

PS-1700

PS-1700



US Model
UK Model
Canadian Model
AEP Model

(US, UK, AEP Model)

(Canadian Model)

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STEREO TURNTABLE SYSTEM

SPECIFICATIONS

GENERAL

Power Requirements: 120V ac, 60 Hz (US, Canadian model)
110, 120, 220, 240 V ac ~ adjustable 50 or 60Hz (UK, AEP model)

Power Consumption: 12W (US, Canadian model)
18W (UK, AEP model)

Dimensions: Approx. 445(w) x 160 (h) x 370(d)mm
17½(w) x 5½(h) x 14¾(d)inches
Including projecting parts and controls

Weight: Approx. 7.4 kg, 16 lb 5 oz (net)
Approx. 9.7 kg, 21 lb 6 oz (in shipping carton)

TONEARM

Type: Statically balanced, universal

Pivot-to-Styleus Length: 216.5mm (8⁹/₁₆ inches)

Overall Arm Length: 300mm (11³/₄ inches)

Overhang: 16.5mm (2¹/₃₂ inches)

Tracking Error: Within +3°, -1°

Tracking-Force Adjustment Range: 0-3g

Shell Weight: 7.5g

Cartridge Weight Range: 4-10g

TURNTABLE

Platter: 30 cm (12 inches), aluminum-alloy diecast

Motor: 4-pole synchronous

Drive System: Belt drive

Speeds: 33¹/₃rpm, 45rpm

Wow and Flutter: 0.06%(WRMS)
±0.08%(DIN)

S/N Ratio: 63dB (DIN-B)

CARTRIDGE

Type: Moving magnet type

Frequency Range: 10 - 30,000 Hz

Channel Separation: 25 dB at 1,000 Hz

Output Voltage: 3mV at 1kHz, 5cm sec, 45°

Load Impedance: 50 kΩ

Tracking Force: 1.5 - 2.5g (2g recommended)

Stylus: Sony ND-134G (Conical 0.5 mil diamond)

Weight: 5.5g

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING 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.

