

PS-DJ9000

SERVICE MANUAL

Ver 1.1 2001. 06

*US Model
AEP Model
UK Model
E Model*



This set is the stereo turntable in PMPK-DJ9000.

SPECIFICATIONS

Motor and Platter

Drive system	Direct drive quartz
Motor	3 phase 8 pole Brushless DC motor
Platter	Aluminum die-cast Diameter 332 mm (13.1 inches) Weight 750 g (1.85 lbs)
Speeds	33 $\frac{1}{3}$ and 45 rpm
Wow and flutter	Less than 0.15 % (WRMS)
Signal to noise ratio	More than 55 dB (DIN-B)

Tone Arm

Type	Static balanced S-shaped tonearm with detachable headshell
Effective arm length	230 mm
Overhang	15 mm
Usable cartridge weight	4 g (min.) to 10 g (max.)

General

Power requirements	U.S.A. and Mexico: 120 V AC, 60 Hz European countries: 220 - 230 V AC, 50/60 Hz Other countries: 110 - 120 V/ 220 - 240 V AC, 50/60 Hz
Power consumption	15 W
Dimensions	Approx. 450 × 152 × 352 mm (17 $\frac{11}{16}$ × 5 $\frac{11}{16}$ × 13 $\frac{3}{4}$ in) (w/h/d)
Mass	10 kg (22 lbs)

Supplied Accessories

Platter (2)
Slip mat (2)
Dust cover (with hinges) (2)
Counterweight (2)
Cartridge and headshell (2)
45 adaptor (2)
Audio cord (with ground wire) (2)
AC power cord (2)

Design and specifications are subject to change without notice.

9-929-553-12
2001F0200-1
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Sony Corporation
Home Audio Company
Shinagawa Tec Service Manual Production Group

Replacing the Cartridge

The life expectancy of the stylus tip is about 500 hours. To maintain optimum sound quality and prevent damage to your records, we recommend replacing the cartridge before the end of this time duration. Obtain a replacement cartridge from your Sony dealer.

STEREO TURNTABLE SYSTEM

SONY®

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks 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 microampers). 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 2V AC range are suitable. (See Fig. A)

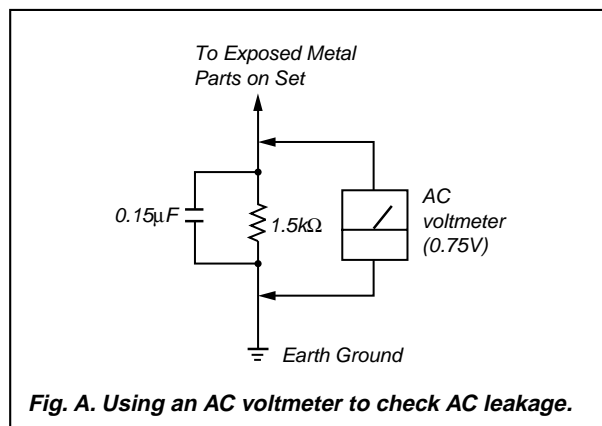


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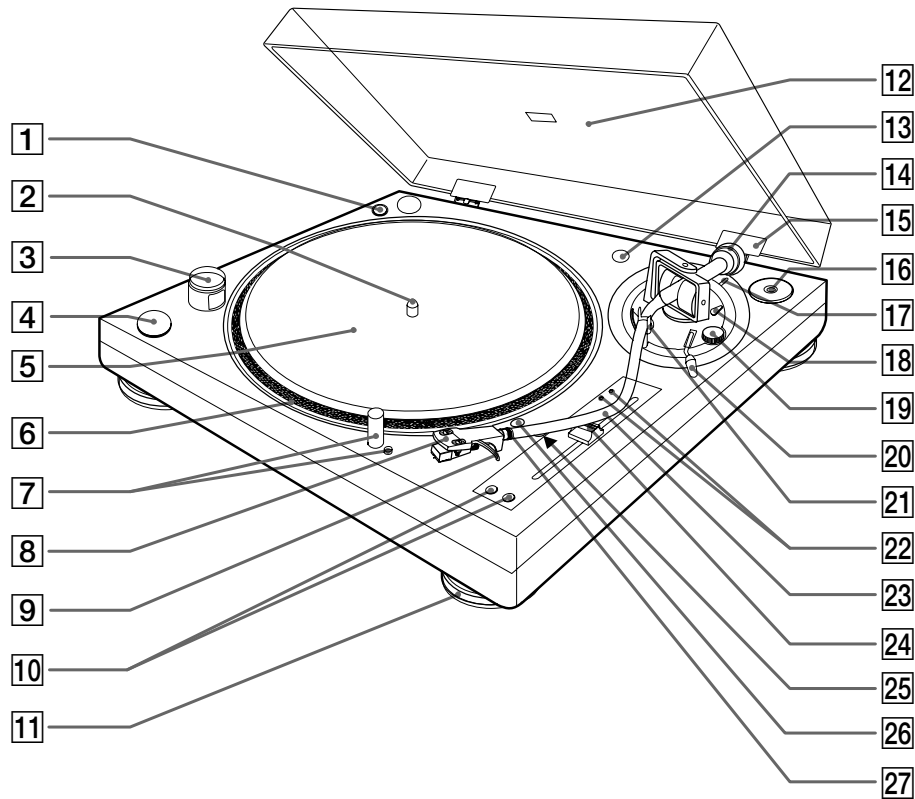
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SAFETY-RELATED COMPONENT WARNING!!

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.

SECTION 1 GENERAL

This section is extracted from instruction manual.



1 POWER ON/OFF switch

2 Spindle

3 Strobe lamp

4 START/STOP button

5 Slip mat

6 Platter

7 TARGET LIGHT and release button

The TARGET LIGHT allows you to see the position of the stylus in the dark. Push and depress the TARGET LIGHT to turn it off. Push the release button to raise the light again and turn it on.

8 Cartridge and headshell

9 Finger lift

10 PITCH BEND + and - buttons

11 Insulator

12 Dust cover

13 Headshell holder

14 Counter weight

15 Hinge

16 45 adaptor

17 height adj (adjusting) lever

Use this lever to adjust the vertical position of the tonearm (**23**).

