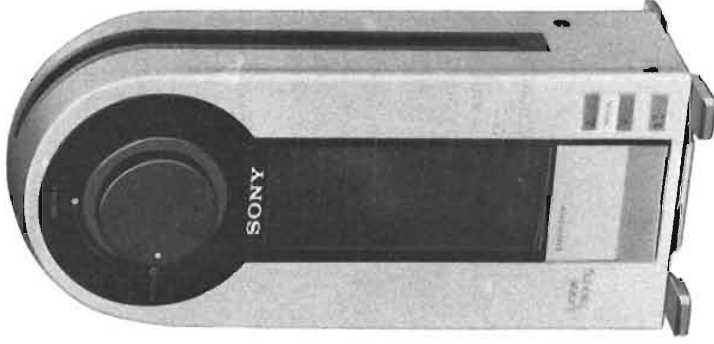


PS-F5

SERVICE MANUAL



US Model
AEP Model
E Model

Turntable

Platter
Motor
Drive system
Control system
Speed
Starting characteristics
Wow and flutter

Signal-to-noise ratio
Automatic system

Tonearm

Pivot-to-stylus length

Cartridge (VL-44GA)

Type
Frequency response
Channel separation
Output voltage
Tracking force
Stylus

Amplifier section

Outputs

9.15 cm (3 1/2 in.), strontium-ferrite
Linear torque BSL (brushless and slotless) motor
Direct drive
Variable reluctance control system
33 1/3 rpm, 45 rpm
Comes to nominal speed within a half revolution (33 1/3 rpm)
0.06% (WRMS)¹
±0.14% (DIN)²
59 dB (DIN B)
Lead-in, return, reject, arm up/down

Dynamic balanced, linear tracking, low mass type
37.5 mm (1 1/2 in.)

Moving magnet type
20-20,000 Hz ±3 dB
20 dB at 1 kHz
2.3 mV (1 kHz, 3.54 cm/s)
1.7 g
Sony ND-144G (0.5 mil diamond)

^{PHONES}
^{REC OUT} A.B (stereo minijacks)
Power output 20 mW + 20 mW
(at 10% harmonic distortion, 32 ohms load)
Load impedance 8-300 ohms

SPECIFICATIONS

General

Battery life (output 0.5 mW + 0.5 mW, headphones, 30 cm records, 33 1/3 rpm, continuous record play in the horizontal position) (hours)

Sony New Super battery SUM-3 (NS) (Eveready Heavy Duty battery No. 1215)	3.5
Eveready Alkaline battery No. E91	8.5

Power requirements

6 V dc: four batteries, IEC designation R6 (size AA)
Rechargeable battery pack BP-61 (optional)
DC IN 6 V jack acceptor.
AC power adaptor:
Refer to the following chart to choose the correct adaptor for your area.

Country	AC power line voltage	Optional ac power adaptor
The USA	120 V ac, 60 Hz	AC-9W
Continental European countries	220 V ac, 50 Hz	AC-456C available in Continental European countries
Other countries	120 V ac (110, 220 or 240 V ac, adjustable by Sony personnel), 50/60 Hz 110, 120, 220 or 240 V ac, adjustable, 50/60 Hz	AC-122 available in Japan AC-4A available in other countries

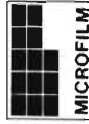
Car battery cord (optional)
DCC-127A for use on 12 V car battery

Approx. 108 × 283 × 76 mm (width) (4 1/4 × 10 3/4 × 3 1/4 in.) incl. projecting parts and controls
Approx. 1.7 kg (3 lb 12 oz) incl. batteries