SONY

SERVICE MANUAL

MODEL IDENTIFICATION

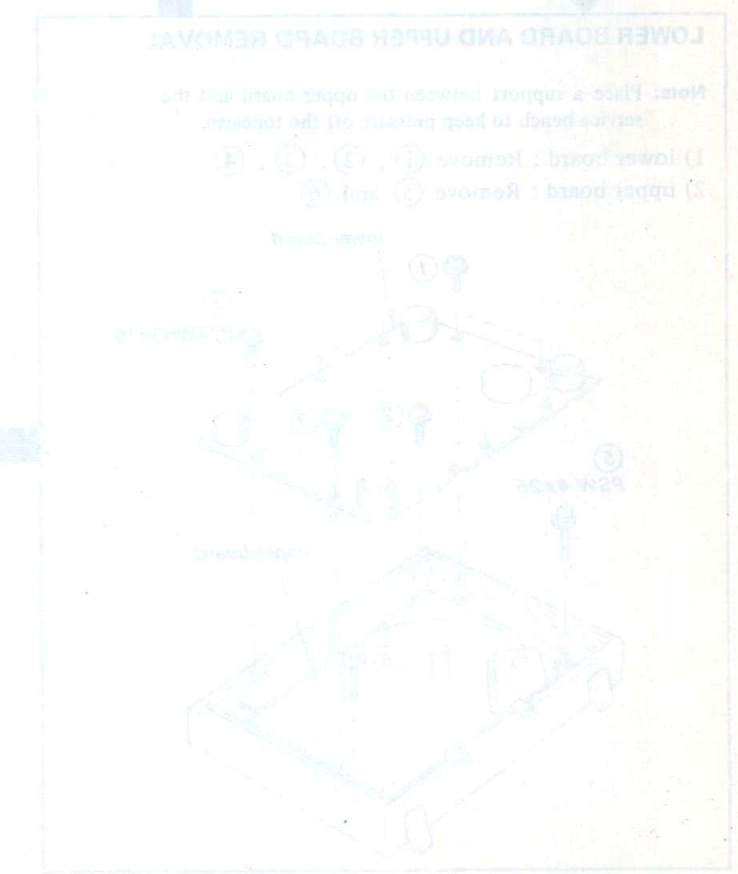
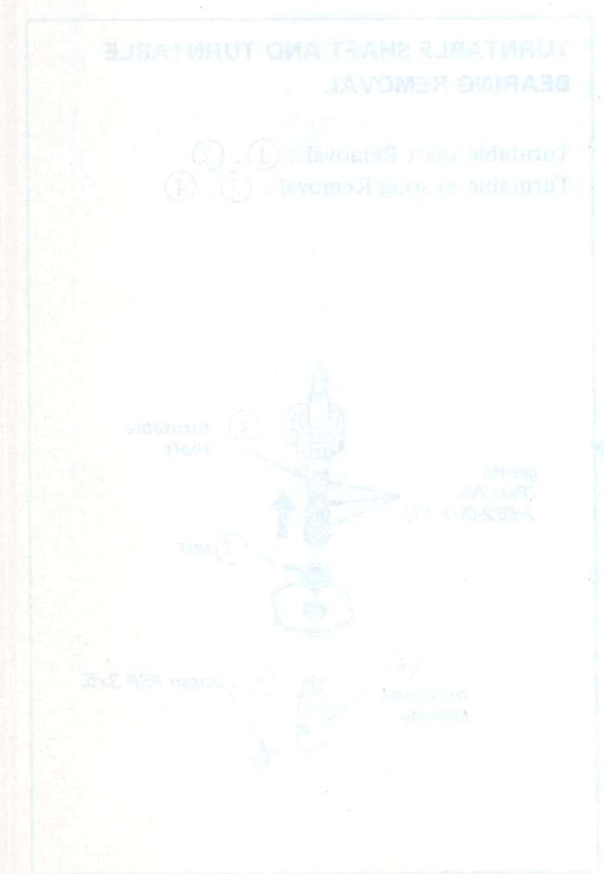
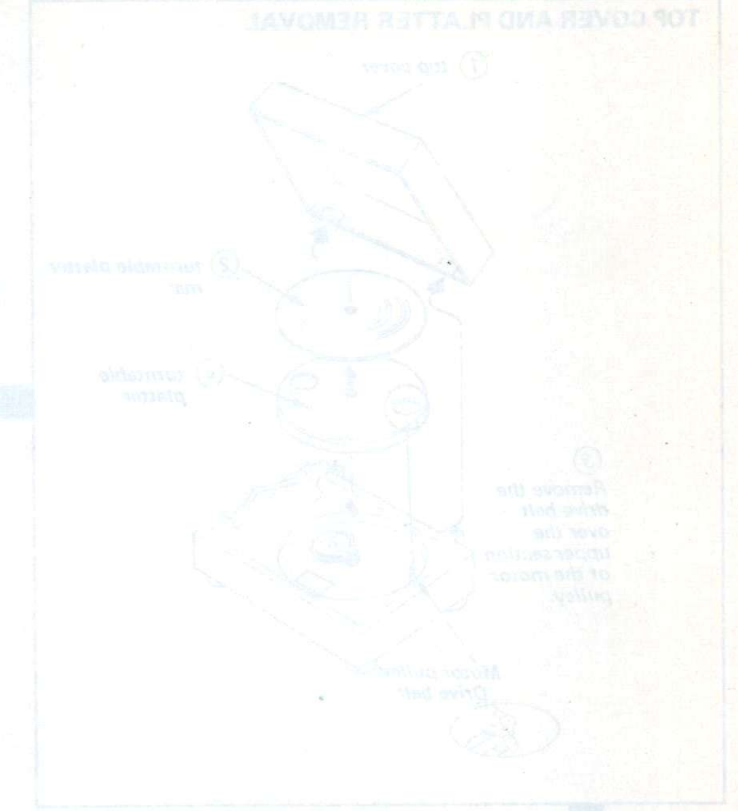
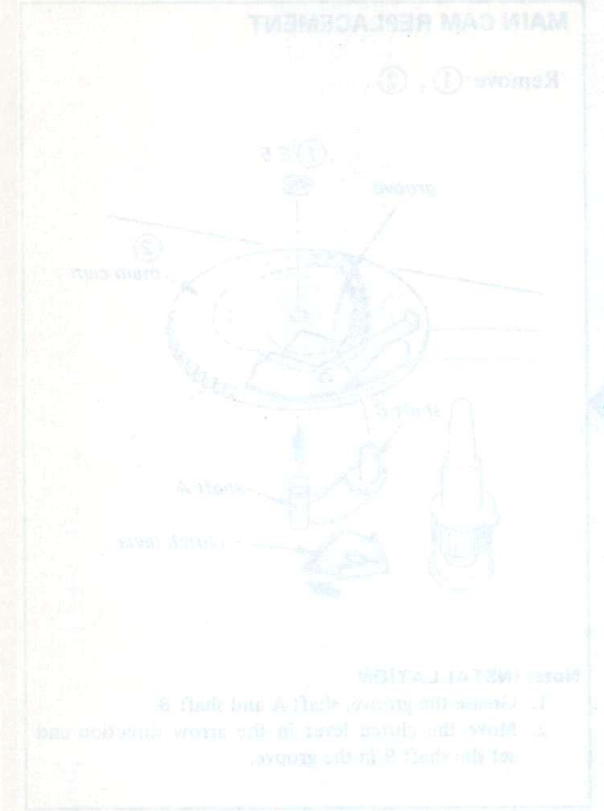
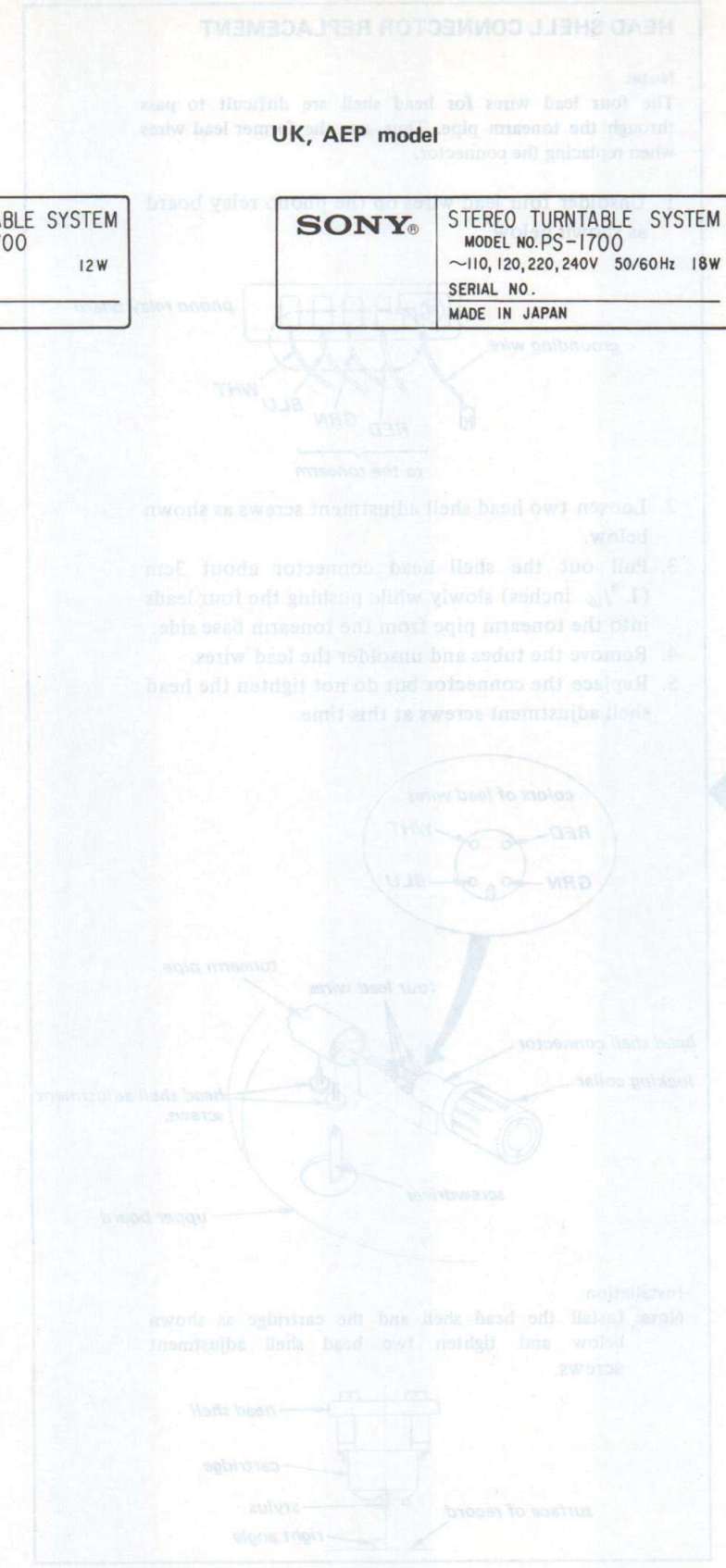
— Specification Labels —