18 LOCK lever (for height adjustment)

19 ANTI-SKATING dial

20 Cueing lever

21 Arm stand

22 Speed-adjustment hole

This hole is for use by qualified service technicians only.

23 Tonearm

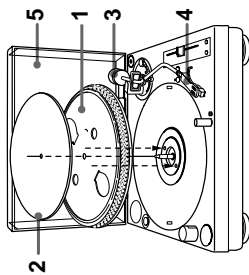
24 PITCH ADJ. (adjusting) knob

25 QUARTZ lock button

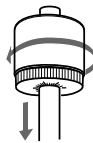
26 SPEED (33/45) button

27 Locking ring

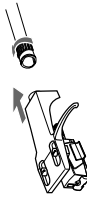
Assembling the Turntable



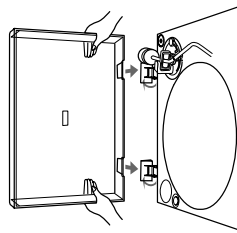
- 1 Carefully place the platter onto the spindle. Make sure the two pins on the bottom of the platter are properly inserted into the two holes in the motor, as indicated by the arrows in the illustration above.
- 2 Place the slip mat on the platter.
- 3 Slide the counterweight onto the shaft at the rear of the tonearm and turn 3 or 4 times in the direction of the arrow.



- 4 Insert the headshell into the end of the tonearm. Turn the locking ring in the direction of the arrow until the headshell is secure.



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



Getting Started

Adjusting the Turntable

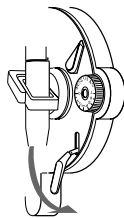
Before attempting to play any records, be sure to complete the following steps to properly adjust the tonearm balance, tracking force and anti-skating dial. Failure to complete these adjustments will result in inferior sound quality and may cause permanent damage to the stylus and record.

- 1 Make sure the turntable is level.

- 2 Set ANTI-SKATING to "0."



- 3 Set the cueing lever to the down position.



- 4 Turn up the protective cover to expose the stylus, and move the tonearm to the space between the arm stand and the platter. Take care not to damage the stylus.

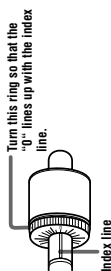
- 5 Balance the tonearm by turning the counterweight either clockwise or counterclockwise.

When the tonearm is properly balanced
It will remain level with the platter when released. It should not tilt in the direction of either the headshell or the counterweight.

- 6 Return the tonearm to the arm stand.

- 7 A properly balanced tonearm has a tracking force of zero. Therefore, rotate the tracking force scale ring until "0" is aligned to the index line.

Restrain the counterweight with your other hand so that it does not rotate along with the scale ring.



- 8 When you use the supplied cartridge, turn the counterweight counterclockwise one full rotation, and then continue turning it until the index line comes to 1. Since one full rotation of the counterweight yields a tracking force of 3 grams, this adjustment results in a tracking force of 4 grams, which is the normal requirement for the supplied cartridge.

You can set a tracking force of 3 to 7 grams.



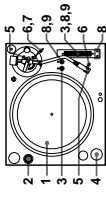
When optionally available cartridge is used

The tracking force scale ring is marked in 0.1-gram units. One full rotation yields a tracking force of 3 grams.

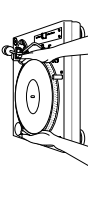
- 9 Set ANTI-SKATING to the same value as the tracking force scale ring.

The numbers on the ANTI-SKATING dial indicate the number of grams in tracking force.

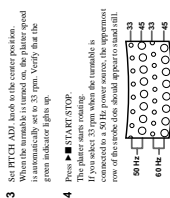
Playing a Record



Before playing a record, be sure the PHONO LINE switch on the mixer is set to PHONO.



- Note**
Place only one record on the platter at a time. If two or more records are stacked on the platter, the stylus will scratch the top record and the bottom record. The quality of reproduction will be impaired.
- 1 Turn the POWER switch to ON.
The auto lamp, the QUARTZ lock indicator, and SPEED indicator light up.
Turn the POWER switch on the mixer and amplifier to ON also.
- 2 Set PITCH ADJ. knob to the center position.
This sets the tone arm to the correct height. The speed is automatically set to 33 rpm. Verify that the green indicator lights up.
- 3 Press ►►► START STOP.
The platter starts rotating.
If you select 33 rpm when the turntable is already rotating, the speed indicator will show the correct rpm. The correct rpm of the motor drive should appear to read still.



- To play another part of the record**
- 1 Set the cutting lever to the up position to raise the tone arm and release the arm stopper.
 - 2 Move the tone arm to the desired position.
 - 3 Set the cutting lever to the down position.
- To play a 45 single**
Place the supplied 45 adapter over the spindle. Press SPEED to select 45 rpm.
The tone arm will descend slowly to the record and play will begin.
After you have finished using the adapter, return it to the adapter tray.
- Using the PITCH BEND + and - buttons**
You can use the PITCH BEND + and - buttons to synchronize the beat of the selection playing on one turntable with the beat of another selection playing on the other turntable. You can use these buttons even if the QUARTZ lock button is turned on or off.
- 1 Press the PITCH BEND + or - button to raise or lower the speed of the selection playing on one of the turntables with the speed of the selection on the other turntable.
 - 2 Press the PITCH BEND + and - buttons to synchronize the beat of both selections. Pressing and holding down the + or - button causes the speed of the selection playing on one turntable to rise or fall at a rate of 10% or 15% more or less than the normal playing speed.
- ⚠ If the stereo data are not stationary when the PITCH BEND + and - buttons are pressed**
Adjust the pitch speed by sliding the PITCH ADJ. knob around + or - until the stereo data become stationary.
- ⚠ If you have an extra handset, keep it in its handset holder.**

SECTION 2
DIAGRAMS

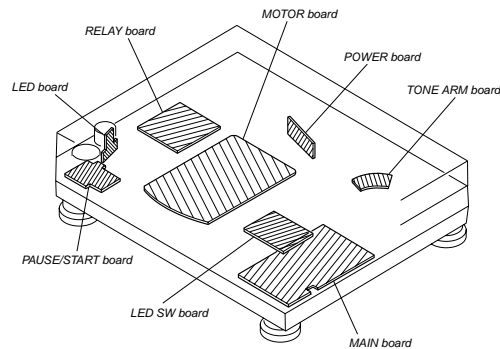
NOTE FOR PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

- Note on Printed Wiring Board:**
- — : parts extracted from the component side.
 - — : parts extracted from the conductor side.
 - : Pattern from the side which enables seeing.

