

# PS-LX51

## SERVICE MANUAL

E Model



### SPECIFICATIONS

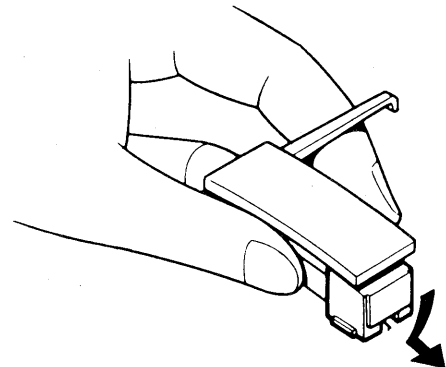
|                        |  |
|------------------------|--|
| <b>Turntable</b>       |  |
| Platter                | 30cm (12 in.)  |
| Motor                  | DC servo motor   |
| Drive system           | Belt drive   |
| Speed                  | 33 1/3 rpm/45 rpm switchable   |
| Wow and flutter        | 0.2% (WRMS)  |
| Signal-to-noise ratio  | 60 dB (DIN-B)  |
| Automatic system       | Return, reject   |
| <b>Tonearm</b>         |  |
| Type                   | Dynamically blanced  |
| Pivot-to-stylus length | 203 mm (8 in.)   |
| Overall arm length     | 235 mm (9 1/4 in.)   |
| <b>Cartridge</b>       |  |
| Type                   | Moving magnet type   |
| Frequency response     | 20 Hz-20kHz  |
| Stylus                 | CN-234   |
| <b>General</b>         |  |
| Dimensions             | 355 × 94 × 345 mm(w/h/d)<br>(14 × 3 3/4 × 13 3/8 inches)   |
| Weight                 | Approx. 2.5 kg (5 lb 8 oz)   |
| Power requirement      | AEP, Italian, Germany model:<br>220-230 V AC, 50/60 Hz<br>PX, Tourist, E, Saudi Arabia model:<br>110-120 V/220-240V AC,<br>Adjustable with the voltage selector,<br>50/60 Hz<br>Australia model 12V DC |
| Power consumption      | 2 W  |
| Accessory supplied     | 45-rpm adaptor (1)   |
| Optional accessories   | Replacement stylus CN-234<br>Stat spray XP-C10<br>Cleaner XP-C1, XP-C2   |

Design and specifications subject to change without notice.

#### Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

### REPLACING THE STYLUS



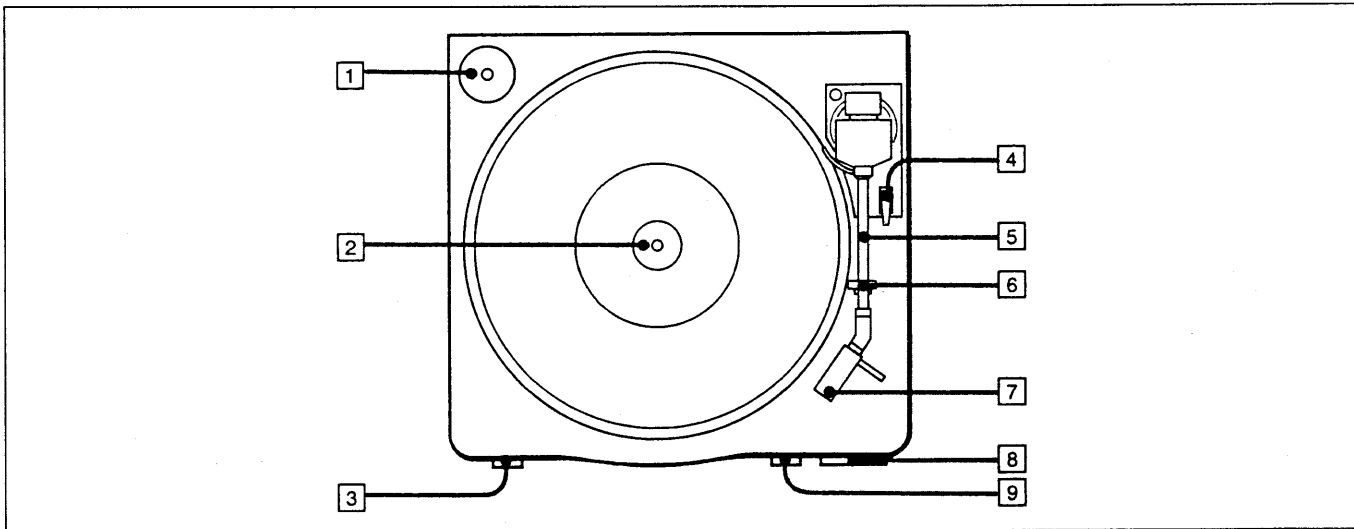
Replace the stylus after about 400 hours of use because using a worn stylus will damage records. An CN-234 replacement stylus is available at your Sony dealer.

