

PS-Q3

SERVICE MANUAL

US Model
 Canadian Model
 AEP Model
 UK Model
 E Model



SPECIFICATIONS

Turntable		General	
Platter	7.8 cm (3 ¹ / ₈ in.), zinc-alloy diecast	Power requirements	US, Canadian model: 120 V ac, 60 Hz AEP model: 220 V ac, 50/60 Hz UK model: 240 V ~ ac, 50/60 Hz E model: 110 - 120, 220 - 240 V ~ ac, 50/60 Hz
Motor	DC motor	Power consumption	3 W
Drive system	Belt drive	Dimensions	Approx. 215 x 235 x 58 mm (w/h/d) (8 ¹ / ₂ x 9 ³ / ₈ x 2 ³ / ₈ in.) including projecting parts and controls
Control system	Electro governer servo control system	Weight	Approx. 2.3 kg (5 lbs 2 oz) net Approx. 3.0 kg (6 lbs 10 oz), in shipping carton
Speed	33 ¹ / ₃ rpm, 45 rpm		
Wow and flutter	0.12% (WRMS)		
Signal-to-noise ratio	58 dB (DIN-B)		
Automatic system	Lead-in, return, reject		
Tonearm			
Type	Dynamic balanced low mass type		
Cartridge			
Type	Moving magnet type		
Frequency response	10 to 20,000 Hz		
Channel separation	20 dB at 1 kHz		
Load impedance	50 kilohms		
Tracking force	2 g		
Stylus	Sony ND-143G (0.6 mil diamond)		
Weight	3.4 g		

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHEMATIQUES 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.

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.

STEREO TURNTABLE SYSTEM

SONY®



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)

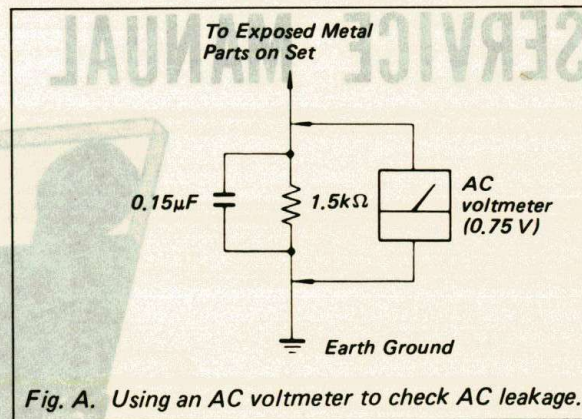
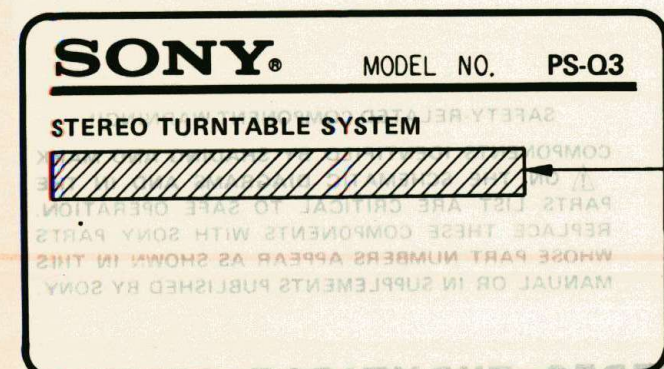


Fig. A. Using an AC voltmeter to check AC leakage.

MODEL IDENTIFICATION

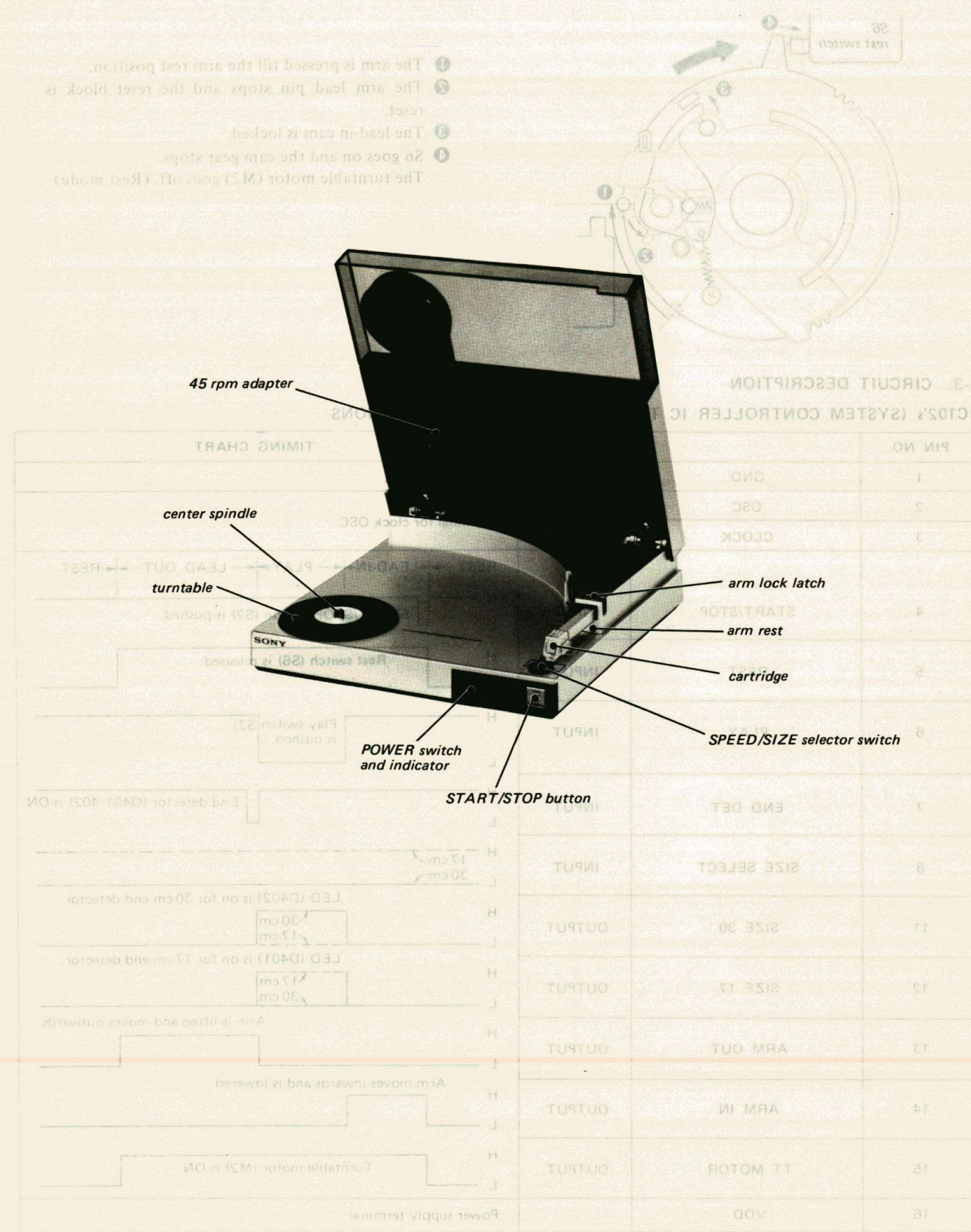
— Specification Label —



- US, Canadian model: AC: 120 V 60 Hz 3 W
- AEP model: AC: 220 V ~ 50/60 Hz 3 W
- UK model: AC: 240 V ~ 50/60 Hz 3 W
- E model: AC: 110 - 120, 220 - 240 V ~ 50/60 Hz 3 W