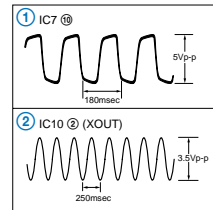
- Note on Schematic Diagram:**
- All capacitors are in μF unless otherwise noted. pF: μpF 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - : panel designation.
- Note:** The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

- $\text{B} +$: B+ Line.
- $\text{B} -$: B- Line.
- Voltages are dc with respect to ground under no-signal conditions.
- no mark : Power on
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.

2-1. Circuit Boards Location

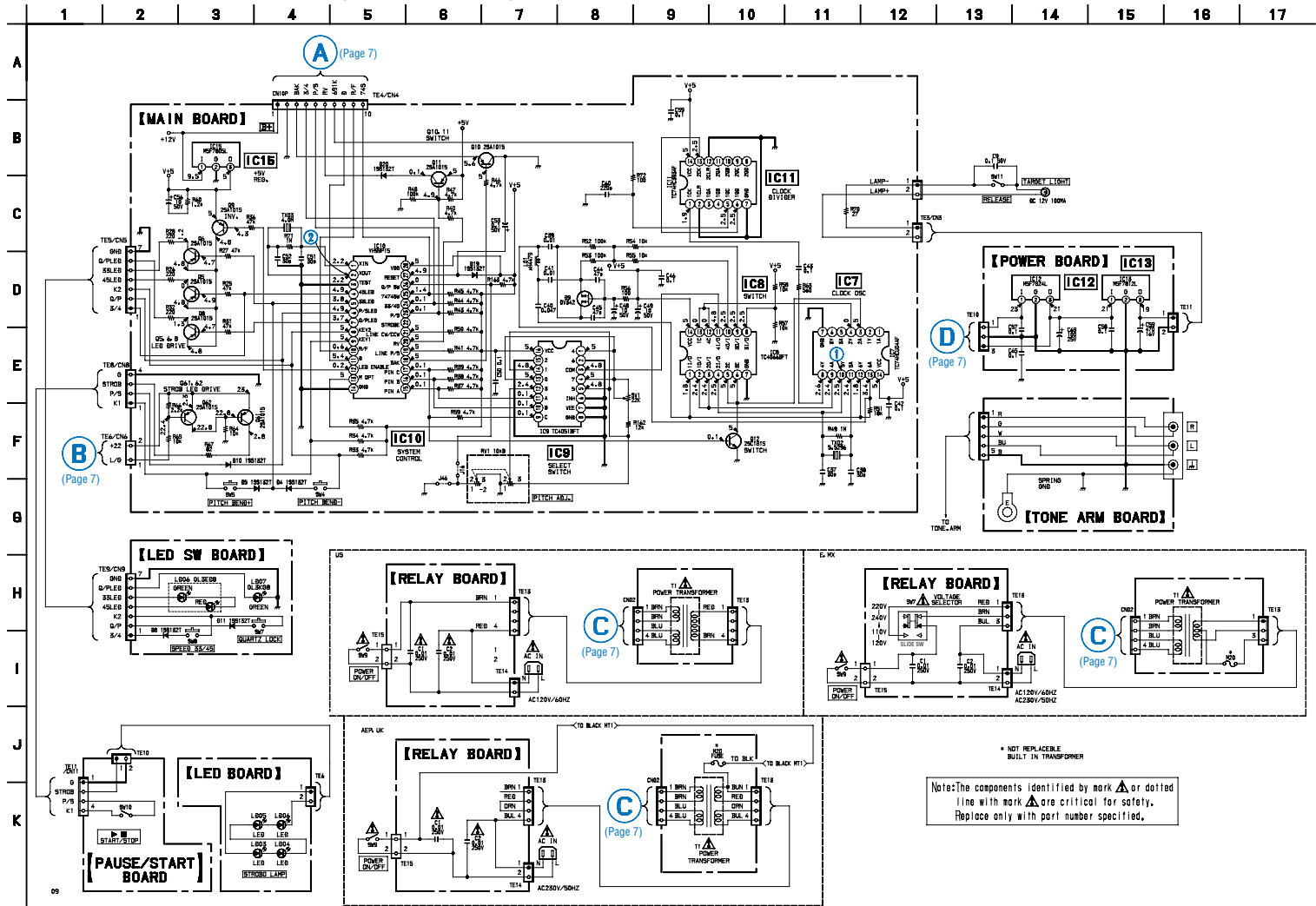


• WAVEFORMS
- MAIN SECTION -



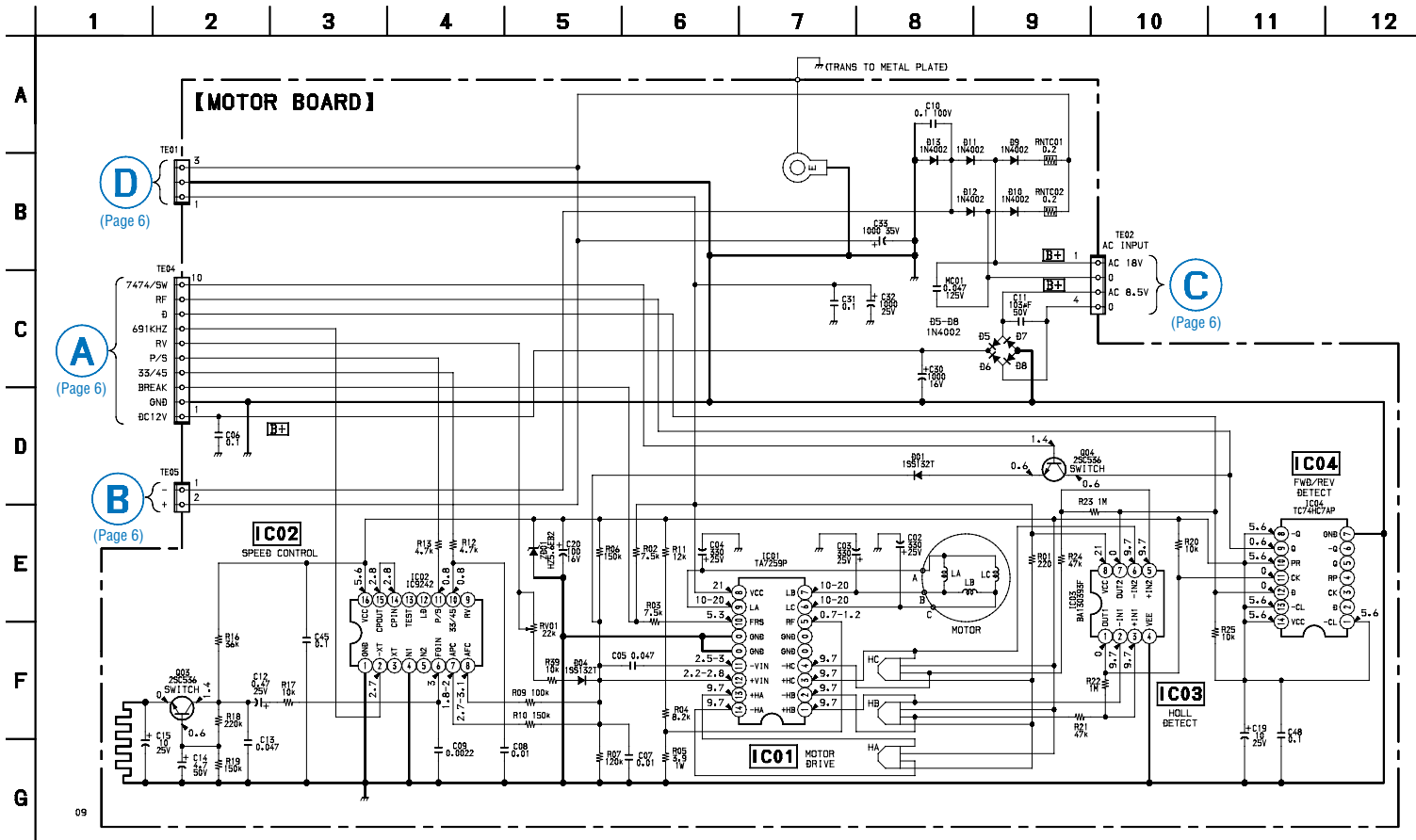
(Continued)

2-2. SCHEMATIC DIAGRAM – MAIN SECTION -- • See Page 8 and 9 for Printed Wiring Boards.



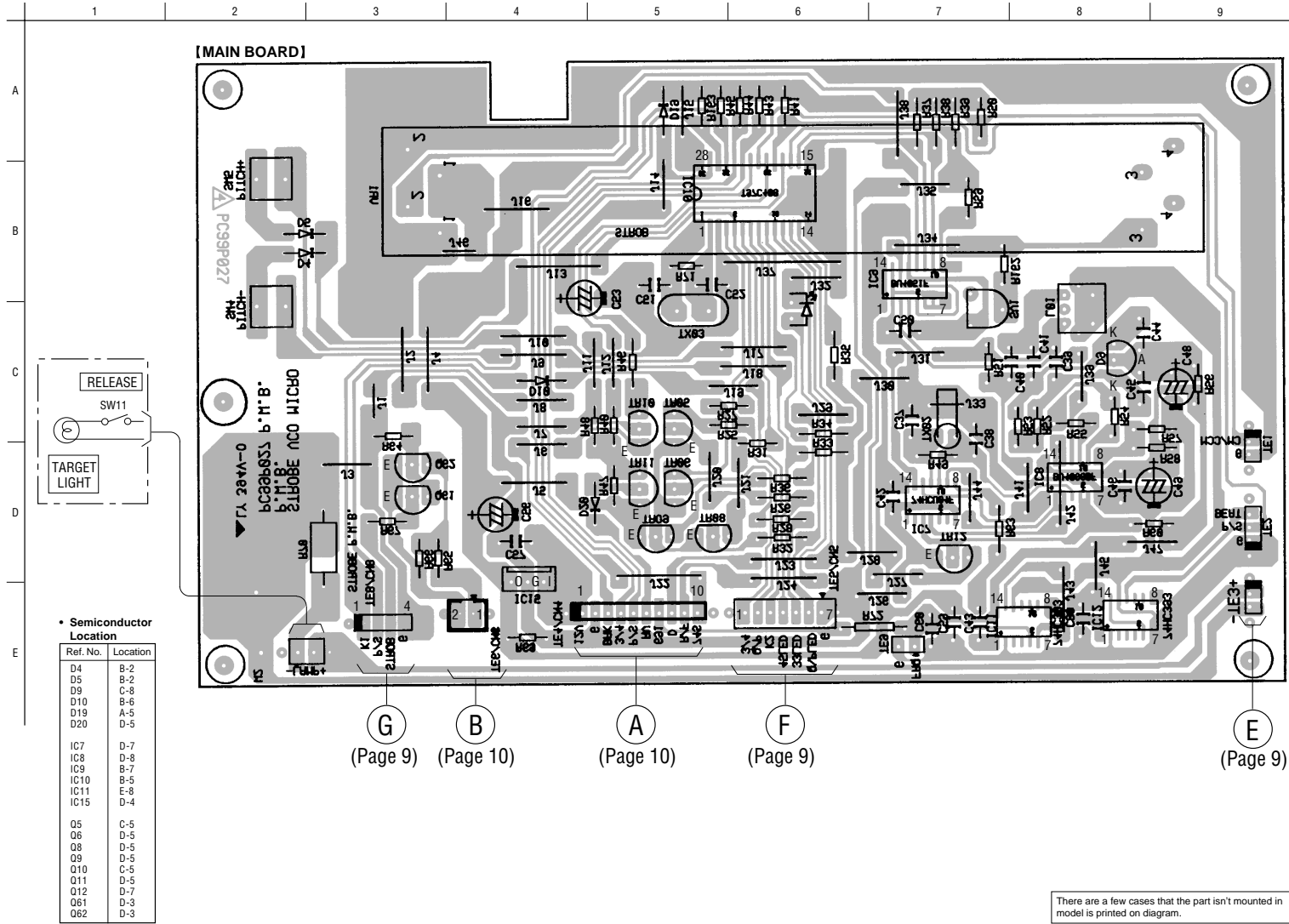
L003, L004, L005, L006:
Exchange all the four when even this one diode breaks in either one.