Be sure to turn the amplifier off before proceeding with replacement.

- 1 While holding the cartridge, detach the stylus assembly as illustrated.
- 2 Insert the new stylus into the cartridge.

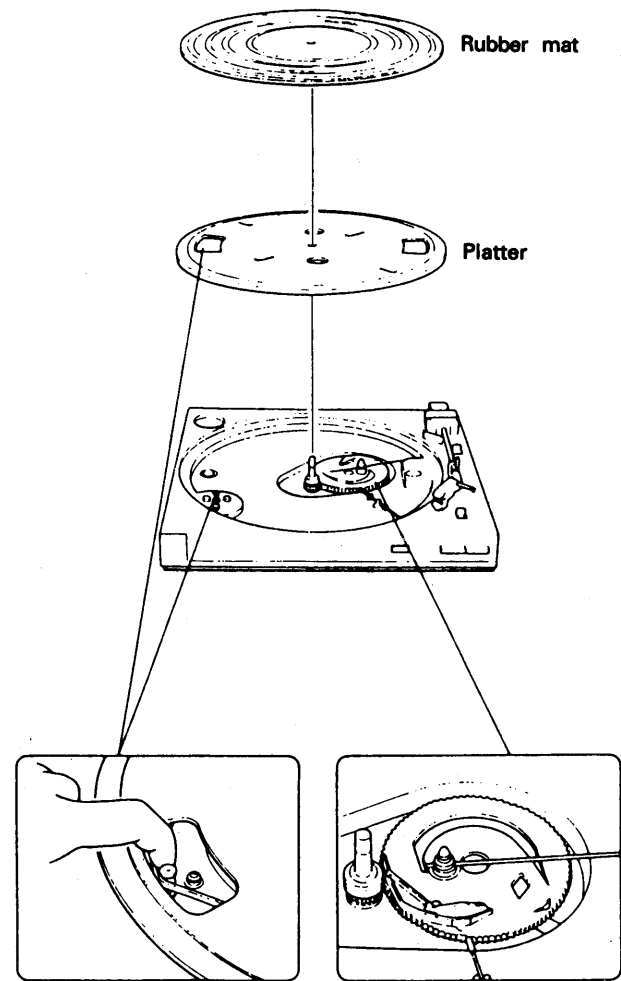
STEREO TURNTABLE SYSTEM  
**SONY**®

## LOCATION OF CONTROLS



- 1** 45-rpm adaptor
- 2** Center spindle
- 3** POWER switch
- 4** Cueing lever
- 5** Tonearm
- 6** Arm rest
- 7** Cartridge
- 8** REJECT button
- 9** Speed selector