US, Canadian model

SONY STEREO TURNTABLE SYSTEM
MODEL NO. PS-1700
AC 120V 60Hz 12W
SERIAL NO.
MADE IN JAPAN

UK, AEP model

SONY STEREO TURNTABLE SYSTEM
MODEL NO. PS-1700
~110, 120, 220, 240V 50/60Hz 18W
SERIAL NO.
MADE IN JAPAN



WARNING
 Unplug the ac power cord before starting any disassembly or replacement procedures.

**SECTION 1
 DISASSEMBLY AND REPLACEMENT**

TOP COVER AND PLATTER REMOVAL

- 1 top cover
- 2 turntable platter mat
- 3 Remove the drive belt over the upper section of the motor pulley.
- 4 turntable platter

Motor pulley
Drive belt

MAIN CAM REPLACEMENT

Remove ①, ②.

groove
shaft B
shaft A
clutch lever

Note: INSTALLATION

1. Grease the groove, shaft A and shaft B.
2. Move the clutch lever in the arrow direction and set the shaft B in the groove.

LOWER BOARD AND UPPER BOARD REMOVAL

Note: Place a support between the upper board and the service bench to keep pressure off the tonearm.

- 1) lower board : Remove ①, ②, ③, ④.
- 2) upper board : Remove ⑤ and ⑥.

lower board
upper board
PTPWH3x16
PSW 4x25

TURNTABLE SHAFT AND TURNTABLE BEARING REMOVAL

Turntable shaft Removal : ①, ②
 Turntable Bearing Removal : ③, ④

grease (Part No. 7-662-001-11)
turntable shaft
nut
turntable bearing
Loosen PSP 3x5.

HEAD SHELL CONNECTOR REPLACEMENT

Note:
 The four lead wires for head shell are difficult to pass through the tonearm pipe. Thus, use the former lead wires when replacing the connector.