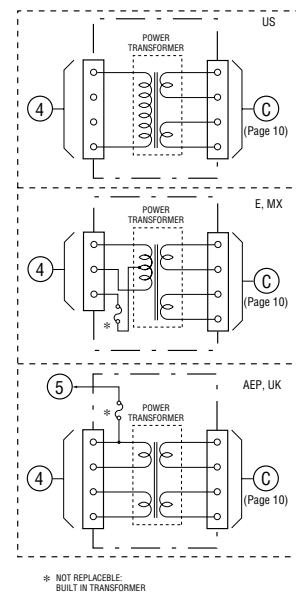
2-3. SCHEMATIC DIAGRAM – MOTOR SECTION – • See Page 10 for Printed Wiring Boards.



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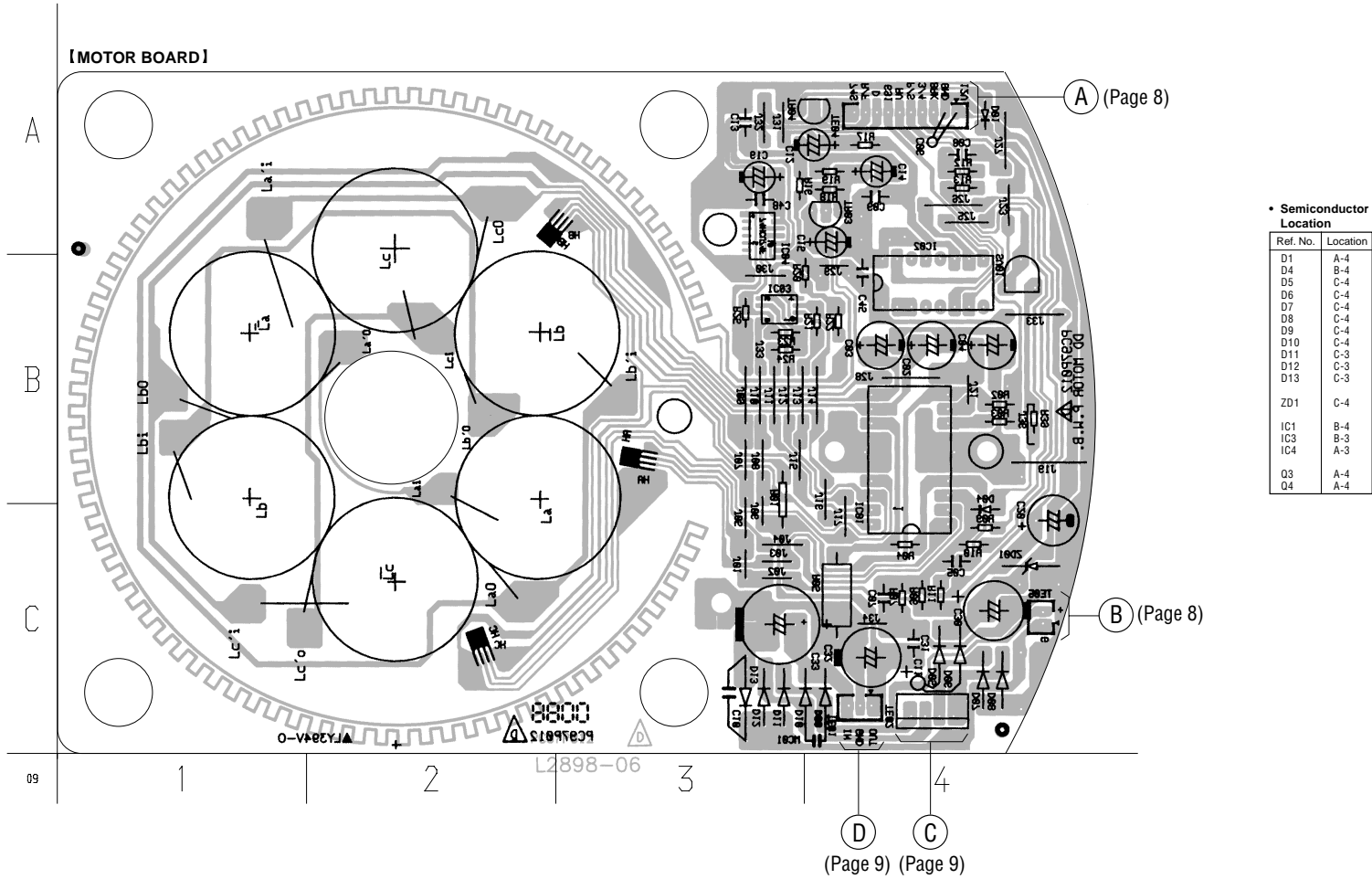
2-4. PRINTED WIRING BOARD – MAIN SECTION – • See Page 5 for Circuit Boards Location. • See Page 6 for Schematic Diagram.