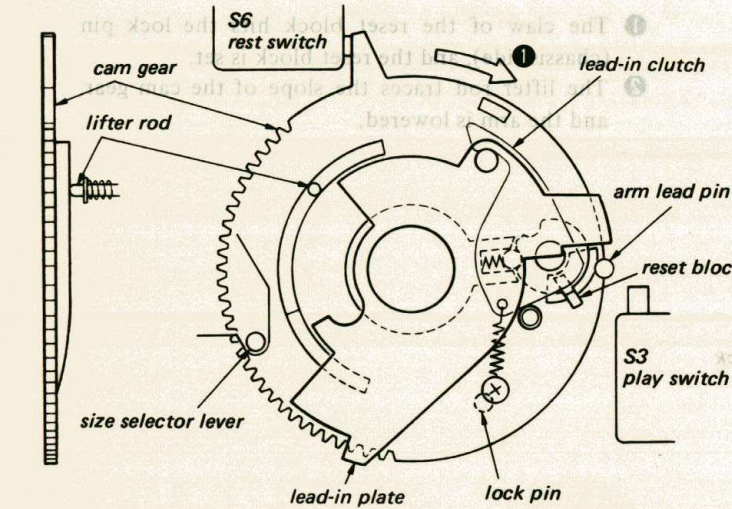
**SECTION 1
OUTLINE**

1-1. PARTS LOCATION



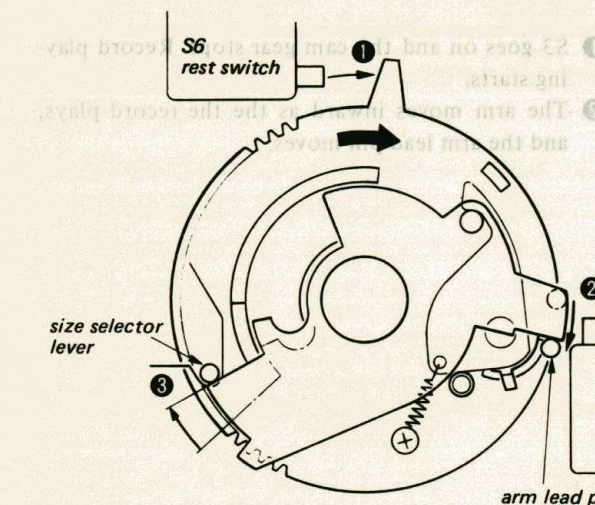
**1-2. MECHANISM DESCRIPTION
AUTOMATIC OPERATION MODE**

1. REST



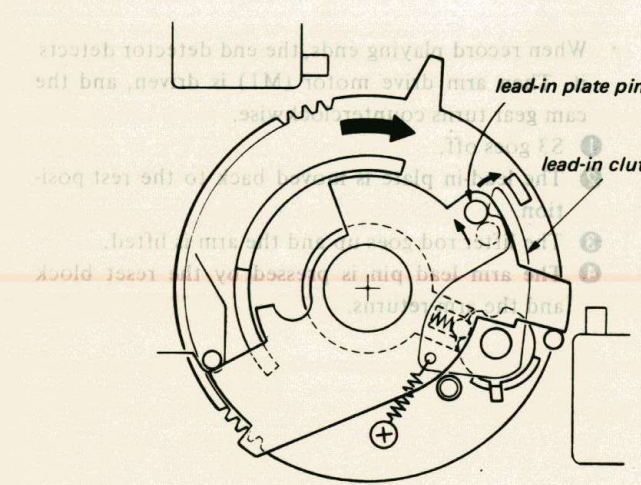
- Cam gear stops, pressing the rest switch.
- The lifter rod is in the "arm lifted" state.
- The arm lead pin is in the rest position.
- ① The arm drive motor (M1) is driven when the START/STOP switch is pressed, and the cam gear turns. Then the turntable motor (M2) goes on.

2. DROP POINT



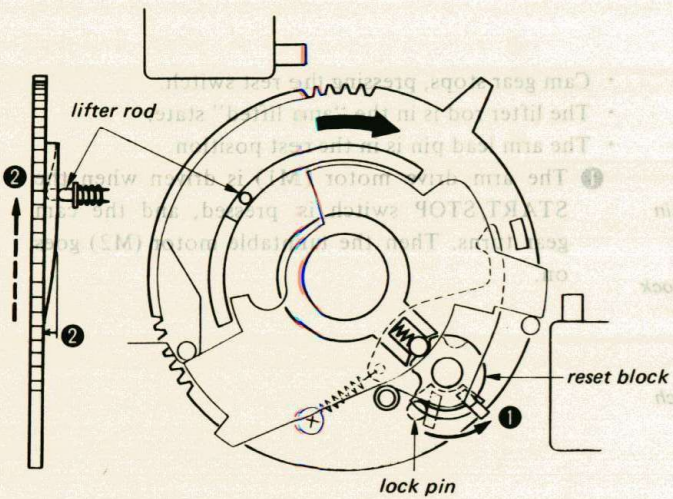
- ① S6 goes off.
- ② The arm lead pin is pressed and the arm moves inward.
- ③ The lead-in plate hits the size selector lever, and the arm movement stops. (drop point)

3. LEAD-IN CLUTCH RELEASE



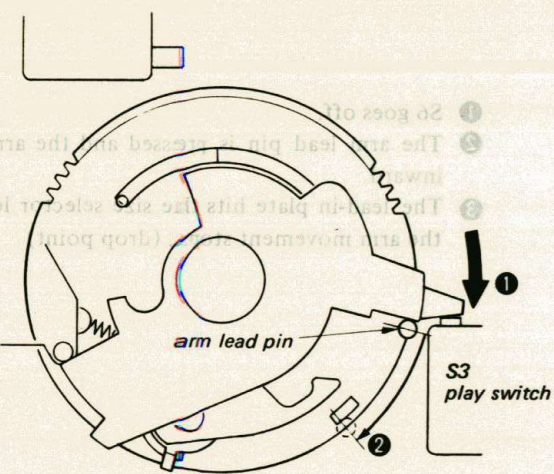
- Since the lead-in plate stops and the cam gear turns, the lead-in clutch comes off of the lead-in plate pin.

4. ARM DOWN



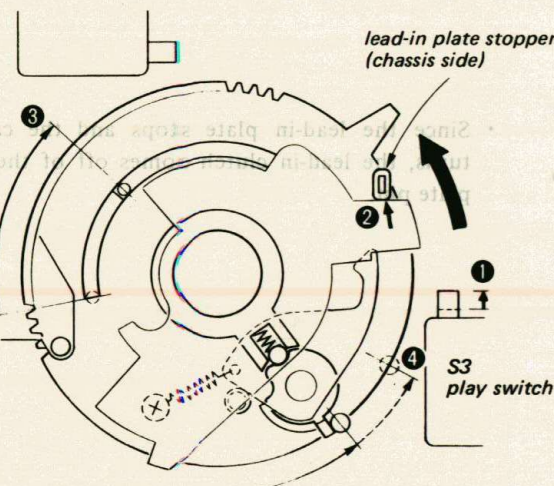
- 1 The claw of the reset block hits the lock pin (chassis side), and the reset block is set.
- 2 The lifter rod traces the slope of the cam gear, and the arm is lowered.

5. PLAYING RECORD



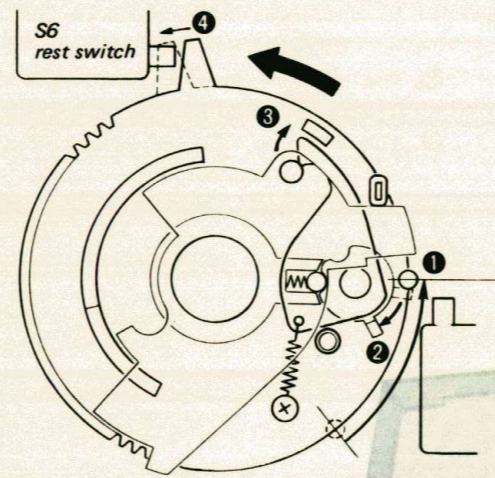
- 1 S3 goes on and the cam gear stops. Record playing starts.
- 2 The arm moves inward as the record plays, and the arm lead pin moves.

6. RETURN



- When record playing ends, the end detector detects it. Then arm drive motor (M1) is driven, and the cam gear turns counterclockwise.
- 1 S3 goes off.
 - 2 The lead-in plate is moved back to the rest position.
 - 3 The lifter rod goes up and the arm is lifted.
 - 4 The arm lead pin is pressed by the reset block and the arm returns.

7. REST



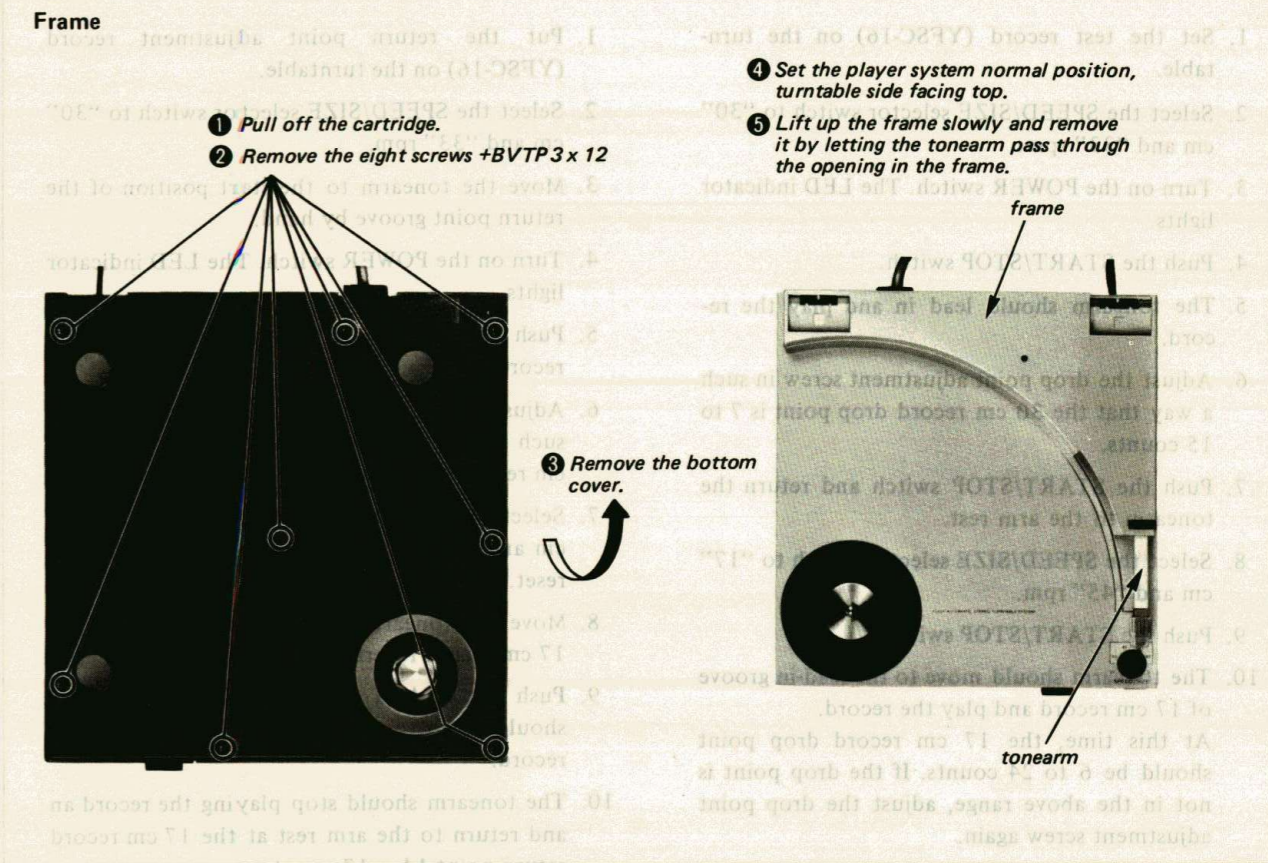
- 1 The arm is pressed till the arm rest position.
- 2 The arm lead pin stops and the reset block is reset.
- 3 The lead-in cam is locked.
- 4 S6 goes on and the cam gear stops. The turntable motor (M2) goes off. (Rest mode)

