# PS-I X300USB

# SERVICE MANUAL

## Ver. 1.3 2008.11

US Model Canadian Model AEP Model UK Model Australian Model



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Drive system: . Belt-drive

DC motor

Platter: 295 mm dia. (aluminum die-cast) Speeds:

33 1/3 and 45 r/min, 2 speed Wow and flutter:

Less than 0.25% (WRMS) Signal to noise ratio:

More than 50 dB (DIN-B)

#### **Tone Arm**

Type:

Dynamic balanced straight-shaped with soft damping control

Effective arm length: 195 mm

#### USB jack

- Power supply: USB bus power compliant (5 V, 100 mA) (The power is supplied by the PC which is connected with an attached USB cable)
- Output jack:

Plug-in-power system (Dedicated USB jack)

USB series B connector

USB (full-speed)

#### SPECIFICATIONS

General

Power requirements: North American model: 120 V AC, 60 Hz Other models: 230 - 240 V AC, 50/60 Hz Power consumption: 2 W Dimensions: Approx.  $420 \times 95 \times 360 \text{ mm} (16^{-1}/_2 \times 3^{-5}/_8 \times 10^{-5})$ 14<sup>1</sup>/<sub>4</sub> in) (w/h/d) Mass: 3.3 kg (7 lb 5 oz) Supplied Accessories: 45 r/min adaptor (1) Platter (with drive belt) (1) Rubber mat (1) USB cable (1) CD-ROM (1) Operating Instructions The installation guide for "Sound Forge Audio Studio LE

Design and specifications are subject to change without notice.

# STEREO TURNTABLE SYSTEM

SONY

9-887-948-04 2008K05-1 © 2008.11

**Sony Corporation** Audio&Video Business Gourp Published by Sony Techno Create Corporation

# SECTION 1 SERVICING NOTES

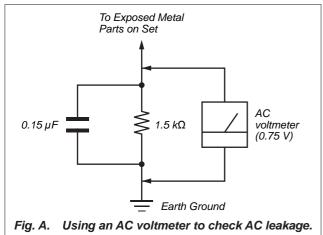
#### SAFETY CHECK-OUT

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)



#### SAFETY-RELATED COMPONET WARNING!

COMPONENTS IDENTIFIED BY MARK  $\triangle$  OR DOTTED LINE WITH MARK  $\triangle$  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!

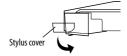
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE A SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONC-TIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DON-NÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

#### REPLACING THE STYLUS

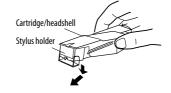
The life expectancy of the stylus tip is about 500 hours. To preserve good sound quality and avoid damage to your records, we recommend replacing the stylus within this time limit. For a replacement stylus, consult your nearest Sony dealer.

#### To remove the stylus

- 1 Turn off and unplug the AC power cords of the turntable and amplifier.
- 2 Protect the stylus with the stylus cover.



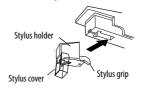
**3** Grasp the stylus holder and pull it downward away from the body of the cartridge/headshell as shown.



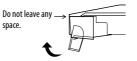
#### To install the stylus

Do this procedure with the stylus protected by the stylus cover.

1 Grasp both sides of the stylus holder, then insert the stylus grip into the cartridge/ headshell receptacle.



**2** Push up the stylus holder until it clicks so that it locks completely.

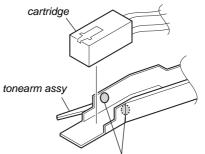


#### Note

Do not push the stylus cover forcefully. Otherwise, the exposed stylus from the cover may cause injury, or damage the stylus.

NOTE FOR CHANGING THE CARTRIDGE

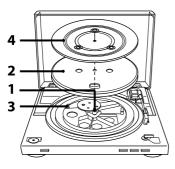
Note: When changing the cartridge, be sure to fix by a bond.



SONY BOND SC608LV (Part No. 7-600-000-48) or equivalent bond.

