
207	*4-903-350-01	WEIGHT, SUPPORT		217	4-903-347-00	(LX230C)...PROTECTOR	
208	7-685-134-14	SCREW +P 2.6X8, TYPE2 NON-SLIT		908	*1-562-517-41	CONNECTOR (WITH HEAD SHELL) 4P	
209	*4-889-539-01	PLATE, GROUND		909	1-549-117-21	(LX230C)...CARTRIDGE (VL-45G)(B)	910
210	4-903-307-11	PIPE, ARM		910	1-549-118-00	(LX230C)...STYLUS (NO-145G)	

SECTION 5 ELECTRICAL PARTS LIST

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

• MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:
 UA...: μA..., UPA...: μPA..., UPC...: μPC,
 UPD...: μPD...

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.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
901	*1-614-795-11	PC BOARD, SYSTEM CONTROL
902	*1-535-117-00	TERMINAL
903	1-551-294-00	CORD (WITH PLUG)
904	△ 1-534-817-XX	(AEP)...CORD, POWER, EURO PLUG
	△ 1-551-628-00	(US,Canadian)...CORD, POWER
	△ 1-556-562-00	(E).....CORD, POWER
	△ 1-551-188-XX	(E).....CORD, POWER
905	1-557-042-11	(LX231)...LEAD (WITH TERMINAL) RED
	1-557-042-21	(LX231)...LEAD (WITH TERMINAL) GREEN
	1-557-042-31	(LX231)...LEAD (WITH TERMINAL) BLUE
	1-557-042-41	(LX231)...LEAD (WITH TERMINAL) WHITE
906	1-549-109-21	(LX231)...CARTRIDGE (WITH SHELL) (VL-42G)B
907	1-549-112-00	(LX231)...STYLUS (ND-142G)
908	*1-562-517-41	(LX230,LX230C)...CONNECTOR (WITH HEAD SHELL) 4P
909	1-549-117-21	(LX230C)...CARTRIDGE (VL-45G)B
910	1-549-118-00	(LX230C)...STYLUS (ND-145G)
C101	1-123-336-00	ELECT 470MF 20% 25V
C102	1-123-380-00	ELECT 1MF 20% 100V
C103	1-123-309-00	ELECT 330MF 20% 10V
C104	1-123-356-00	ELECT 10MF 20% 50V
D101	8-719-510-01	DIODE 1SRBA10
D102	8-719-107-94	DIODE 1SS202-1
IC101	8-759-103-35	IC UPC1470H
M101	8-835-126-01	MOTOR, DC (DNR-7600A)
R101	△ 1-217-383-00	FUSIBLE 4.7 5% 1/4W F
R102	1-214-717-00	METAL 330 1% 1/4W
R103	1-214-721-00	METAL 470 1% 1/4W
R104	1-214-729-00	METAL 1K 1% 1/4W
RV101	1-226-233-00	RES. ADJ, CARBON 1K
RV102	1-226-232-00	RES. ADJ, CARBON 500
S101	1-570-166-11	SWITCH, PUSH (1 KEY)
S102	1-570-489-11	SWITCH, MICRO
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

ACCESSORY & PACKING MATERIAL

Part No.	Description
△ 1-526-565-00	(E)....AC PLUG ADAPTOR
3-701-616-00	(LX230)...BAG, POLYETHYLENE (FOR SCREW)
3-701-630-00	BAG, POLYETHYLENE (FOR INSTRUCTION MANUAL)
3-701-634-00	BAG, POLYETHYLENE (FOR TURNTABLE)
3-701-806-00	ADAPTOR, 45, (E)
3-703-450-01	(US)...INSTRUCTION (FOR SAFETY CAUTION)
3-765-234-11	(UK,E)....MANUAL, INSTRUCTION
3-765-234-11	(AEP)...MANUAL, INSTRUCTION
3-765-234-41	(US)...MANUAL, INSTRUCTION
3-765-234-21	(Canadian)...MANUAL, INSTRUCTION
3-794-123-11	LABEL, CAUTION (FOR DRIVE GEAR)
3-795-753-21	(LX230)...INSTRUCTION (FOR SCREW)
4-874-262-00	GUIDE, RECORD
4-876-352-00	SHEET, PROTECTION (FOR SET)
4-881-698-00	PLATE, PROTECTION (FOR FRAME SIDE)
4-887-481-01	(LX230)...SCREW (B), CARTRIDGE FITTING
4-889-536-01	CUSHION (LEFT)
4-889-537-01	CUSHION (RIGHT)
4-889-538-01	HOLDER, TURNTABLE
4-903-348-01	(LX230,LX230C)...HOLDER, ARM
4-903-468-41	(LX231)....INDIVIDUAL CARTON
4-903-468-51	(LX230)....INDIVIDUAL CARTON
4-903-468-61	(LX230C)...INDIVIDUAL CARTON
4-913-521-01	(Canadian,AEP,UK,E)...SHEET, TURNTABLE
4-913-521-11	(US).....SHEET, TURNTABLE
*X-4903-416-1	TURNTABLE ASSY