1-3. CIRCUIT DESCRIPTION
IC102's (SYSTEM CONTROLLER IC TC9305P-009) TERMINAL FUNCTIONS

PIN NO.		IN/OUT	TIMING CHART
1	GND		Ground terminal
2	OSC		Terminal for clock OSC
3	CLOCK		
4	START/STOP	INPUT	
5	REST	INPUT	
6	PLAY	INPUT	
7	END DET	INPUT	
8	SIZE SELECT	INPUT	
11	SIZE 30	OUTPUT	
12	SIZE 17	OUTPUT	
13	ARM OUT	OUTPUT	
14	ARM IN	OUTPUT	
15	TT MOTOR	OUTPUT	
16	VDD		Power supply terminal

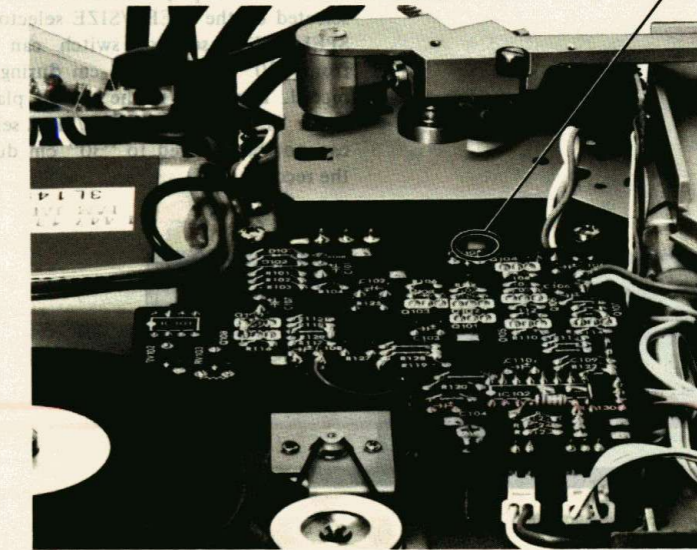
SECTION 2
DISASSEMBLY

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



NOTE ON REASSEMBLING CAM GEAR

When reassembling, make sure the protrusion of the cam gear does not land on the lever of the REST switch (S6). When it does, push the lever in to clear the landing.



SECTION 3 ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

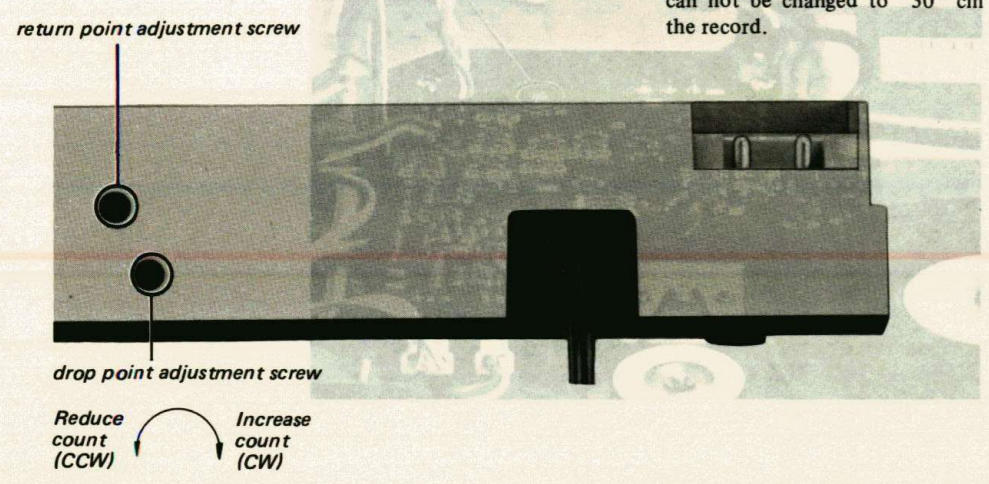
Drop Point Adjustment

1. Set the test record (YFSC-16) on the turntable.
2. Select the SPEED/SIZE selector switch to "30" cm and "33" rpm.
3. Turn on the POWER switch. The LED indicator lights.
4. Push the START/STOP switch.
5. The tonearm should lead in and play the record.
6. Adjust the drop point adjustment screw in such a way that the 30 cm record drop point is 7 to 15 counts.
7. Push the START/STOP switch and return the tonearm to the arm rest.
8. Select the SPEED/SIZE selector switch to "17" cm and "45" rpm.
9. Push the START/STOP switch.
10. The tonearm should move to the lead-in groove of 17 cm record and play the record. At this time, the 17 cm record drop point should be 6 to 24 counts. If the drop point is not in the above range, adjust the drop point adjustment screw again.
11. Select the SPEED/SIZE selector switch to "30" cm and "33" rpm again. Make sure that the 30 cm record drop point. Adjust the drop point if necessary.

Return Point Adjustment

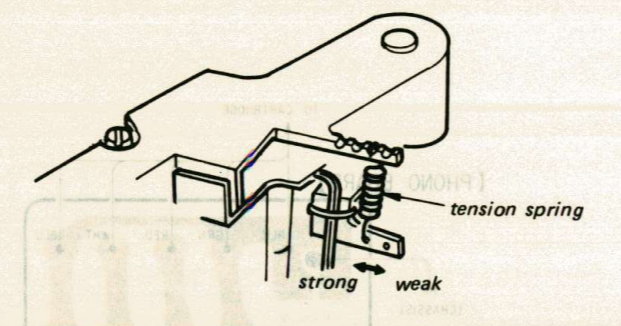
1. Put the return point adjustment record (YFSC-16) on the turntable.
2. Select the SPEED/SIZE selector switch to "30" cm and "33" rpm.
3. Move the tonearm to the start position of the return point groove by hand.
4. Turn on the POWER switch. The LED indicator lights.
5. Push the START/STOP switch to play the record.
6. Adjust the return point adjustment screw in such a way that the tonearm returns at the 30 cm record return point 10 - 13 counts.
7. Select the SPEED/SIZE selector switch to "17" cm and "33" rpm. (The tonearm is on the arm rest.)
8. Move the tonearm to the start position of the 17 cm record return point groove by hand.
9. Push the START/STOP switch. The tonearm should down to the record groove and play the record.
10. The tonearm should stop playing the record and return to the arm rest at the 17 cm record return point 14 - 17 counts. Readjust the return point adjustment screw finely if necessary.
11. Select the SPEED/SIZE selector switch to "30" cm and "33" rpm. Make sure that the 30 cm record return point again.

Caution: If the record play is started under "30" cm selected by the SPEED/SIZE selector switch, the SPEED/SIZE selector switch can be changed from "30" cm to "17" cm during playing the record. However, if the record play is started under "17" cm, the SPEED/SIZE selector switch can not be changed to "30" cm during playing the record.



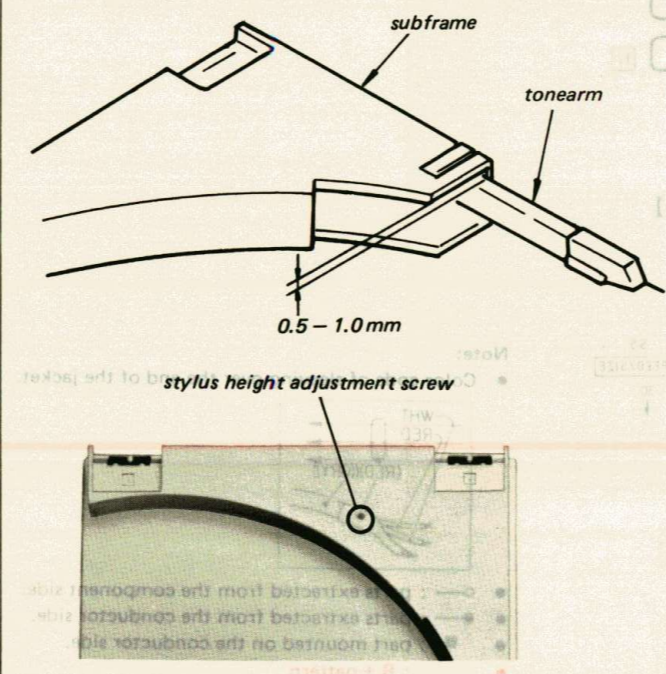
Stylus Pressure Adjustment

1. Turn on the POWER switch. Push the START/STOP switch to let the tonearm lead in.
2. Turn off the POWER switch.
3. Adjust the stylus pressure at the range of $1.8 \pm 0.3g$ by changing the compression spring hooking position under the tonearm at horizontal.