1. Unsolder four lead wires on the phono relay board as shown below.

phono relay board
grounding wire
RED GRN BLU WHT
to the tonearm

2. Loosen two head shell adjustment screws as shown below.
3. Pull out the shell head connector about 3cm (1 3/16 inches) slowly while pushing the four leads into the tonearm pipe from the tonearm base side.
4. Remove the tubes and unsolder the lead wires.
5. Replace the connector but do not tighten the head shell adjustment screws at this time.

colors of lead wires
RED WHT
GRN BLU
head shell connector
locking collar
four lead wires
tonearm pipe
head shell adjustment screws
screwdriver
upper board

Installation
Note: Install the head shell and the cartridge as shown below and tighten two head shell adjustment screws.

head shell
cartridge
stylus
surface of record
right angle

TONEARM BODY REMOVAL

Remove the head shell and counterweight ass'y first.

- 1 Unsolder four lead wires.
- 2 Pull out the grounding wire.
- 3 Loosen B3x8.
- 4 Auto-return lever ass'y
- 5 SC 3x6, hexagon socket
- 6 Turn the tonearm base approx. 2mm in the arrow direction and remove the tonearm body ass'y.

phono relay board
WHT
RED GRN BLU
to the tonearm

—Bottom View—

tonearm base (Included in the tonearm body ass'y.)
SC 3x6, hexagon socket

10 tonearm body (Included in the tonearm body ass'y.)
tonearm pipe
9 screw, pivot
8 Nut (A), pivot
7 Nut (B), pivot (Use pin-face screwdriver) Part No. 7-700-731-21 d = 3.8mm
lead wires
same as the opposite side

TONEARM PIPE REPLACEMENT

Removal

- 1 Loosen B2.6x6 tonearm body
- 2 Loosen SC2.6x4, hexagon socket.
- 3 tonearm pipe
- 4 rubber washer
- 5 connector

Installation

1. Replace the tonearm pipe.
2. Insert the tonearm pipe, rubber washer and connector in the tonearm body and temporarily secure the pipe with two SC 2.6x4 screws and a B 2.6x6 screw.
3. Mount the tonearm body at the tonearm base with two pivot screws (Refer to TONEARM BODY REMOVAL). Do not tighten the pivot screws at this time.
4. Install the tonearm body ass'y on the upper board temporarily (Refer to TONEARM BODY REMOVAL).
5. Adjust the balance of the tonearm as shown below.

tonearm pipe
tonearm body
A B C

6. Remove the tonearm body ass'y again and tighten a B 2.6x6 screw and two SC 2.6x4 screws firmly.

COUNTERWEIGHT SHAFT REMOVAL

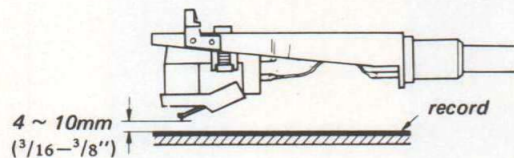
tonearm body
slot
P3x16
rubber damper
counterweight shaft
W3

SECTION 2
ADJUSTMENTS

TONEARM HEIGHT ADJUSTMENT

A) Automatic Return Operation

The stylus tip should be 4–10mm above the record surface as the tonearm returns to its rest automatically.

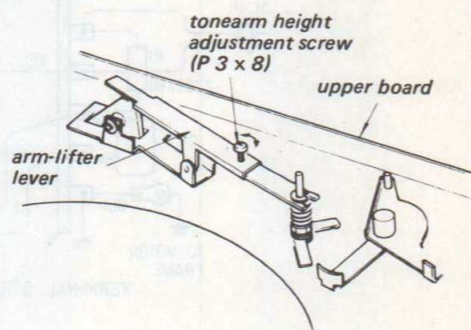


If necessary, adjust the height of the arm-lifter by loosening the adjustment screw as shown below.



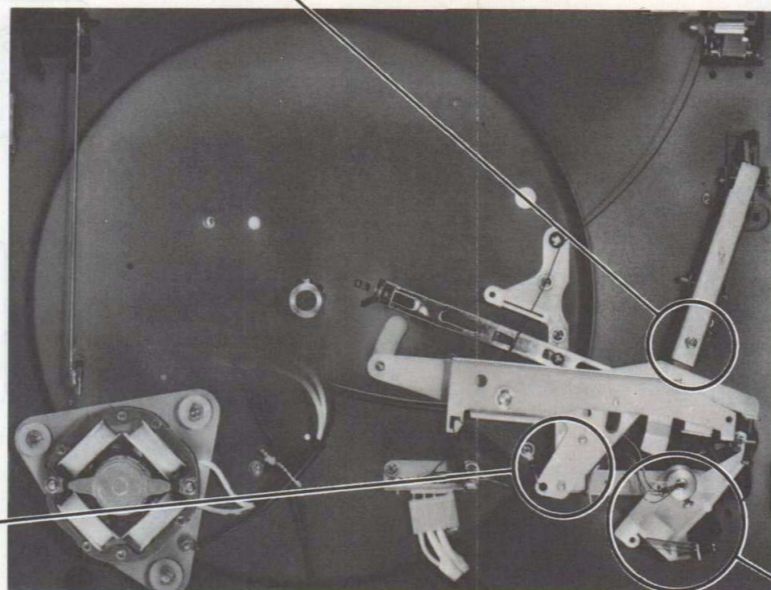
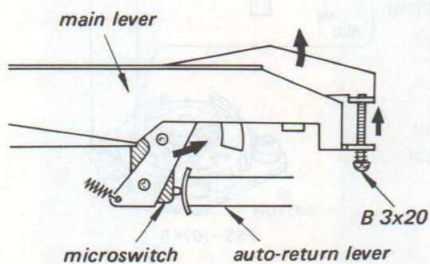
B) Manual Return Operation