Dimensions

Weight

STEREO TURNTABLE SYSTEM



SONY®

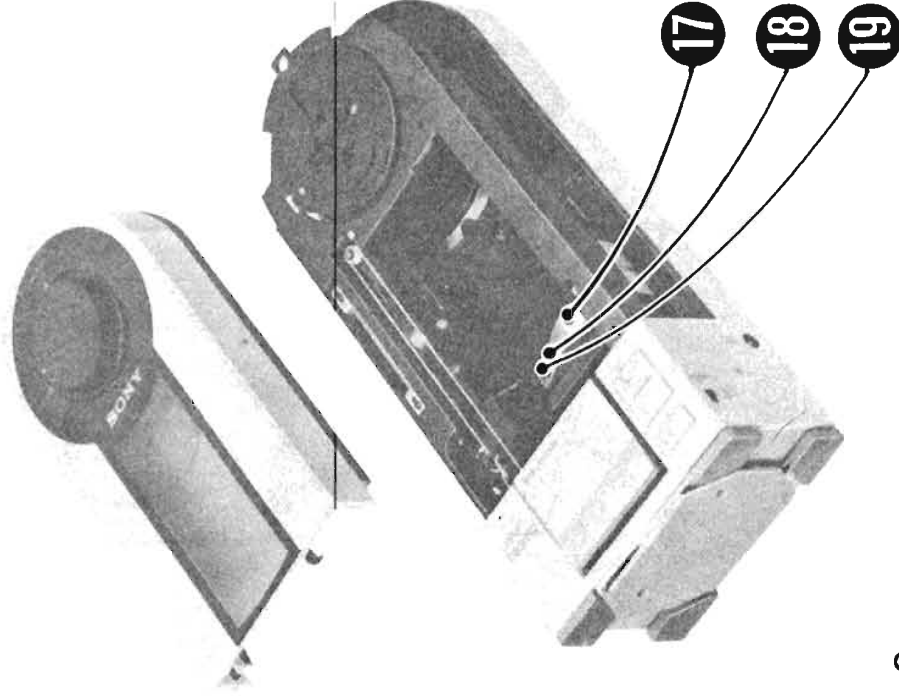
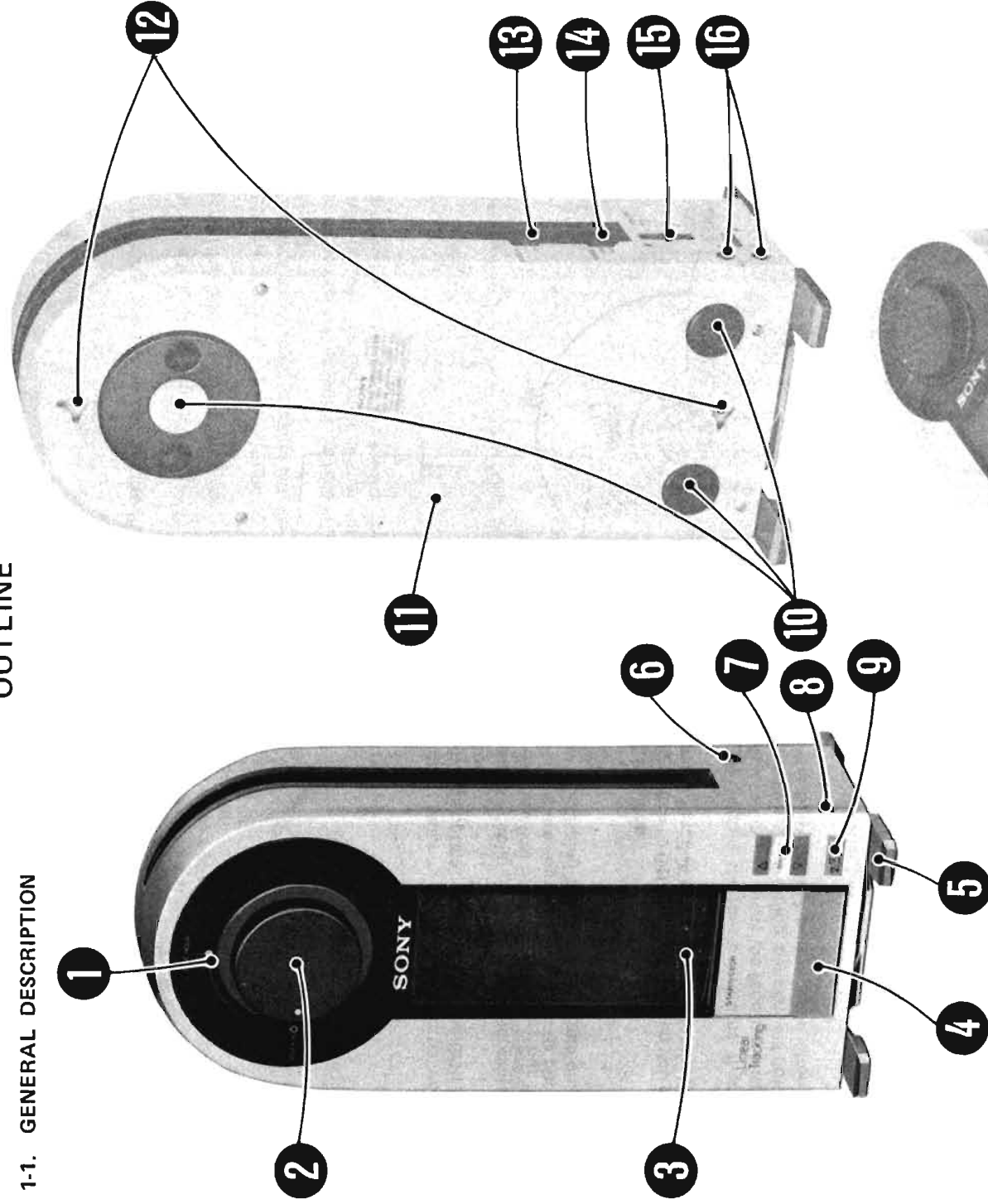
AUD