- bottom view -

#### ASSEMBLING THE TURNTABLE



**1** Move the metallic parts inside the larger gear in the direction of the arrow.



**2** Carefully place the platter on the spindle.



**3** Using the ribbon, loop the drive belt around the motor pully. After looping the belt, do not forget to

remove the ribbon.



4 Place the rubber mat on the platter.

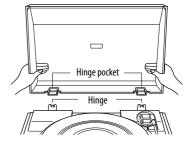
#### Note

When the AC power cord is plugged after assembling or moving the turntable, the turntable sometimes rotates and the torn arm descends to the platter even if START is not pressed.

If this occurs, press STOP to return the tone arm to the arm stand.

#### To remove the dust cover

With the dust cover fully opened, grasp both sides of the cover, then remove it carefully.



#### Tip

You can use the turntable leaving the dust cover removed. In that case, store the cover correctly.

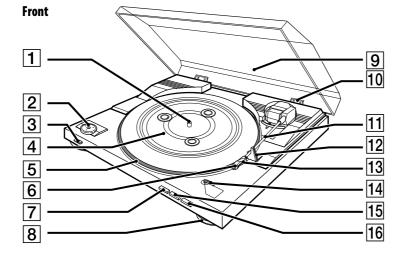
#### To install the dust cover

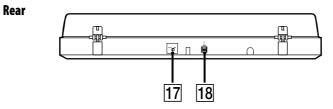
Insert the hinge pockets on the dust cover into the hinges on the rear of the cabinet.

# SECTION 2 GENERAL

# **Parts and Controls**

1 Spindle	10 Hinge
2 45 r/min adaptor	11 Tone arm
3 Speed select button	12 Arm stand
4 Rubber mat	13 Finger lift
5 Platter	14 SIZE SELECTOR
6 Cartridge and headshell	15 STOP button
7 START button	16 UP/DOWN button
8 Insulator	17 PHONO/LINE switch
9 Dust cover	18 USB jack



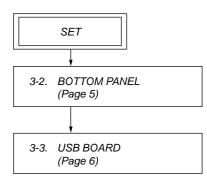


4

### SECTION 3 DISASSEMBLY

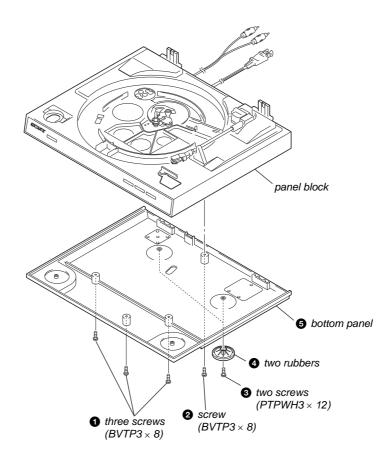
• This set can be disassembled in the order shown below.

#### 3-1. DISASSEMBLY FLOW



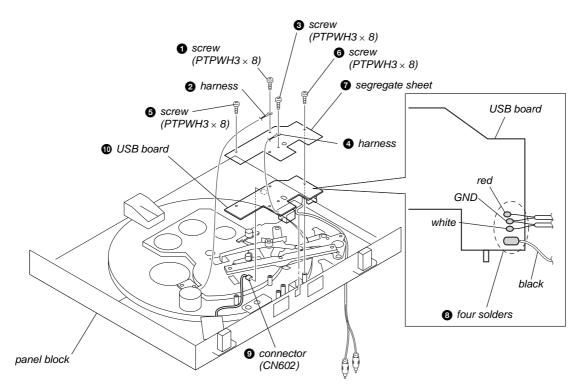
Note: Follow the disassembly procedure in the numerical order given.

#### 3-2. BOTTOM PANEL



#### 3-3. USB BOARD

Note: This illustration is seeing panel block from the base side.



## SECTION 4 EXPLODED VIEWS AND ACCESSORIES

Note:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service.