Stylus Height Adjustment

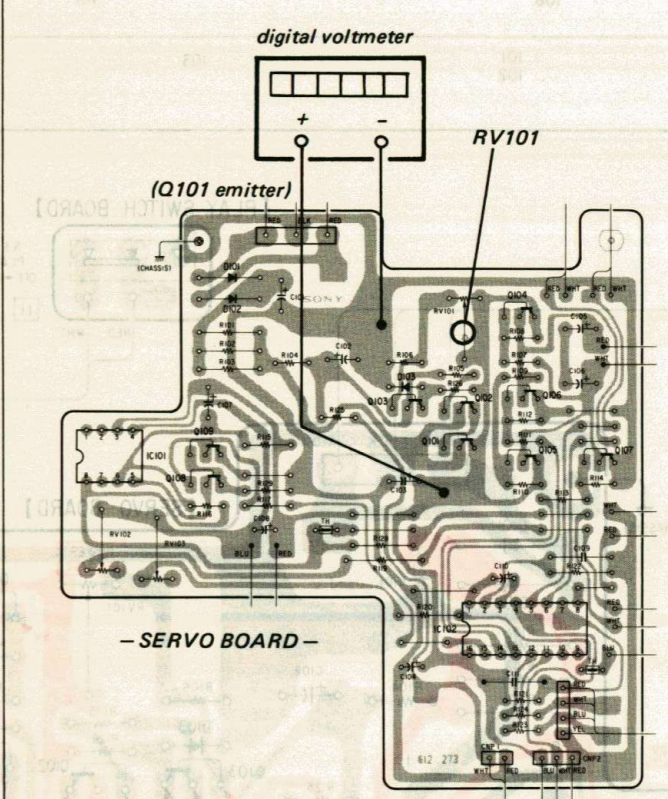
1. The tonearm is on the arm rest and UP condition.
2. Adjust the clearance between the tonearm top surface and subframe inside surface by the stylus height adjustment screw to 0.5 - 1.0 mm.
3. After the adjustment 2, make sure that the tonearm top surface does not touch with the subframe inside surface by leading in and returning the tonearm.



3-2. ELECTRICAL ADJUSTMENTS

Power Voltage Adjustment

Setting:

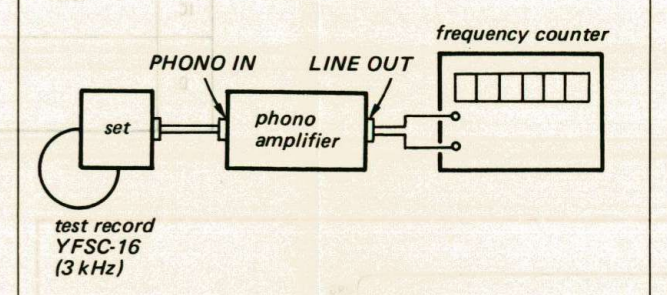


Procedure:

1. Turn on the POWER switch. (STOP mode)
2. Adjust RV101 for $3.1 V \pm 0.1 V$ on the digital voltmeter.

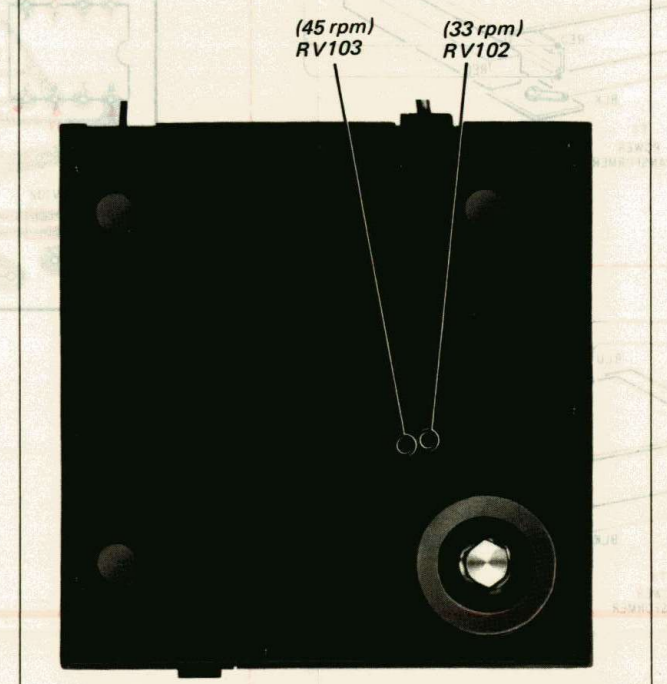
Speed Adjustment

Setting:



Procedure:

1. Select the SPEED/SIZE selector switch to "30" cm and "33" rpm.
2. Play 3 kHz signal in the test record.
3. Adjust RV102 for $3,000 Hz \pm 9 Hz$ on the counter.
4. Select the SPEED/SIZE selector switch to "30" cm and "45" rpm.
5. Play 3 kHz signal in the test record.
6. Adjust RV103 for $4,050 Hz \pm 12 Hz$ on the counter.