1. Bring the tonearm on the record and set the curing lever to “ ∇ ” (up position).
2. Confirm that the clearance between the stylus tip and the record surface is 4–7mm.
3. If necessary, adjust the height of the arm-lifter by turning the adjustment screw (P3x8) as shown below.



MICROSWITCH POSITION ADJUSTMENT

1. Secure the tonearm to the tonearm rest.
2. Set the microswitch to “OFF” by turning the adjustment screw (B3x20).
3. When the tonearm is removed from its rest, confirm that the microswitch turns “ON”.
4. When the tonearm returns to its rest automatically, the microswitch should turn “OFF”.



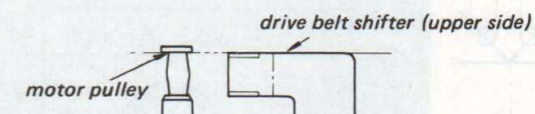
ADAPTATION TO LOCAL POWER LINE FREQUENCY

This unit can be adapted to operate at another power line frequency by changing the motor pulley ass'y

Motor Pulley Ass'y

50 Hz	60 Hz
X-4844-007-1	X-4844-007-2

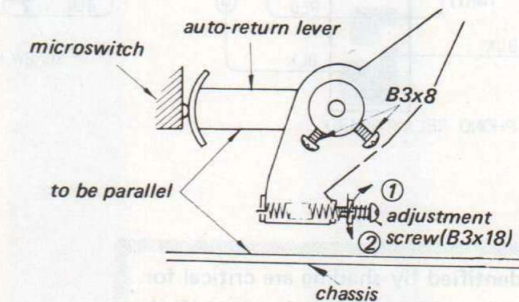
1. Set the speed selector lever to “33”.
2. Adjust the motor pulley height as shown below.



AUTOMATIC RETURN POSITION ADJUSTMENT

1. Secure the tonearm to the tonearm rest.
2. Adjust the auto-return lever by loosening two screws (B3x8) so that the auto-return lever is parallel with the edge of the chassis as shown below.
3. If the automatic return operation does not work properly, adjust by turning the adjustment screw as shown below.

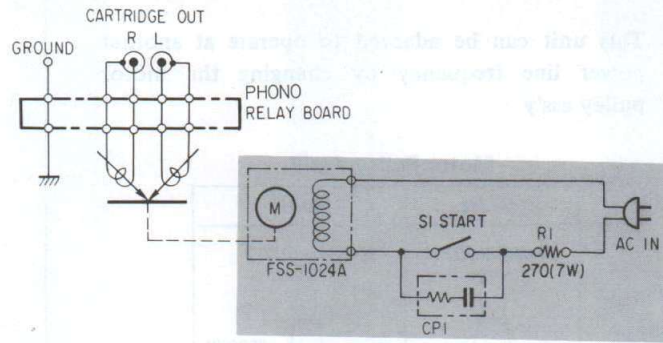
Turning direction	Automatic return position
① ↑	become slow.
② ↓	become fast.