Some delay should be anticipated when ordering these items.

#### 4-1 OVERALL SECTION



 Color Indication of Appearance Parts Example:

KNOB, BALANCE (WHITE) . . . (RED)

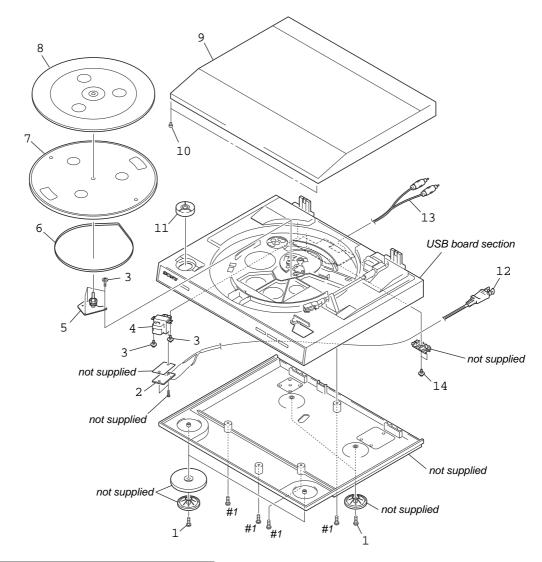
Parts Color Cabinet's Color

The components identified by mark  ${\rm I}\!\!/_{\rm A}$  or dotted line with mark  ${\rm I}\!\!/_{\rm A}$  are critical for safety.

Replace only with part number specified.

Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant

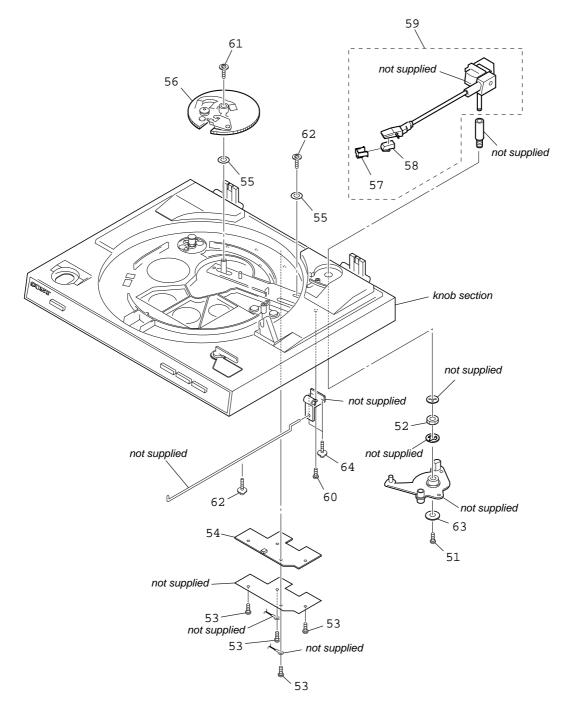
le numéro spécifié.



# Note: When POWER board failed, please change the board entirely.

Ref. No.	Part No.	Description	emark	Ref. No.	Part No.	Description	Remark
1	4-215-536-01	SCREW=PTPWH 3X12 W10 STEP		10	9-885-117-82	RUBBER FOOT FOR DUSTCOVER	
2	9-885-117-64	POWER BOARD, COMPLETE		11	9-885-117-84	45 RPM ADAPTER (45 r/min adaptor)	
3	4-215-531-01	SCREW=PTPWH 3X8 W8	4	<u>∕</u> ∆ 12	9-885-117-93	CORD, POWER (US) (US, Canadian)	
⊥∆ 4	9-885-117-02	TRANSFORMER (CEL), POWER	4	<u>∕</u> ∆ 12	9-885-117-96	CORD, POWER (CEL) (AEP)	
		(AEP, UK, Aus	stralian)	∕∆ 12	9-885-117-97	CORD, POWER (CEK) (UK)	
⊥∆ 4	9-885-117-66	TRANSFORMER (US), POWER (US, Canadi	ian)				
			4	⚠ 12	9-885-117-98	CORD, POWER (AU) (Australian)	
5	9-885-117-69	CENTER & PINION ASSY		13	9-885-117-92	CORD, CONNECTION	
6	9-885-117-87	BELT (Drive belt)		14	4-215-534-01	SCREW=PTPWH 3X16 W8	
7	9-885-117-85	TURN TABLE (Platter)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
8	9-885-117-86	PAD, RUBBER (Rubber mat)					
9	9-885-117-71	DUSTCOVER					