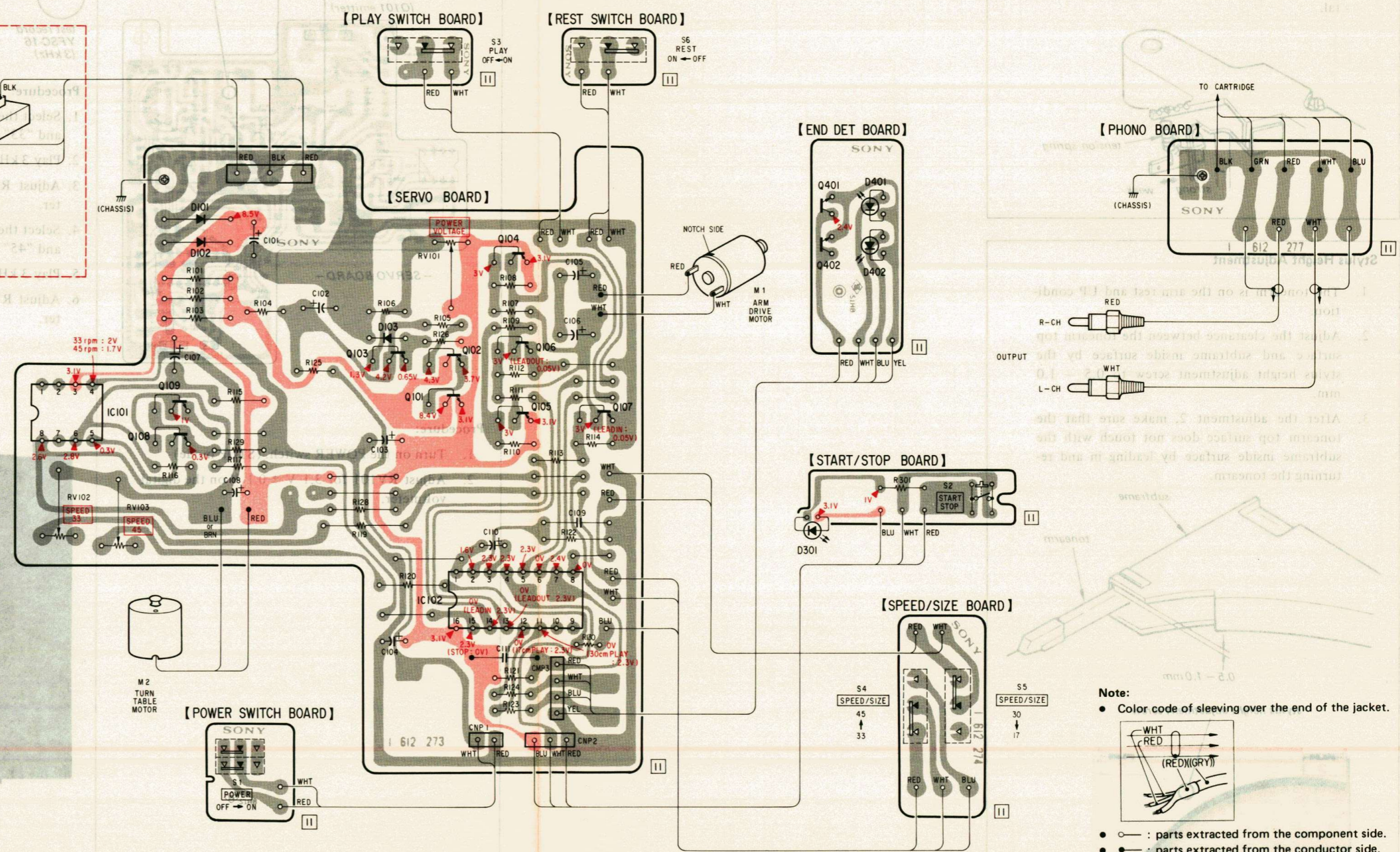
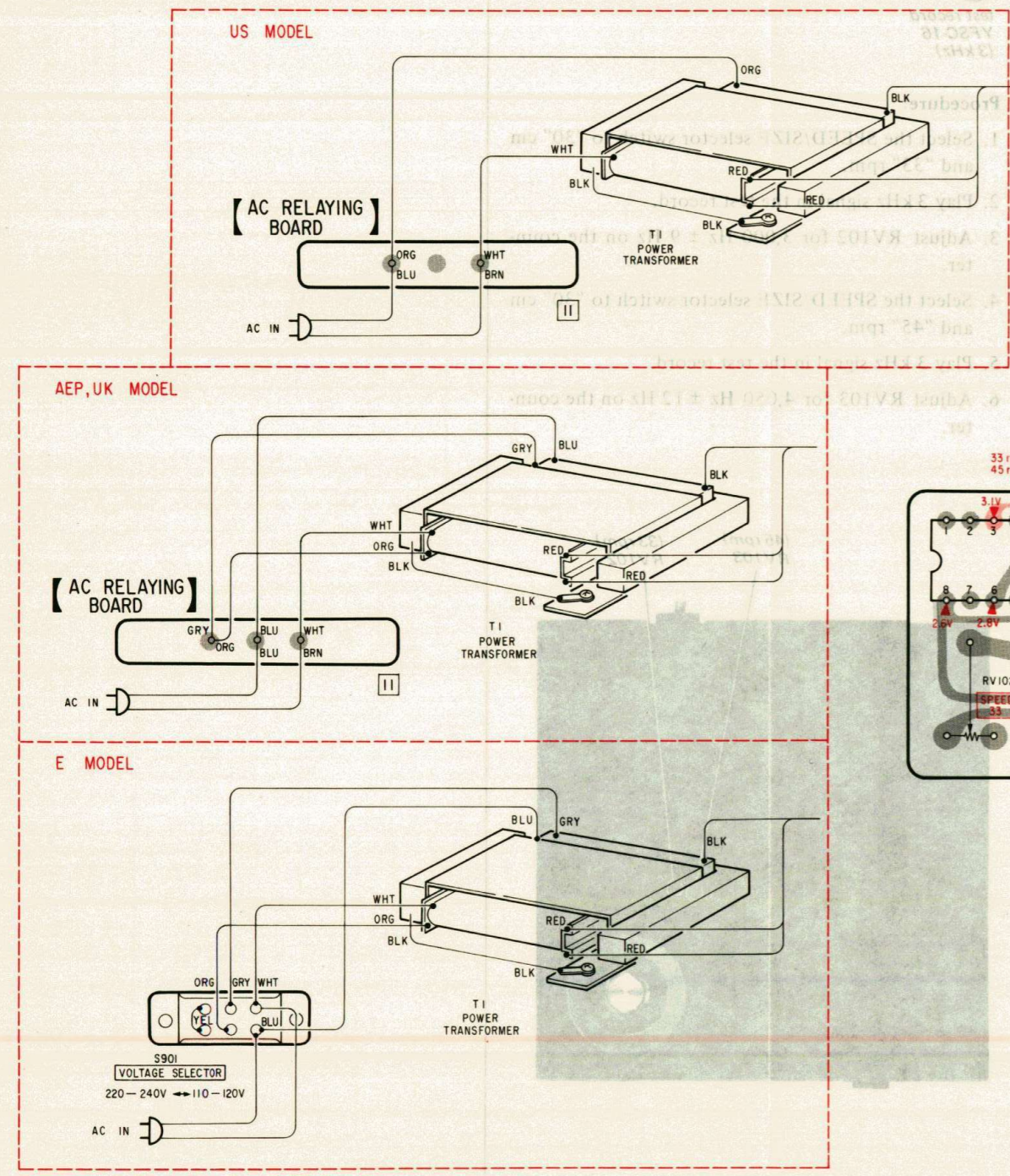


SECTION 4 DIAGRAMS

4-1. MOUNTING DIAGRAM

Q IC	IC101	109 108	103	102 101	104 106 105 IC102	107	401 402	Q IC
D		101 102	103				301 401 402	D

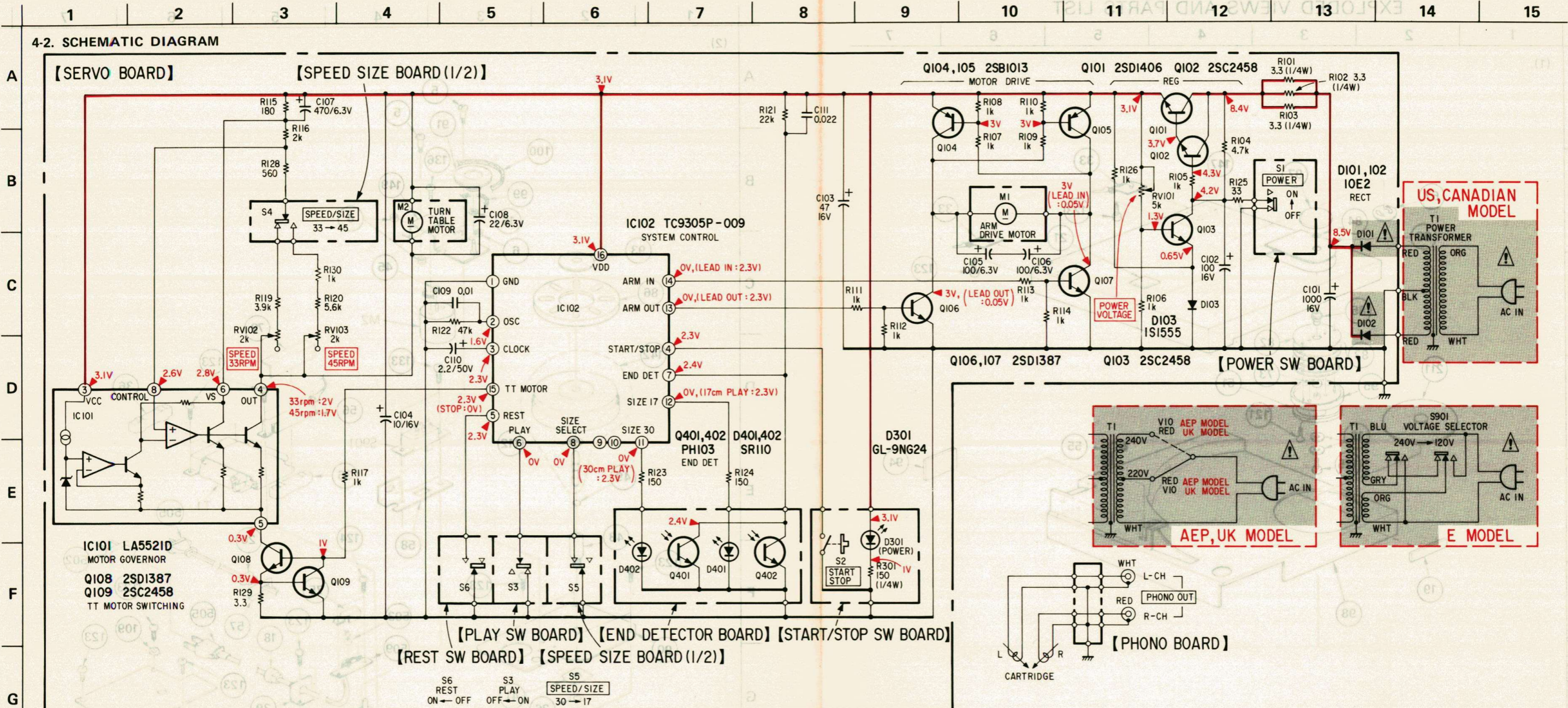
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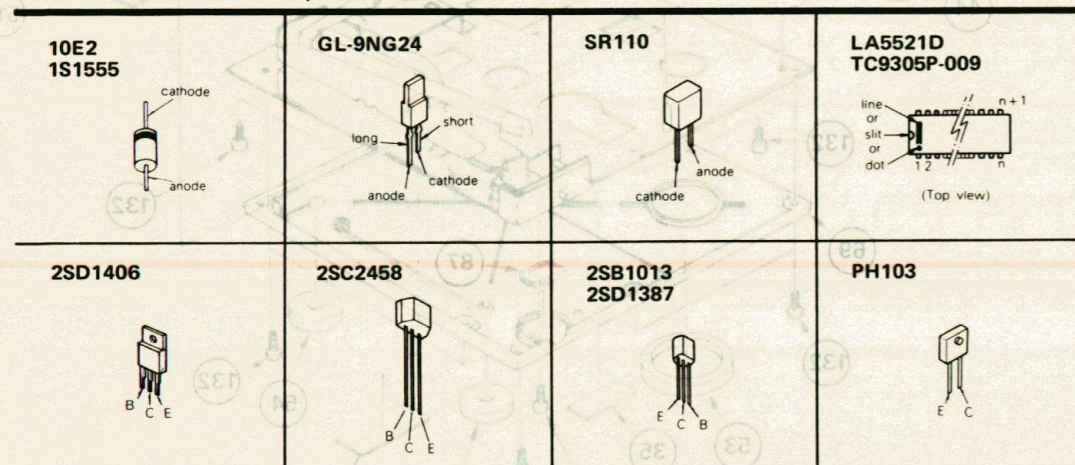
Note:

- Color code of sleeving over the end of the jacket.
- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : part mounted on the conductor side.
- : B + pattern

4-2. SCHEMATIC DIAGRAM



• Semiconductor Lead Layouts



Note:

- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\mu\text{F}$. 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted. $\text{k}\Omega : 1000\ \Omega$, $\text{M}\Omega : 1000\ \text{k}\Omega$.
- Panel designation.
- Adjustment for repair.
- B+ bus.
- Readings are taken under 30 cm PLAY mode with a VOM (50 $\text{k}\Omega/\text{V}$).
- Switches

Ref. No.	Switch	Position
S1	POWER	OFF
S2	START/STOP	OFF
S3	PLAY	ON
S4	SPEED/SIZE (45 RPM/33 RPM)	33 RPM
S5	SPEED/SIZE (17 cm/30 cm)	30 cm
S6	REST	OFF

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

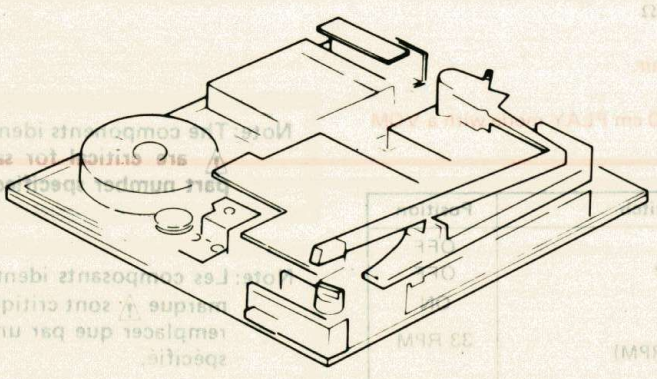
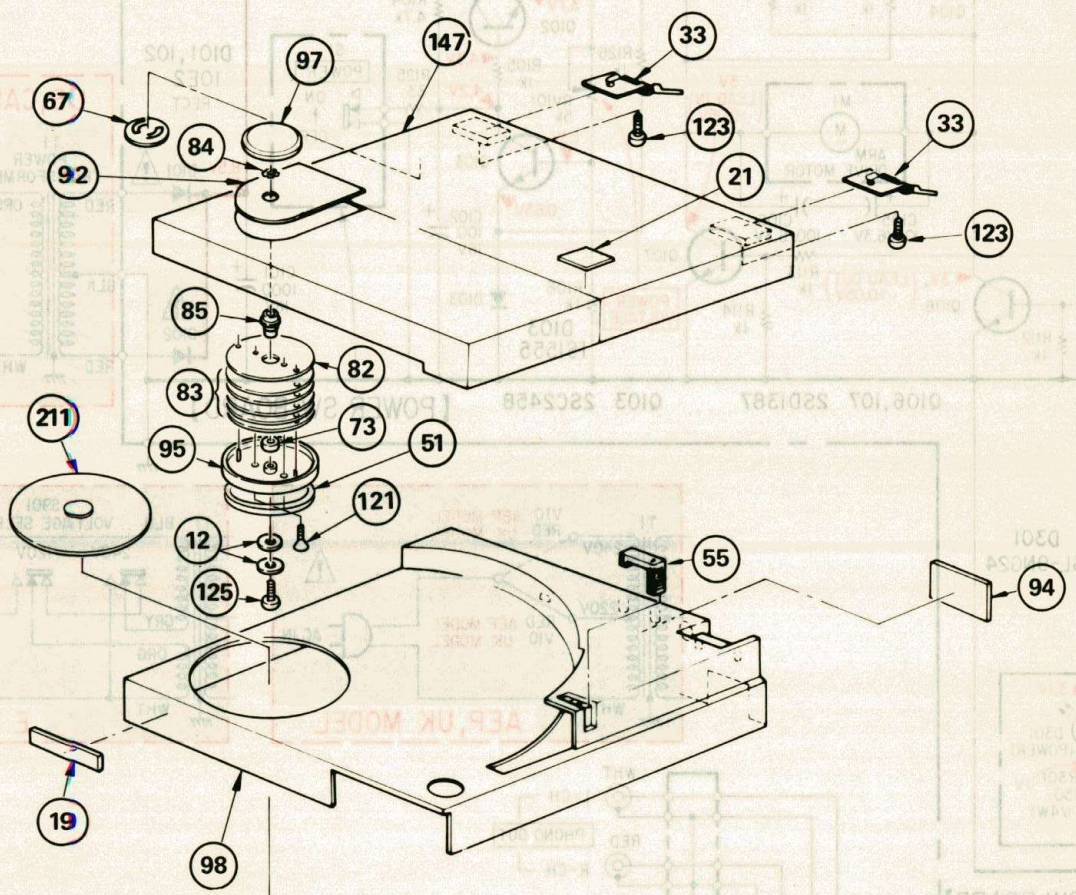
Note: Les composants identifiés par une trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 5

EXPLODED VIEWS AND PARTS LIST

(1).

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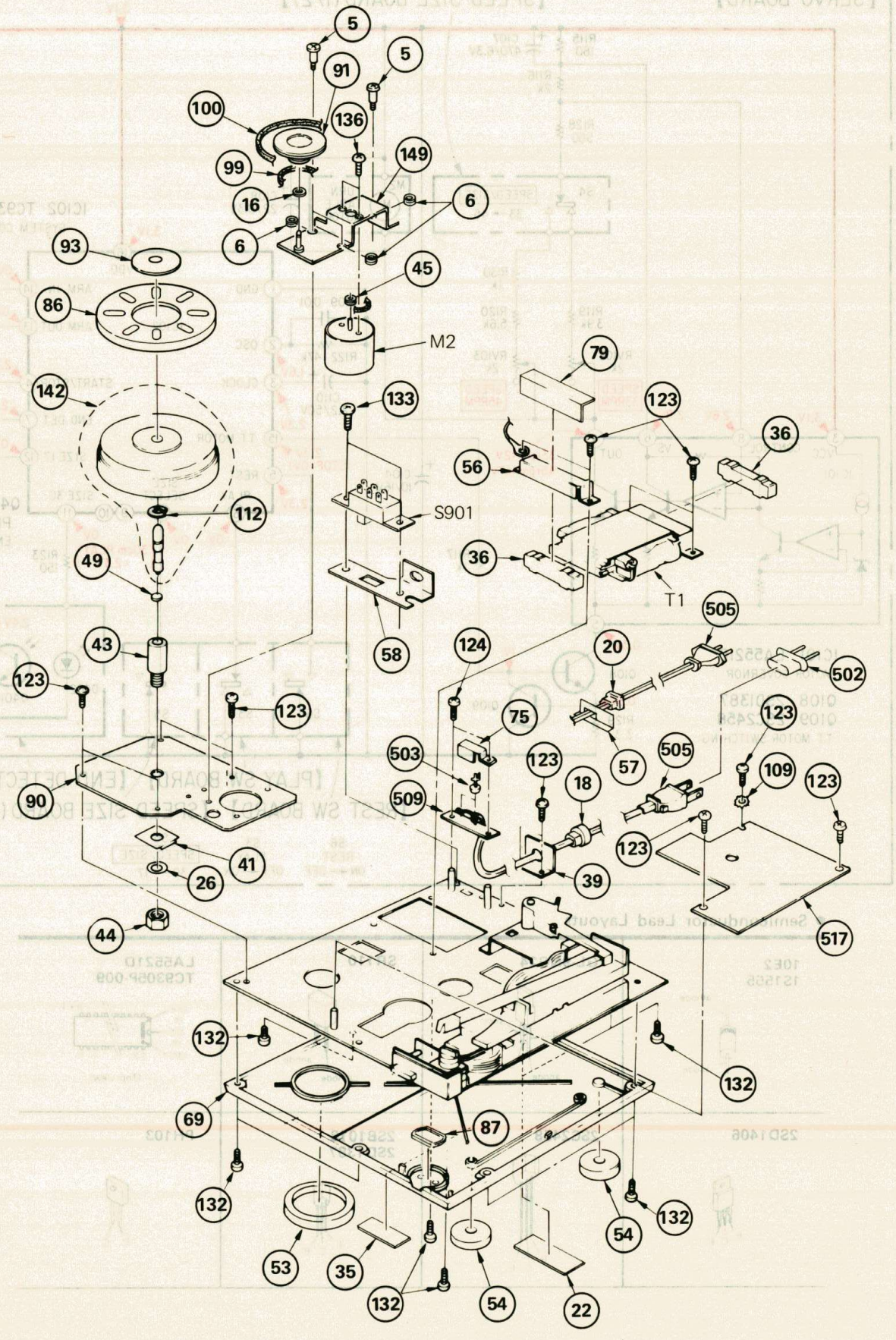


Note: All capacitors are in μF unless otherwise noted. All resistors are in Ω , $\text{k}\Omega$, or $\text{M}\Omega$ unless otherwise noted. Panel designation. \square - Push. \square - Adjustment for repair. \square - Part. Feedings are taken under 30 mm P.T.A. (50 kVA) and critical for safety. Replace only with original number.