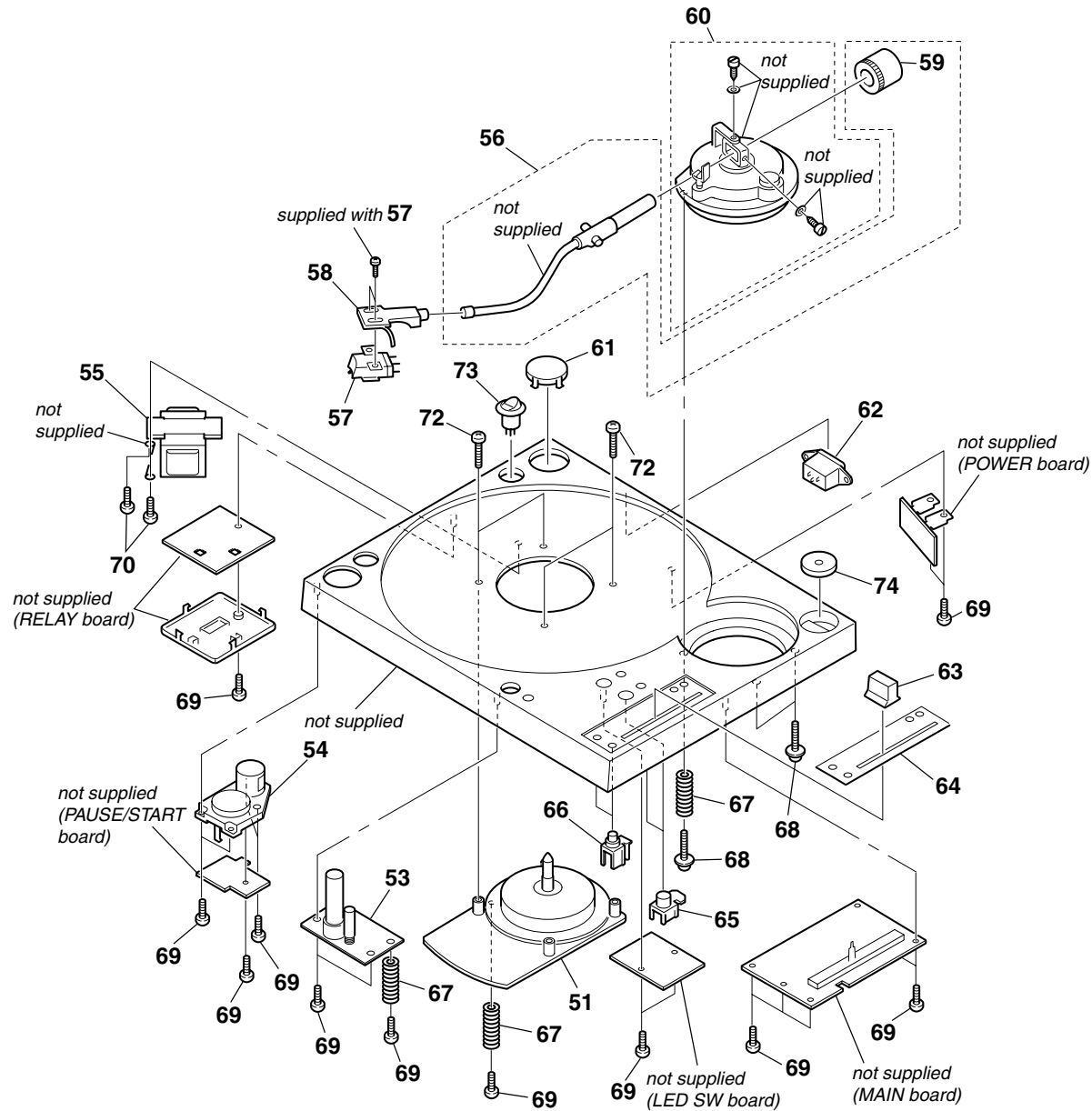
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2-6. PRINTED WIRING BOARD – MOTOR SECTION – • See Page 5 for Circuit Boards Location. • See Page 7 for Schematic Diagram.



EXPLODED VIEW

3-2. CABINET SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	A-4412-592-A	MOTOR BOARD, COMPLETE		64	4-231-214-01	PLATE, VR NAME	
53	4-231-231-01	TERGET (LIGHT) ASSY		65	4-231-215-01	KNOB, QUARTZ	
54	4-231-232-01	BASE ASSY, KNOB (AEP,UK)		66	4-231-212-01	KNOB, P/B (AEP,UK)	
54	4-232-018-01	BASE ASSY, KNOB (US,MX,E)		66	4-232-016-01	KNOB, P/B (US,MX,E)	
56	4-231-230-01	ARM ASSY, TONE		67	4-231-224-01	SPRING	
57	1-251-931-11	CARTRIDGE (INCLUDING STYLUS)		68	3-703-136-11	SCREW, TAPPING	
58	4-231-511-01	SHELL ASSY, HEAD		69	7-685-647-79	SCREW +P3x10 TYPE2 SLIT	
59	4-231-239-01	WEIGHT ASSY, COUNTER		70	7-685-903-31	SCREW +PTPWH3x10 (TYPE2)	
60	4-231-233-01	BASE ASSY, TONE ARM		72	7-682-162-01	SCREW +P4x10	
61	4-231-228-01	KNOB		73	4-231-223-01	BRACKET (POWER SW)	
62	4-231-234-01	SOCKET ASSY, AC		74	4-234-872-01	45 ADAPTOR	
63	4-231-213-01	KNOB, VR (AEP,UK)		T1	1-435-743-11	TRANSFORMER, POWER (US,MX)	
63	4-232-017-01	KNOB, VR (US,MX,E)		T1	1-435-744-11	TRANSFORMER, POWER (AEP,UK)	
				T1	1-435-745-11	TRANSFORMER, POWER (E)	

SECTION 4 ELECTRICAL PARTS LIST

LED

LED SW

MAIN

NOTE:

- 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 and -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. . . : μ A. . . uPA. . . : μ PA. . .
uPB. . . : μ PB. . . uPC. . . : μ PC. . .
uPD. . . : μ PD. . .
- CAPACITORS
uF: μ F
• COILS
uH: μ H