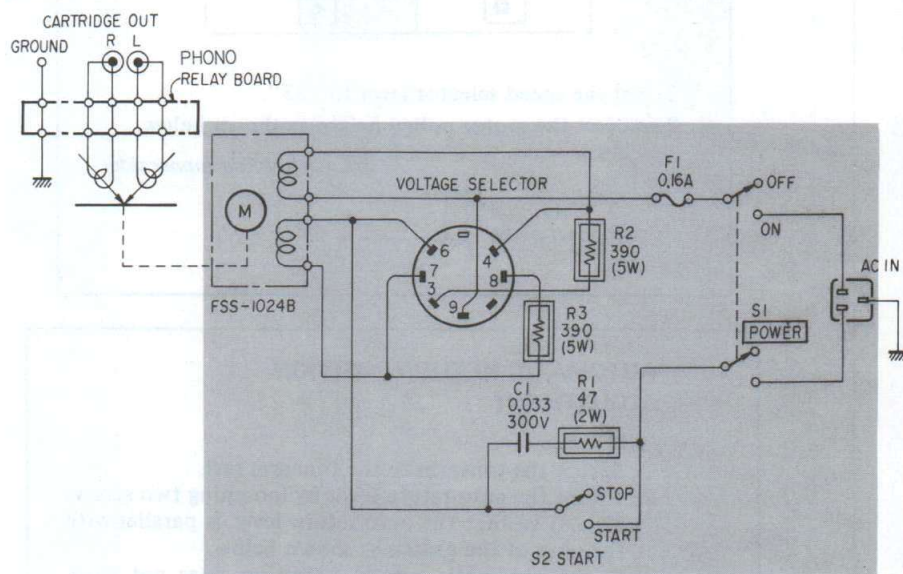
SECTION 3
DIAGRAMS

3-1. SCHEMATIC DIAGRAM

US, Canadian model

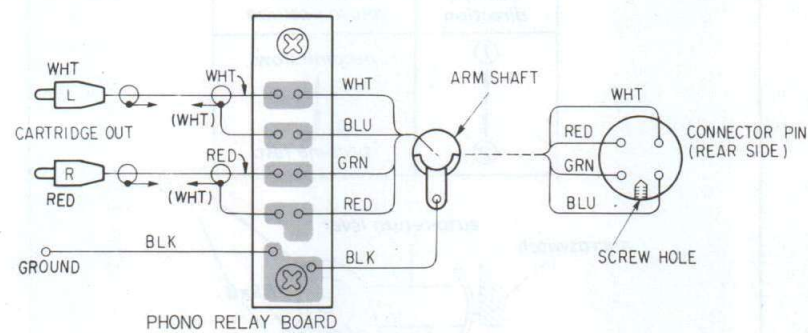


UK, AEP model



3-2. WIRING DIAGRAM (1)

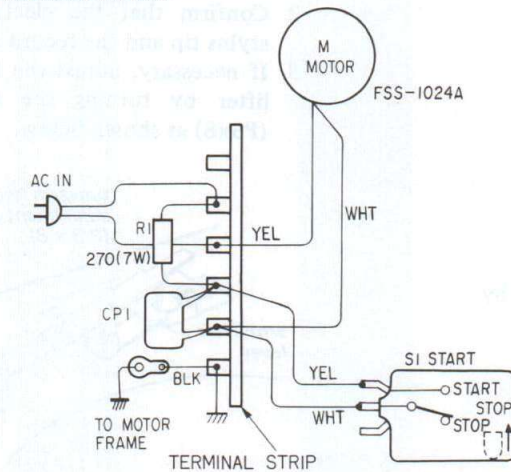
All models



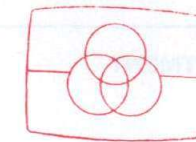
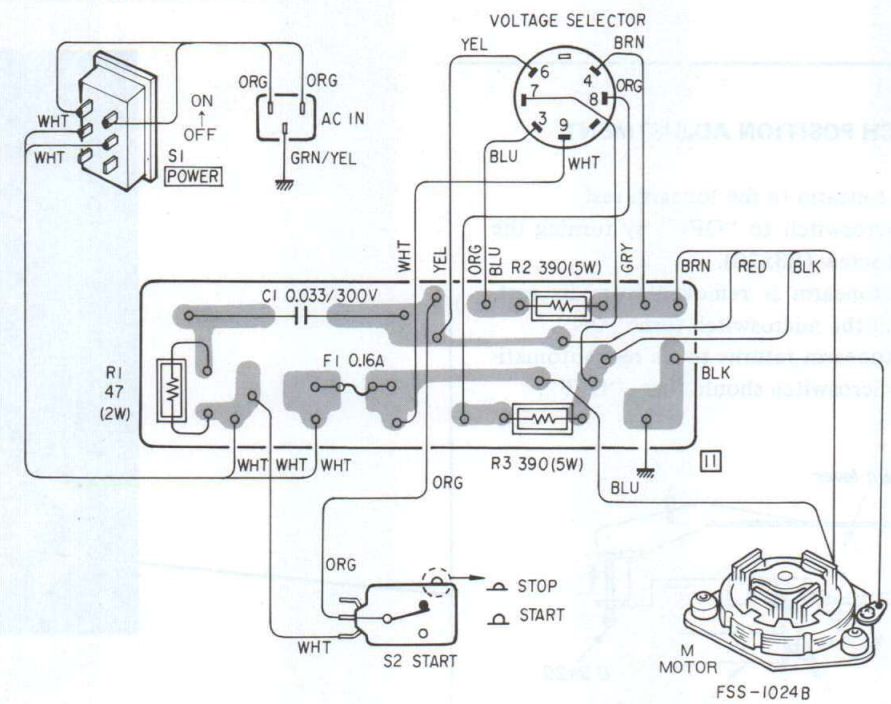
Note: The components identified by shading are critical for safety. Replace only with part number specified.