Ref. No.	Part Name
21	POWER
22	START/STOP
23	PLAY
24	SPEED SIZE (45 RPM/33 RPM)
25	SPEED SIZE (30 RPM)
26	(17 cm/30 cm)
28	REST

(2).

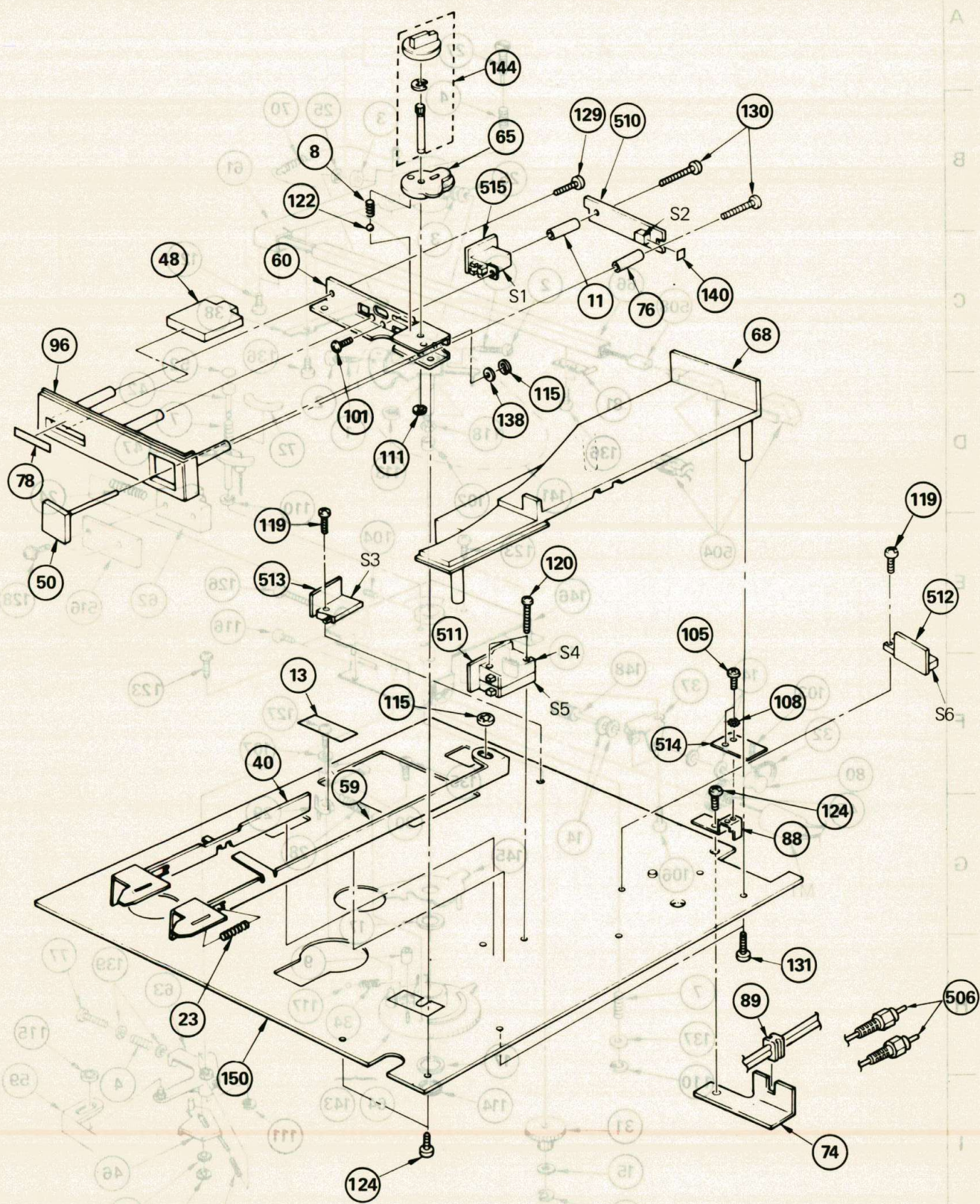
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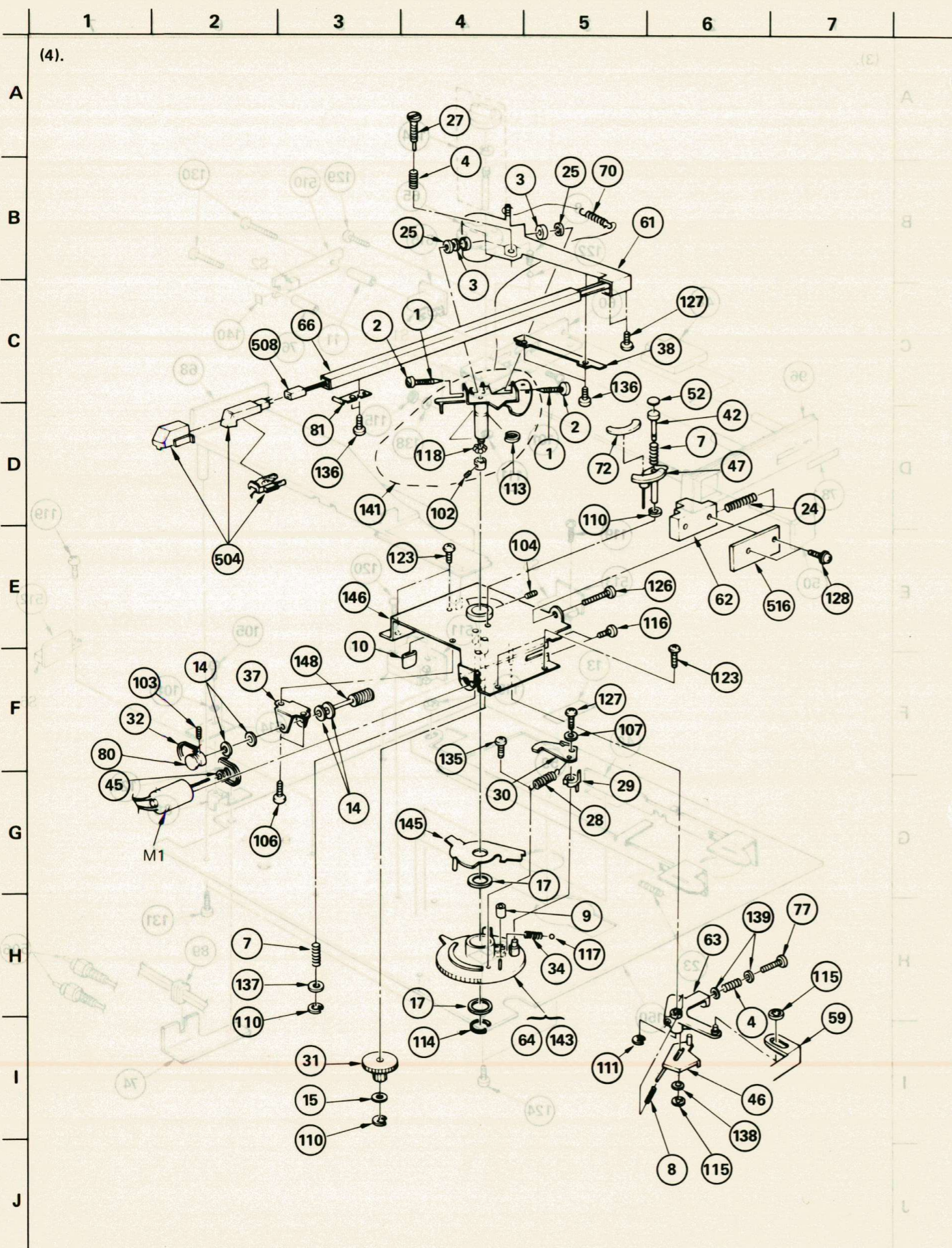