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

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

- Abbreviation
MX: Mexican Model

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
LED BOARD *****				< DIODE >			
LD3	8-719-301-38	DIODE SEL2210S-C		D4	8-719-107-94	DIODE 1SS132T-73	
LD4	8-719-301-38	DIODE SEL2210S-C		D5	8-719-107-94	DIODE 1SS132T-73	
LD5	8-719-301-38	DIODE SEL2210S-C		D9	8-719-979-71	DIODE SVC342-L	
LD6	8-719-301-38	DIODE SEL2210S-C		D10	8-719-107-94	DIODE 1SS132T-73	
*****				D19	8-719-107-94	DIODE 1SS132T-73	
LED SW BOARD *****				D20	8-719-107-94	DIODE 1SS132T-73	
< DIODE >				< IC >			
D8	8-719-107-94	DIODE 1SS132T-73		IC7	8-759-233-64	IC TC74HCU04AF-TP1	
D11	8-719-107-94	DIODE 1SS132T-73		IC8	8-759-530-28	IC TC4066BFT(EL,N)	
LD06	8-719-981-49	DIODE GL3ED8 (SPEED 33/45)		IC9	8-759-009-05	IC TC4051BFT(EL,N)	
LD07	8-719-988-04	DIODE GL3KG8 (QUARTZ LOCK)		IC10	8-759-832-40	IC TC9915	
< SWITCH >				IC11	8-759-233-26	IC TC74HC393AF-TP1	
SW7	1-553-856-00	SWITCH, KEY BOARD (QUARTZ LOCK)		IC15	8-759-231-53	IC M5F7805L	
SW8	1-553-856-00	SWITCH, KEY BOARD (SPEED 33/45)		< TRANSISTOR >			
*****				Q5	8-729-201-53	TRANSISTOR 2SA1015-YGR	
MAIN BOARD *****				Q6	8-729-201-53	TRANSISTOR 2SA1015-YGR	
< CAPACITOR >				Q8	8-729-201-53	TRANSISTOR 2SA1015-YGR	
C37	1-162-210-31	CERAMIC	30PF 5% 50V	Q9	8-729-201-53	TRANSISTOR 2SA1015-YGR	
C38	1-162-210-31	CERAMIC	30PF 5% 50V	Q10	8-729-201-53	TRANSISTOR 2SA1015-YGR	
C39	1-162-306-11	CERAMIC	0.01uF 20.00% 16V	Q11	8-729-201-53	TRANSISTOR 2SA1015-YGR	
C40	1-164-206-41	CERAMIC	0.047uF 99% 50V	Q12	8-729-119-78	TRANSISTOR 2SC1815-YGR	
C41	1-162-306-11	CERAMIC	0.01uF 20.00% 16V	Q61	8-729-201-53	TRANSISTOR 2SA1015-YGR	
C42	1-136-165-00	FILM	0.1uF 5.00% 50V	Q62	8-729-201-53	TRANSISTOR 2SA1015-YGR	
C43	1-136-165-00	FILM	0.1uF 5.00% 50V	< RESISTOR >			
C44	1-162-215-31	CERAMIC	47PF 5% 50V	R25	1-247-871-11	CARBON	47K 5% 1/4W
C45	1-162-215-31	CERAMIC	47PF 5% 50V	R26	1-249-409-11	CARBON	220 5% 1/4W F
C46	1-136-165-00	FILM	0.1uF 5.00% 50V	R27	1-247-871-11	CARBON	47K 5% 1/4W
C48	1-126-964-11	ELECT	10uF 20.00% 50V	R28	1-249-409-11	CARBON	220 5% 1/4W F
C49	1-126-964-11	ELECT	10uF 20.00% 50V	R31	1-247-871-11	CARBON	47K 5% 1/4W
C50	1-136-165-00	FILM	0.1uF 5.00% 50V	R32	1-249-409-11	CARBON	220 5% 1/4W F
C51	1-162-210-31	CERAMIC	30PF 5% 50V	R33	1-247-847-11	CARBON	4.7K 5% 1/4W
C52	1-162-210-31	CERAMIC	30PF 5% 50V	R34	1-247-847-11	CARBON	4.7K 5% 1/4W
C53	1-126-956-11	ELECT	0.1uF 20.00% 50V	R36	1-247-871-11	CARBON	47K 5% 1/4W
C56	1-126-964-11	ELECT	10uF 20.00% 50V	R37	1-247-847-11	CARBON	4.7K 5% 1/4W
C59	1-136-165-00	FILM	0.1uF 5.00% 50V	R38	1-247-847-11	CARBON	4.7K 5% 1/4W
C60	1-162-286-31	CERAMIC	220PF 10% 50V	R39	1-247-847-11	CARBON	4.7K 5% 1/4W
				R40	1-247-847-11	CARBON	4.7K 5% 1/4W
				R41	1-247-847-11	CARBON	4.7K 5% 1/4W
				R43	1-247-847-11	CARBON	4.7K 5% 1/4W

L003, L004, L005, L006:

Exchange all the four when even this one diode breaks in either one.