# TURNTABLE ASSEMBLY



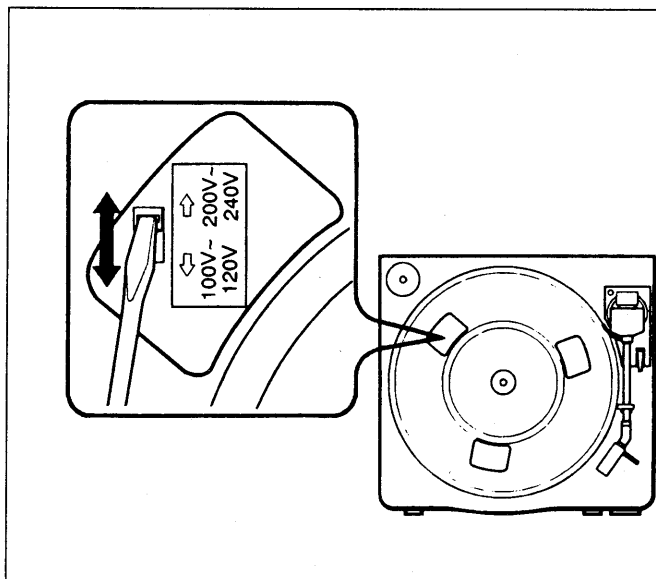
**Speed Adjustment**

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

- Place a stroboscope board on the turntable sheet.
- Set the SPEED switch to 45. Press the START button. Adjust VR2 so that the striped pattern of stroboscope board is stationary.
- Set the SPEED switch to 33. Adjust VR1 in the same way.

FRONT

Hook the belt on the motor pulley.  
If the belt is removed from the platter, replace it with the glossy side outward.



**Setting the Voltage Selector**

(E model)

**For customers of the model equipped with the voltage selector**

Check to confirm that the voltage selector is set to the local power line voltage. If not, set the voltage selector to the correct position before connecting the AC power cord to a wall outlet.

# PS-LX51

**SCHEMATIC DIAGRAM**

**NOTE:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50VV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- SP: Singapore MY: Malaysia

**Switches:**

| Ref.No. | Switch | Position |
|---------|--------|----------|
| SW1     | MOTOR  | OFF      |
| SW2     | SPEED  | 33       |
| SW3     | POWER  | OFF      |