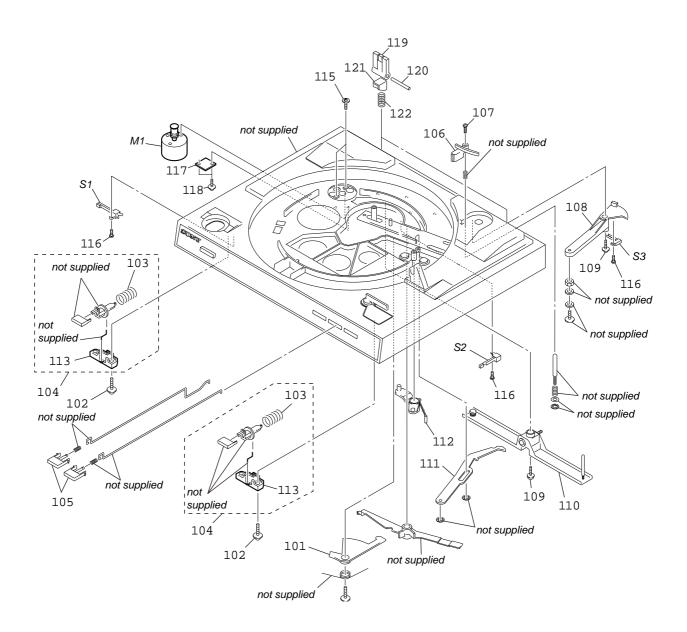
#### 4-2 USB BOARD SECTION



Note: When USB board failed, please change the board entirely.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-215-538-01	SCREW PS 3X12		58	9-885-117-76	CARTRIDGE	
52	4-215-530-01	NUT M9 HEX 11		59	9-885-117-72	TONEARM ASSY	
53	4-215-532-01	SCREW=PTPWH 3X8 W10					
54	9-885-117-63	USB BOARD, COMPLETE (US, Canadi	an)	60	4-215-520-01	SCREW BVTT 3X20	
54	9-885-131-44	USB BOARD, COMPLETE (AEP, UK, A	ustralian)	61	4-215-539-01	SCREW=PTPWH 3X7 W10	
				62	4-215-540-01	SCREW=BVTPW 3X10 W13	
55	4-215-523-01	COLLAR (D6D8X1.5)		63	4-215-562-01	WASHER D3.2 W13	
56	9-885-117-68	GEAR ASSY, CAM		64	4-215-576-01	SCREW=PTPWH 3X10 W10	
57	9-885-117-75	STYLUS (N-6516)					