MAIN

MOTOR

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R44	1-247-847-11	CARBON	4.7K	5%	1/4W	C19	1-126-964-11	ELECT	10uF	20.00%	50V
R45	1-247-847-11	CARBON	4.7K	5%	1/4W	C20	1-126-768-11	ELECT	2200uF	20.00%	16V
R46	1-247-847-11	CARBON	4.7K	5%	1/4W	C30	1-126-942-11	ELECT	1000uF	20.00%	25V
R47	1-247-847-11	CARBON	4.7K	5%	1/4W	C31	1-164-159-11	CERAMIC	0.1uF		50V
R48	1-247-879-11	CARBON	100K	5%	1/4W	C32	1-126-942-11	ELECT	1000uF	20.00%	25V
R49	1-247-903-00	CARBON	1M	5%	1/4W	C33	1-126-952-11	ELECT	1000uF	20.00%	35V
R50	1-247-847-11	CARBON	4.7K	5%	1/4W	C45	1-164-159-11	CERAMIC	0.1uF		50V
R51	1-249-432-11	CARBON	18K	5%	1/4W	C48	1-164-159-11	CERAMIC	0.1uF		50V
R52	1-247-879-11	CARBON	100K	5%	1/4W	< DIODE >					
R53	1-247-879-11	CARBON	100K	5%	1/4W	D1	8-719-107-94	DIODE 1SS132			
R54	1-247-855-11	CARBON	10K	5%	1/4W	D4	8-719-107-94	DIODE 1SS132			
R55	1-247-855-11	CARBON	10K	5%	1/4W	D5	8-719-200-02	DIODE 1N4002			
R56	1-247-807-11	CARBON	100	5%	1/4W	D6	8-719-200-02	DIODE 1N4002			
R57	1-247-855-11	CARBON	10K	5%	1/4W	D7	8-719-200-02	DIODE 1N4002			
R58	1-247-855-11	CARBON	10K	5%	1/4W	D8	8-719-200-02	DIODE 1N4002			
R59	1-247-847-11	CARBON	4.7K	5%	1/4W	D9	8-719-200-02	DIODE 1N4002			
R60	1-247-855-11	CARBON	10K	5%	1/4W	D10	8-719-200-02	DIODE 1N4002			
R63	1-247-825-11	CARBON	560	5%	1/4W	D11	8-719-200-02	DIODE 1N4002			
R64	1-247-855-11	CARBON	10K	5%	1/4W	D12	8-719-200-02	DIODE 1N4002			
R65	1-247-855-11	CARBON	10K	5%	1/4W	D13	8-719-200-02	DIODE 1N4002			
R66	1-247-839-11	CARBON	2.2K	5%	1/4W	DZ1	8-719-109-89	DIODE HZ5.6EB2			
R67	1-249-404-00	CARBON	82	5%	1/4W F	< IC >					
R70	1-247-693-11	CARBON	27	5%	1/4W F	IC1	8-759-202-02	IC TA7259P			
R71	1-247-903-00	CARBON	1M	5%	1/4W	IC2	8-759-832-39	IC IC9242P			
R72	1-247-807-11	CARBON	100	5%	1/4W	IC3	8-759-510-72	IC BA10393F-E1			
R162	1-249-430-11	CARBON	12K	5%	1/4W	IC4	8-759-032-81	IC TC74HC74AP			
R163	1-247-847-11	CARBON	4.7K	5%	1/4W	< TRANSISTOR >					
< VARIABLE RESISTOR >						Q3	8-729-281-53	TRANSISTOR 2SC536-2F			
RV1	1-227-359-11	RES, VAR (SLIDE) 10K				Q4	8-729-281-53	TRANSISTOR 2SC536-2F			
SV1	1-241-765-11	RES, ADJ, CARBON 22K				< RESISTOR >					
< SWITCH >						R2	1-247-852-11	CARBON	7.5K	5%	1/4W
SW4	1-553-856-00	SWITCH, KEY BOARD (PITCH BEND -)				R3	1-247-852-11	CARBON	7.5K	5%	1/4W
SW5	1-553-856-00	SWITCH, KEY BOARD (PITCH BEND +)				R5	1-216-356-00	METAL OXIDE FILM	3.9	5%	1/4W
< VIBRATOR >						R6	1-247-883-00	CARBON	150K	5%	1/4W
TX02	1-795-150-11	VIBRATOR CRYSTAL (5.5296MHz)				R7	1-247-879-11	CARBON	100K	5%	1/4W
TX03	1-795-151-11	VIBRATOR CRYSTAL (4MHz)				R9	1-247-879-11	CARBON	100K	5%	1/4W

A-4412-592-A MOTOR BOARD, COMPLETE						R10	1-247-883-00	CARBON	150K	5%	1/4W
*****						R11	1-247-857-11	CARBON	12K	5%	1/4W
< CAPACITOR >						R12	1-247-847-11	CARBON	4.7K	5%	1/4W
C2	1-126-940-11	ELECT	330uF	20.00%	25V	R13	1-247-847-11	CARBON	4.7K	5%	1/4W
C3	1-126-940-11	ELECT	330uF	20.00%	25V	R16	1-247-868-11	CARBON	36K	5%	1/4W
C4	1-126-940-11	ELECT	330uF	20.00%	25V	R17	1-247-855-11	CARBON	10K	5%	1/4W
C5	1-101-006-99	CERAMIC	0.047uF		50V	R18	1-247-887-00	CARBON	220K	5%	1/4W
C6	1-164-159-11	CERAMIC	0.1uF		50V	R19	1-247-883-00	CARBON	150K	5%	1/4W
C7	1-101-004-00	CERAMIC	0.01uF		50V	R20	1-247-855-11	CARBON	10K	5%	1/4W
C8	1-101-004-00	CERAMIC	0.01uF		50V	R21	1-247-847-11	CARBON	4.7K	5%	1/4W
C9	1-101-002-00	CERAMIC	0.0022uF			R22	1-247-903-00	CARBON	1M	5%	1/4W
C10	1-164-159-11	CERAMIC	0.1uF		50V	R23	1-247-903-00	CARBON	1M	5%	1/4W
C11	1-101-004-00	CERAMIC	0.01uF		50V	R24	1-247-847-11	CARBON	4.7K	5%	1/4W
C12	1-126-959-11	ELECT	0.47uF		25V	R25	1-247-855-11	CARBON	10K	5%	1/4W
C13	1-101-006-99	CERAMIC	0.047uF		50V	R39	1-247-855-11	CARBON	10K	5%	1/4W
C14	1-126-963-11	ELECT	4.7uF		50V	< VARIABLE RESISTOR >					
C15	1-126-964-11	ELECT	10uF	20.00%	50V	SV1	1-241-765-11	RES, ADJ, CARBON 22K			

PAUSE/START

POWER

RELAY

TONE ARM

Ref. No.	Part No.	Description	Remark
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PAUSE/START BOARD

<SWITCH>

SW10	1-570-245-11	SWITCH, MICRO (▶■ START STOP)
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POWER BOARD

< CAPACITOR >

C57	1-164-159-11	CERAMIC	0.1uF	50V
C58	1-164-159-11	CERAMIC	0.1uF	50V
C59	1-126-935-11	ELECT	470uF	20.00% 16V
C65	1-164-159-11	CERAMIC	0.1uF	50V
C69	1-126-942-61	ELECT	1000uF	20.00% 25V

< IC >

IC12	8-759-604-89	IC M5F7824L
IC13	8-759-231-58	IC M5F7812L

RELAY BOARD

< CAPACITOR >

△ C1	1-113-925-11	CERAMIC	0.01uF	20.00% 250V
△ C2	1-113-925-11	CERAMIC	0.01uF	20.00% 250V

<SWITCH>

△ SW7	1-786-111-11	SWITCH, VOLTAGE SELECTION (E,MX)
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TONE ARM BOARD

MISCELLANEOUS

57	1-251-931-11	CARTRIDGE
△ 62	4-231-234-01	SOCKET ASSY AC
△ T1	1-435-743-11	TRANSFORMER, POWER (US,MX)
△ T1	1-435-744-11	TRANSFORMER, POWER (AEP,UK)
△ T1	1-435-745-11	TRANSFORMER, POWER (E)

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

REVISION HISTORY

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Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

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