WIRING DIAGRAM (2)

US, Canadian model



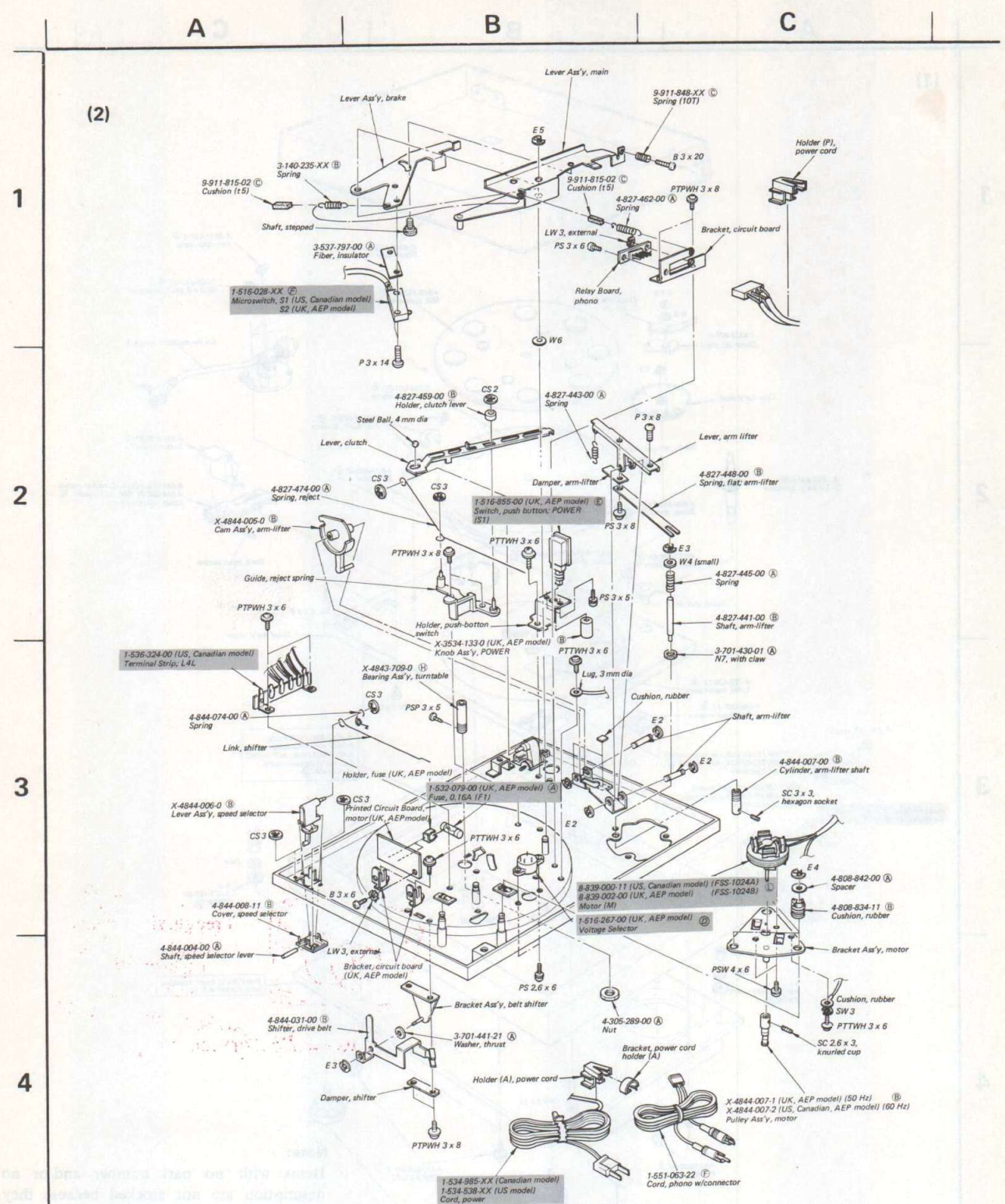
UK, AEP model (Conductor Side)