#### 4-3 KNOB SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	9-885-117-78	PENDULUM (L)		115	4-215-541-01	SCREW (F 3X6.5) STEP	
102	4-215-533-01	SCREW=PTPWH 3X12 W8					
103	4-215-526-01	SPRING		116	4-215-542-01	SCREW=PTP 2.6X8	
104	9-885-117-67	SET ASSY, KNOB SHAFT (&)		117	9-885-117-03	ADAPTOR BOARD, COMPLETE	
105	9-885-117-74	KNOB, PLAY STOP		118	4-215-532-01	SCREW=PTPWH 3X8 W10	
				119	4-216-509-01	HINGE	
106	9-885-117-81	LIFTER		120	4-216-534-01	HINGE PIN	
107	4-215-535-01	SCREW=PTP 3X8					
108	9-885-117-77	FIXING SWITCH SET		121	4-216-510-01	HINGE SLIDE	
109	4-215-537-01	SCREW=PTPWH 3X10 W8		122	4-216-536-01	HINGE SPRING	
110	9-885-117-70	SHAFT ASSY		M1	9-885-117-73	MOTOR ASSY (TURN TABLE)	
				S1	9-885-117-88	SWITCH, LEAF (SPEED SETTING)	
111	9-885-117-83	CONTROL PLATE		S2	9-885-117-88	SWITCH, LEAF (TONE ARM UP/DOWN	I DETECT)
112	9-885-117-79	PENDULUM (M)					
113	9-885-117-80	KNOB SET		S3	9-885-117-89	SWITCH, LEAF (TONE ARM TURN DE	TECT)
114	4-215-540-01	SCREW=BVTPW 3X10 W13					

#### 4-4 ACCESSORIES

Part No.	Description	Remark
3-198-123-14 3-198-123-23	MANUAL, INSTRUCTION (FRENCH,	
3-198-123-33	MANUAL, INSTRUCTION	. ,
3-198-123-43		, ( ,
3-296-918-01	APPLICATION SOFTWARE (SFAS) (CD-ROM: Sound Forge Au	· · · ·
3-878-582-11	MANUAL, INSTRUCTION (DANISH, F	FINNISH) (AEP)
3-878-582-21 3-878-582-31 3-878-582-41 3-878-582-51	MANUAL, INSTRUCTION (RUSSIAN) MANUAL, INSTRUCTION (GREEK) (A	JESE) (ÀEP) (AEP) AEP)
3-878-582-61 3-878-582-71 9-885-117-84 9-885-117-85 9-885-117-86 9-885-117-87 9-885-117-95	MANUAL, INSTRUCTION (SLOVAKIA	Ň) (ÁÉP)
	3-198-123-14 3-198-123-23 3-198-123-23 3-198-123-23 3-198-123-43 3-296-918-01 3-878-582-11 3-878-582-21 3-878-582-21 3-878-582-21 3-878-582-51 3-878-582-51 3-878-582-51 3-878-582-71 9-885-117-86 9-885-117-87	3-198-123-14 MANUAL, INSTRUCTION (ENGLISH)   3-198-123-23 MANUAL, INSTRUCTION (FRENCH, (C.   3-198-123-33 MANUAL, INSTRUCTION (FRENCH, (C.   3-198-123-33 MANUAL, INSTRUCTION (GERMAN, DUTCH, IT)   3-198-123-43 MANUAL, INSTRUCTION (SWEDISH)   3-296-918-01 APPLICATION SOFTWARE (SFAS) (CD-ROM: Sound Forge Au   3-878-582-11 MANUAL, INSTRUCTION (DANISH, F)   3-878-582-21 MANUAL, INSTRUCTION (PORTUGU   3-878-582-31 MANUAL, INSTRUCTION (PORTUGU   3-878-582-31 MANUAL, INSTRUCTION (CZECH, H)   3-878-582-51 MANUAL, INSTRUCTION (CZECH, H)   3-878-582-51 MANUAL, INSTRUCTION (CZECH, H)   3-878-582-71 MANUAL, INSTRUCTION (SLOVAKIA)   9-885-117-84 45 RPM ADAPTER (45 r/min adaptor)   9-885-117-86 PAD, RUBBER (Rubber mat)   9-885-117-87 BELT (Drive belt)

PS-LX300USB

# <u>MEMO</u>

# **REVISION HISTORY**

Checking the version allows you to jump to the revised page.

Also, clicking the version at the top of the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision	
		Description of Revision	
1.0	2008.02	New	
1.1	2008.06	Addition of Canadian, AEP, UK and Australian models	
1.2	2008.09		-08139)
1.3	2008.11	Change of Part No. for COMPLETE USB BOARD (AEP, UK and Australian models) (SMR	-08179)