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

**WIRING DIAGRAM**

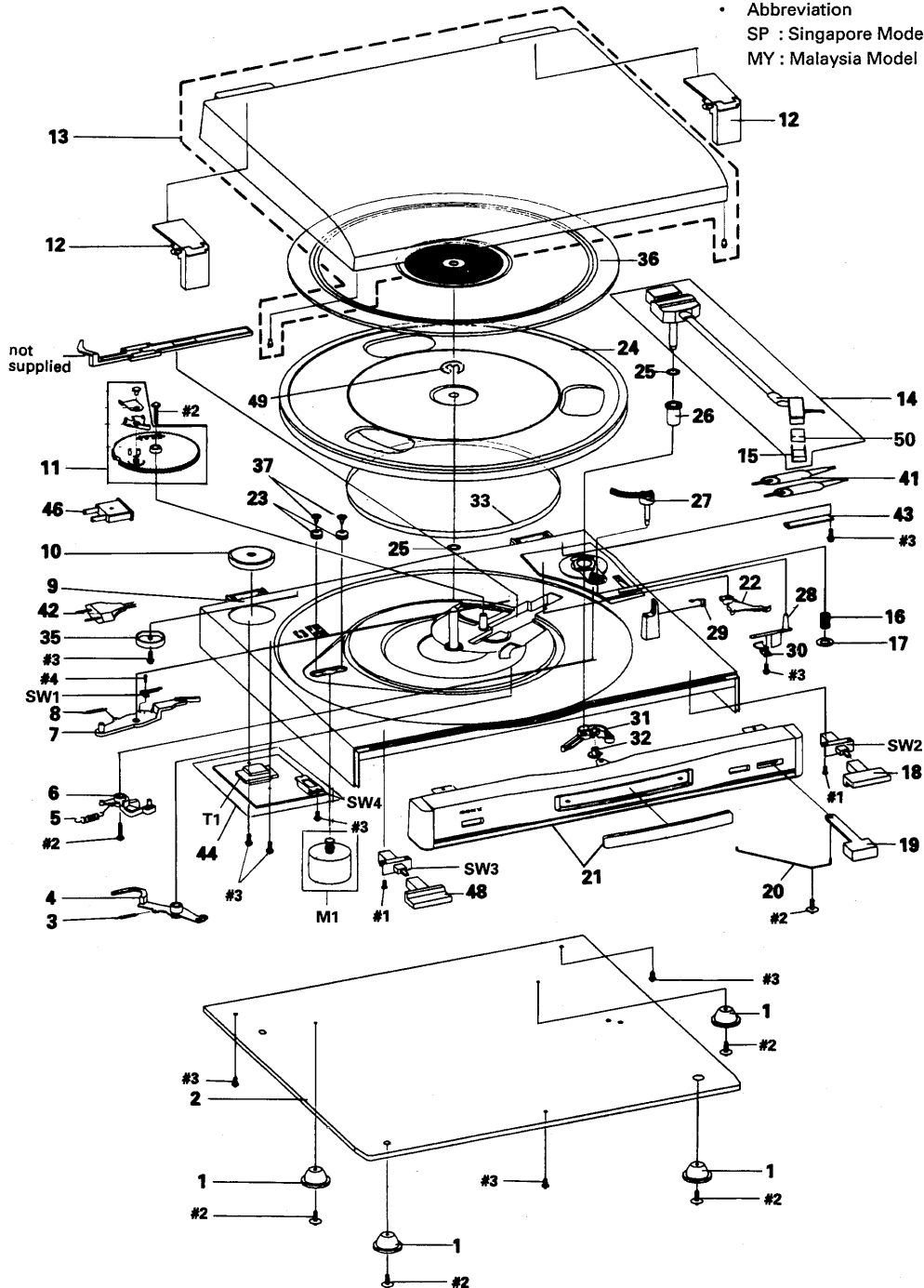
# EXPLODED VIEW

**NOTE:**

- XX, -X mean standardized parts, so they may have some differences from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delays should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Screw(# mark) list is given in the last of this parts list.

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

- Abbreviation  
 SP : Singapore Model  
 MY : Malaysia Model



| Ref. No. | Part No.     | Description     | Remarks | Ref. No. | Part No.     | Description        | Remarks |
|----------|--------------|-----------------|---------|----------|--------------|--------------------|---------|
| 1        | 4-955-842-01 | FOOT-RUBBER     |         | 6        | 4-950-454-01 | ELEVATOR           |         |
| * 2      | 4-953-061-01 | COVER-BOTTOM    |         | 7        | 4-950-463-01 | ARM-CONTROL        |         |
| 3        | 4-950-453-01 | SPRING-REJECT   |         | 8        | 4-950-464-01 | SPRING-CONTROL ARM |         |
| 4        | 4-950-452-01 | LEVER-REJECT    |         | * 9      | 4-950-431-01 | CABINET-UPPER      |         |
| 5        | 4-950-455-01 | SPRING-ELEVATOR |         |          |              |                    |         |

| Ref. No. | Part No.     | Description       | Remarks | Ref. No. | Part No.     | Description                  | Remarks |
|----------|--------------|-------------------|---------|----------|--------------|------------------------------|---------|
| 10       | 4-950-467-01 | ADAPTOR-45RPM     |         | 31       | 4-950-450-01 | ARM-FEED                     |         |
| 11       | A-4660-140-A | GEAR ASSY, RING   |         | 32       | 4-950-451-01 | CAM-ADJUST                   |         |
| 12       | 4-950-432-01 | HINGE             |         | 33       | 4-950-434-01 | BELT                         |         |
| 13       | A-4660-138-A | COVER ASSY, DUST  |         | * 35     | 4-950-514-01 | WASHER CODE                  |         |
| 14       | A-4660-139-A | ARM ASSY, TONE    |         | 36       | A-4660-142-A | RUBBER ASSY, SHEET           |         |
| 15       | 4-951-290-01 | STYLUS (CN-234)   |         | 37       | 4-950-469-01 | SCREW-SETTING MOTOR          |         |
| 16       | 4-950-442-01 | SPRING-ELEVATION  |         | 38       | 1-572-746-11 | SWITCH, LEAF (SW1) (MOTOR)   |         |
| 17       | 4-950-444-01 | WASHER-C/S        |         | 39       | 1-572-744-11 | SWITCH, PUSH (2 KEY) (SPEED) |         |
| 18       | 4-950-445-01 | BUTTON-SPEED      |         | △40      | 1-572-744-11 | SWITCH, PUSH (SW3) (POWER)   |         |
| 19       | 4-950-447-01 | BUTTON-REJECT     |         | 41       | 1-590-871-11 | CORD, CONNECTION (3 CORE)    |         |
| 20       | 4-950-448-01 | LINK-REJECT       |         | △42      | 1-558-943-11 | CORD, POWER (E)              |         |
| 21       | A-4660-374-A | PANEL ASSY, FRONT |         | △42      | 1-558-944-11 | CORD, POWER (SP, MY)         |         |
| 22       | A-4660-141-A | MOTOR ASSY        |         | 43       | 1-639-237-11 | PHONE BOARD                  |         |
| 23       | 4-950-470-01 | CUSHION-MOTOR     |         | △44      | 1-639-239-11 | POWER BOARD (E)              |         |
| 24       | 4-950-433-01 | PLATTER           |         | △44      | 1-639-236-11 | POWER BOARD (SP, MY)         |         |
| 25       | 4-950-435-01 | SPACER            |         | △45      | 1-450-508-11 | TRANSFORMER, POWER           |         |
| 26       | 4-950-436-01 | BUSHING-TONE ARM  |         | △46      | 1-693-159-11 | ADAPTER, AC (E)              |         |
| 27       | 4-950-437-01 | ARM-ELEVATION     |         | △47      | 1-572-745-11 | VOLTAGE SELECTOR (SW4) (E)   |         |
| 28       | 4-950-440-01 | LEVER-CUEING      |         | 48       | 4-950-513-01 | BUTTON POWER                 |         |
| 29       | 4-950-439-01 | LOCKER-ARM        |         | 49       | 4-953-059-01 | E RING                       |         |
| 30       | 4-950-441-01 | BRACKET-CUEING    |         | 50       | 1-251-028-11 | CARTRIDGE (MAIN)             |         |