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GENERAL SECTION

No.	Part No.	Description
1	2-203-518-61	SCREW, PIVOT
2	2-203-519-00	NUT (A), LOCK, PIVOT
3	2-203-530-00	DAMPER
4	3-549-887-00	SPRING, COIL, COMPRISION
5	3-570-027-00	SCREW, MOTOR
6	3-570-118-00	CUSHION, MOTOR
7	3-573-150-00	SPRING, COMPRESSION
8	3-576-098-00	SPRING, COMPRESSION
9	3-579-008-00	RUBBER (S1), BRAKE
10	3-579-032-00	RUBBER, BRAKE
11	3-654-056-00	SPACER (2.6X7)
12	3-663-748-00	WASHER, SUS
13	3-701-030-00	LABEL, SERIAL NUMBER
14	3-701-437-11	WASHER
15	3-701-437-21	WASHER
16	3-701-438-21	WASHER
17	3-701-448-21	WASHER, POLYETHYLENE
18	3-701-682-00	(US,Canadian)...STOPPER, CORD
19	3-701-690-00	(UK)...LABEL (MADE IN JAPAN)
20	3-703-244-00	(AEP,UK)...BUSHING, CORD
21	3-703-705-01	STICKER, SONY SYMBOL (30)
22	3-703-845-01	(US,Canadian)..LABEL (N)(U/C), MAIN CAUTION
23	4-838-324-00	SPRING, COMPRESSION
24	4-861-965-00	SPRING, COMPRESSION
25	4-863-604-00	BEARING, PIVOT
26	4-870-945-00	RING (P9), O
27	4-873-347-00	SHAFT, ADJUSTMENT, HIGH
28	4-877-850-00	SPRING, TENSION
29	4-879-717-00	RESET BLOCK
30	4-879-718-00	CLUTCH, LEAD-IN
31	4-879-727-00	GEAR
32	4-879-751-00	BELT
33	4-879-761-11	HINGE
34	4-879-762-00	SPRING, COMPRESSION
35	4-881-683-00	(E)....LABEL, VOLTAGE
36	4-885-101-00	RUBBER, HOLDING, TRANSFORMER
37	4-885-103-00	SUPPORT, WORM SHAFT
38	4-885-106-00	PLATE, LOWER, ARM
39	4-885-107-00	(US,Canadian)...BRACKET (A), POWER CORD
40	4-885-108-00	LEVER, SWITCH
41	4-885-110-00	SPACER
42	4-885-117-00	SHAFT, BRAKE
43	4-885-125-00	BEARING, MOTOR
44	4-885-126-00	NUT
45	4-885-130-00	PULLEY

GENERAL SECTION

No.	Part No.	Description
46	4-885-131-00	PLATE, ADJUSTMENT
47	4-885-132-00	BLOCK, UP END DOWN
48	4-885-133-11	BUTTON, POWER
49	4-885-135-11	RETAINER, THRUST
50	4-885-136-00	BUTTON, S/S
51	4-885-138-00	CUSHION
52	4-885-139-00	PAD, BRAKE
53	4-885-143-00	SPACER (A), LEG
54	4-885-144-00	SPACER (B), LEG
55	4-885-145-00	PIECE, ARM LOCK
56	4-885-156-00	PLATE, HOLDING, TRANSFORMER
57	4-885-158-00	(AEP,UK)...BRACKET (B), POWER CORD
58	4-885-159-00	(E).....BRACKET (C), POWER CORD
59	4-885-163-00	LEVER, SELECT
60	4-885-164-00	BRACKET, CONTROL BLOCK
61	4-885-166-11	JOINT, PIPE
62	4-885-169-00	BLOCK, END ADJUSTMENT
63	4-885-170-00	LEVER, SELECTION
64	4-885-171-00	GEAR, CAM
65	4-885-172-00	CAM, SELECTION
66	4-885-173-00	PIPE, ARM
67	4-885-174-00	HOLDER, ADAPTOR
68	4-885-176-12	(RED).....FRAME, SUB
68	4-885-176-41	(BLACK)....FRAME, SUB
68	4-885-176-51	(SILVER)...FRAME, SUB
69	4-885-178-07	(AEP,UK)...PLATE, BOTTOM
69	4-885-178-16	(E).....PLATE, BOTTOM
69	4-885-178-26	(US,Canadian)...PLATE, BOTTOM
70	4-885-182-00	SPRING, TENSION
71
72	4-885-184-00	FELT, UP AND DOWN
73	4-885-186-00	BEARING, RADIAL
74	4-885-188-00	PLATE (B), JACK
75	4-885-197-00	(US,Canadian,AEP,UK)...PROTECTOR
76	4-885-199-00	SPACER
77	4-885-204-00	SCREW, R
78	4-885-213-00	(AEP)...LABEL, STAND-BY
79	4-885-214-00	(E)....PROTECTOR, POWER
80	4-885-215-00	PULLEY
81	4-885-217-00	SPRING, LEAF
82	4-905-501-01	PLATE (A), WEIGHT
83	4-905-502-01	PLATE (B), WEIGHT
84	4-905-503-01	NUT, PLATE
85	4-905-504-01	SLEEVE, CENTER
86	4-905-505-01	SHEET, ROTOR
87	4-905-506-01	ADAPTOR, SLIT

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.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.
- 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:

All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.
MF: μF, PF: μPF.

COILS

MMH : mH, UH : μH

SEMICONDUCTORS

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

GENERAL SECTION

Table with 3 columns: No., Part No., Description. Lists various mechanical parts like brackets, bushings, screws, and pulleys.

GENERAL SECTION

Table with 3 columns: No., Part No., Description. Lists various mechanical parts like screws, rotors, gears, and chassises.

ACCESSORY & PACKING MATERIAL

Table with 3 columns: No., Part No., Description. Lists accessories like bags, manuals, instructions, and spacers.

ELECTRICAL PARTS

Table with 3 columns: Ref.No., Part No., Description. Lists electrical components like diodes, capacitors, and ICs.

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.
Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.
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:

All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF: μF, PF: μμF.

COILS

MMH : mH, UH : μH

SEMICONDUCTORS

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

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.
Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.
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:

All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF: μF, PF: μμF.

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
Q101	8-729-201-78	TRANSISTOR 2SD1406
Q102	8-729-245-83	TRANSISTOR 2SC2458
Q103	8-729-245-83	TRANSISTOR 2SC2458
Q104	8-729-801-83	TRANSISTOR 2SB1013
Q105	8-729-801-83	TRANSISTOR 2SB1013
Q106	8-729-801-93	TRANSISTOR 2SD1387
Q107	8-729-801-93	TRANSISTOR 2SD1387
Q108	8-729-801-93	TRANSISTOR 2SD1387
Q109	8-729-245-83	TRANSISTOR 2SC2458
Q401	8-729-101-13	TRANSISTOR PH103
Q402	8-729-101-13	TRANSISTOR PH103
R101	1-246-413-00	CARBON 3.3 5% 1/4W
R102	1-246-413-00	CARBON 3.3 5% 1/4W
R103	1-246-413-00	CARBON 3.3 5% 1/4W
R104	1-247-847-00	CARBON 4.7K 5% 1/6W
R105	1-247-831-00	CARBON 1K 5% 1/6W
R106	1-247-831-00	CARBON 1K 5% 1/6W
R107	1-247-831-00	CARBON 1K 5% 1/6W
R108	1-247-831-00	CARBON 1K 5% 1/6W
R109	1-247-831-00	CARBON 1K 5% 1/6W
R110	1-247-831-00	CARBON 1K 5% 1/6W
R111	1-247-831-00	CARBON 1K 5% 1/6W
R112	1-247-831-00	CARBON 1K 5% 1/6W
R113	1-247-831-00	CARBON 1K 5% 1/6W
R114	1-247-831-00	CARBON 1K 5% 1/6W
R115	1-247-813-00	CARBON 180 5% 1/6W
R116	1-247-838-00	CARBON 2K 5% 1/6W
R117	1-247-831-00	CARBON 1K 5% 1/6W
R119	1-247-845-00	CARBON 3.9K 5% 1/6W
R120	1-247-849-00	CARBON 5.6K 5% 1/6W
R121	1-247-863-00	CARBON 22K 5% 1/6W
R122	1-247-871-00	CARBON 47K 5% 1/6W
R123	1-247-811-00	CARBON 150 5% 1/6W
R124	1-247-811-00	CARBON 150 5% 1/6W
R125	1-247-795-00	CARBON 33 5% 1/6W
R126	1-247-831-00	CARBON 1K 5% 1/6W
R128	1-247-825-00	CARBON 560 5% 1/6W
R129	1-247-771-00	CARBON 3.3 5% 1/6W
R130	1-247-831-00	CARBON 1K 5% 1/6W
R301	1-246-453-00	CARBON 150 5% 1/4W
RV101	1-226-235-00	RES, ADJ, CARBON 5K
RV102	1-226-234-00	RES, ADJ, CARBON 2K (33RPM)
RV103	1-226-234-00	RES, ADJ, CARBON 2K (45RPM)

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "A" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.
- 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:

All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.
MF:μF, PF:μμF.

COILS

MMH : mH, UH : μH

SEMICONDUCTORS

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

ELECTRICAL PARTS

Ref.No.	Part No.	Description
S1	1-553-909-00	SWITCH, PUSH (1 KEY)(POWER)
S2	1-553-856-00	SWITCH, KEY BOARD (START/STOP)
S3	1-552-532-00	SWITCH, PUSH
S4	1-552-532-00	SWITCH, PUSH (SPEED/SIZE) (45RPM/33RPM)
S5	1-552-532-00	SWITCH, PUSH (SPEED/SIZE) (17cm/30cm)
S6	1-552-532-00	SWITCH, PUSH
S901	Δ.1-552-535-00	(E)... SWITCH, POWER & VOLTAGE CHANGE
T1	Δ.1-447-435-00	(UC,Canadian)...TRANSFORMER, POWER
T1	Δ.1-447-438-00	(AEP, UK).....TRANSFORMER, POWER
T1	Δ.1-447-437-00	(E).....TRANSFORMER, POWER

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

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.