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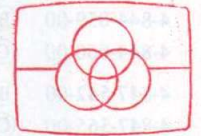
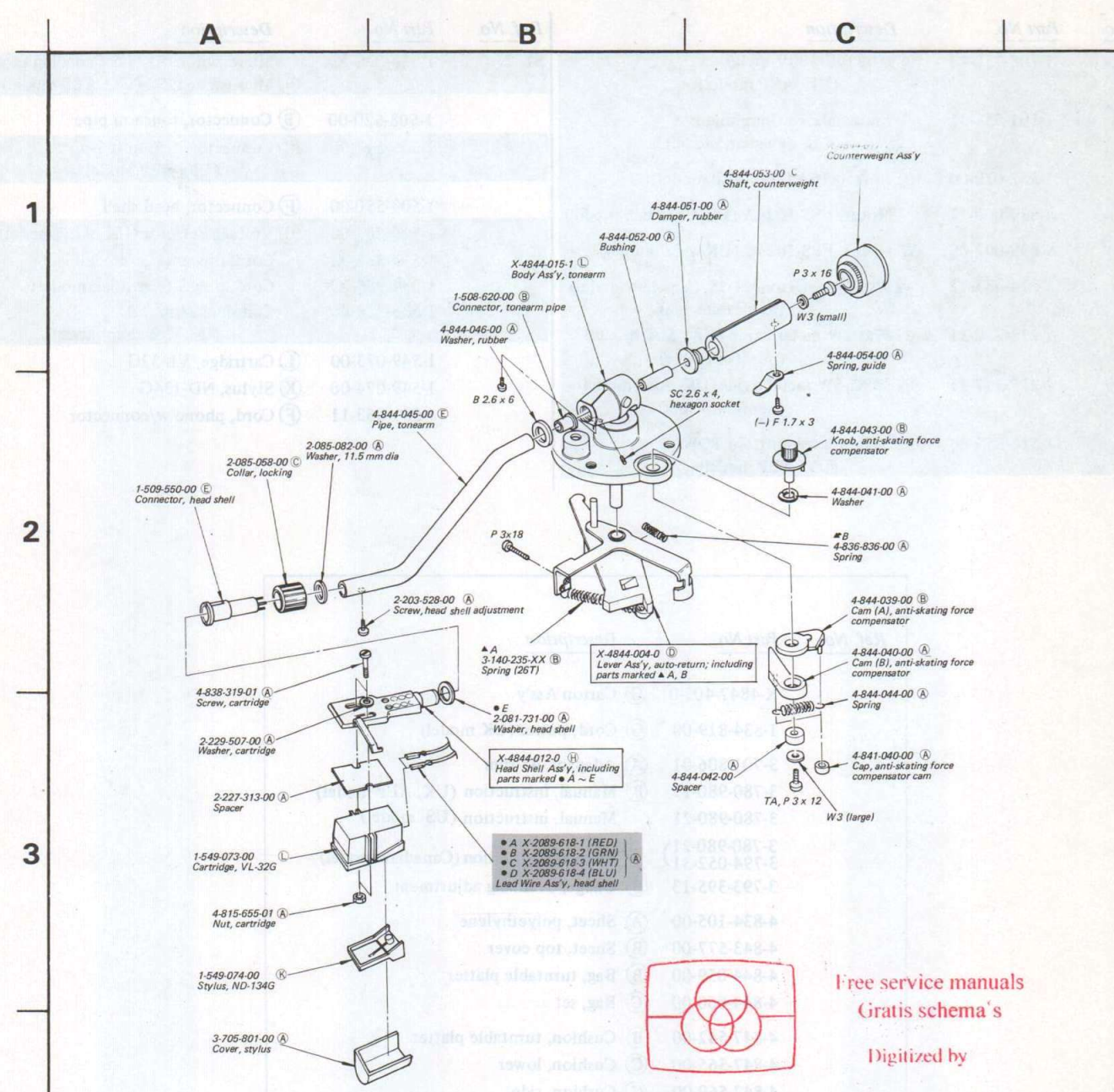
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Note: The components identified by shading are critical for safety. Replace only with part number specified.

Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- (-) = slotted head
- The circled letters (A) to (Z) are applicable for the European model only.



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SECTION 5 ELECTRICAL PARTS LIST

o The circled letters (A) to (Z) are applicable for the European model only.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C1	1-108-750-12	(B) 0.033 μ F 300V mylar (UK, AEP model)
CP1	1-101-534-31	Encapsulated Component (US, Canadian model)
F1	1-532-079-00	(B) Fuse, 0.16A (UK, AEP model)
M	8-839-000-11	Motor, FSS-1024A (US, Canadian model)
M	8-839-002-00	(L) Motor, FSS-1024B (UK, AEP model)
R1	1-214-083-11	270 Ω 7W metal oxide (US, Canadian model) (nonflammable)
R1	1-217-220-11	(B) 47 Ω 2W metal oxide (UK, AEP model) (nonflammable)
R2, 3	1-217-317-11	(B) 390 Ω 5W metal oxide (UK, AEP model) (nonflammable)
S1	1-516-855-00	(E) Switch, push-button: POWER (UK, AEP model)

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
S1, 2	1-516-028-XX	Microswitch, S1 (US Canadian model) (F) Microswitch, S2 (UK, AEP model)
	1-508-620-00	(B) Connector, tonearm pipe
	1-509-547-00	(C) Connector, ac input; 3-p (UK, AEP model)
	1-509-550-00	(F) Connector, head shell
	1-516-267-00	(D) Voltage Selector (UK, AEP model)
	1-534-538-XX	Cord, power (US model)
	1-534-985-XX	Cord, power (Canadian model)
	1-536-324-00	Terminal Strip, L4L (US, Canadian model)
	1-549-073-00	(L) Cartridge, VL-32G
	1-549-074-00	(K) Stylus, ND-134G
	1-551-063-11	(F) Cord, phono w/connector

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
	X-4847-405-0	(G) Carton Ass'y
	1-534-819-00	(G) Cord, power (UK model)
	3-701-806-01	(A) Adaptor, 45 rpm
	3-780-980-11	(B) Manual, instruction (UK, AEP model)
	3-780-980-21	Manual, instruction (US model)
	3-780-980-21 3-794-052-31	Manual, instruction (Canadian model)
	3-793-395-13	(B) Gauge, overhang adjustment
	4-834-105-00	(A) Sheet, polyethylene
	4-843-577-00	(B) Sheet, top cover
	4-844-059-00	(B) Bag, turntable platter
	4-844-060-00	(C) Bag, set
	4-847-542-00	(B) Cushion, turntable platter
	4-847-565-00	(C) Cushion, lower
	4-847-569-00	(C) Cushion, side

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

Sony Corporation

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