**ELECTRICAL PARTS LIST**

**NOTE:**

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS  
All resistors are in ohms  
METAL : Metal-film resistor  
METAL OXIDE : Metal Oxide-film resistor  
F : nonflammable
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- SEMICONDUCTORS  
In each case, u : μ, for example :  
uA...: μA..., uPA...: μPA...,  
uPB...: μPB..., uPC...: μPC...,  
uPD...: μPD...
- CAPACITORS  
MF : μF, PF : μμF
- COILS  
MMH : mH, uH : μH
- Abbreviation  
SP : Singapore MY : Malaysia

| Ref. No. | Part No.     | Description                        | Remarks | Ref. No. | Part No.     | Description   | Remarks |
|----------|--------------|------------------------------------|---------|----------|--------------|---|---------|
|          |              | MISCELLANEOUS<br>*****             |         |          |              | ACCESSORIES & PACKING MATERIALS<br>*****                |         |
| 38       | 1-572-746-11 | SWITCH, LEAF (SW1) (MOTOR)         |         | *        | 4-950-496-01 | SNOW BOX (L)  |         |
| 39       | 1-572-744-11 | SWITCH, PUSH (2 KEY) (SW2) (SPEED) |         | *        | 4-950-503-01 | SNOW BOX (R)  |         |
| △40      | 1-572-744-11 | SWITCH, PUSH (SW3) (POWER)         |         | *        | 4-956-070-01 | INDIVIDUAL CARTON                                       |         |
| 41       | 1-590-871-11 | CORD, CONNECTION (3 CORE)          |         |          | 3-756-169-51 | MANUAL, INSTRUCTION (English, French, Spanish, Chinese) |         |
| △42      | 1-558-943-11 | CORD, POWER (E)                    |         |          |              | *****   |         |
| △42      | 1-558-944-11 | CORD, POWER (SP, MY)               |         |          |              | HARDWARE LIST   |         |
| △44      | 1-639-236-11 | POWER BOARD (SP, MY)               |         | #1       | 7-685-246-19 | SCREW +KTP 3X8 TYPE2 NON-SLIT                           |         |
| △44      | 1-639-239-11 | POWER BOARD (E)                    |         | #2       | 7-685-903-21 | SCREW +PTPWH 3X8 TYPE2                                  |         |
| △45      | 1-450-508-11 | TRANSFORMER, POWER                 |         | #3       | 7-685-646-19 | SCREW +BVTIP 3X8 TYPE2 NON-SLIT                         |         |
| △47      | 1-572-745-11 | VOLTAGE SELECTOR (SW4) (E)         |         | #4       | 7-685-104-19 | SCREW +P 2X6 TYPE2 NON-SLIT                             |         |
|          |              | *****                              |         |          |              |   |         |