FEATURES

- You can take the PS-F5 with you anywhere, since the set is compact and lightweight, and operates on batteries. Its smart, innovative design allows it to be used standing upright, lying down or hanging on a wall.
- The PS-F5's built-in headphone amplifier allows two pairs of headphones to be connected directly to the set, while the built-in equalizer amplifier allows the set to be connected directly to a radio cassette recorder.
- This turntable system is equipped with a linear tracking tonearm. You do not have to adjust tonearm balance.
- The linear torque BSL (brushless and slotless) direct drive servo motor has a high signal-to-noise ratio.
- When you select the record size and speed, place the record and set the DISC HOLD knob to DISC HOLD, automatic record play and stylus up/down are operated by the "feather-touch" function buttons. When the play is finished, the tonearm automatically returns to the rest position.
- A muting system activates when the tonearm is lifted and is deactivated after the tonearm lowers onto a record so there is no need to turn the volume down every time the stylus is placed on a record.
- A record cleaning brush built under the tonearm cleans the surface of the record while it is playing.

SECTION 1 OUTLINE

1-1. GENERAL DESCRIPTION



PARTS IDENTIFICATIONS

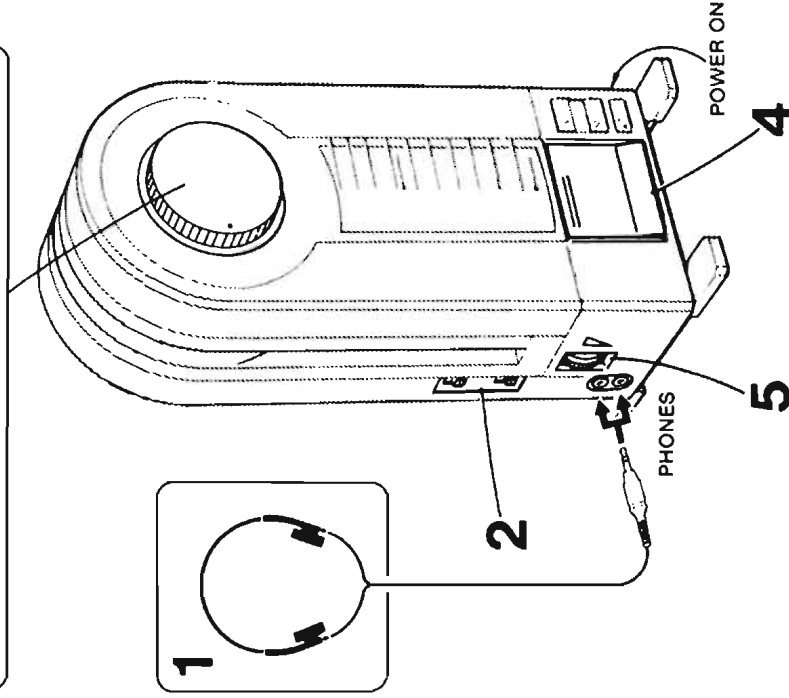
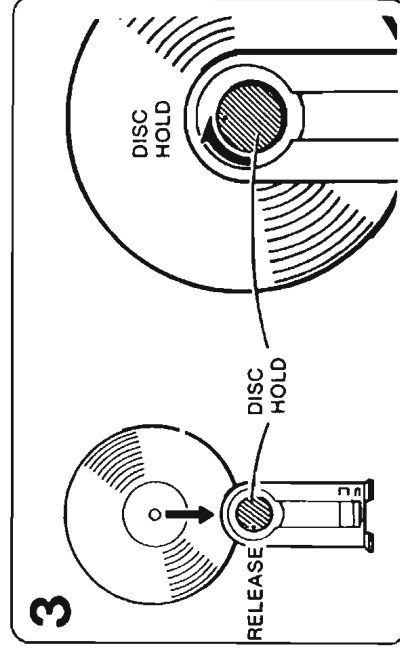
- 1 Disc holder
- 2 DISC HOLD knob
- 3 OPR/BATT (operation/battery) indicator
- 4 START/STOP button
- 5 Feet
- 6 DC IN 6V (external power input) jack
- 7 MANUAL (arm transport) buttons
- 8 POWER switch
- 9 $\nabla \nabla$ (arm down/up) button
- 10 Battery compartment
- 11 Rubber cushions
- 12 Openings to allow hanging on a wall
- 13 SIZE selector
- 14 SPEED selector
- 15 VOLUME control
- 16 PHONES/REC OUT (headphones/recording out) jacks
- 17 Tonearm
- 18 Cartridge
- 19 Stylus

RECORD PLAYING

AUTO PLAY

Before starting, remove the dust guard band and set the **POWER** switch to **ON**.

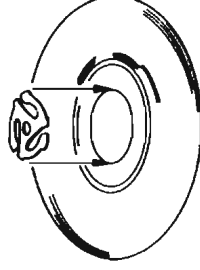
- 1 Connect the headphones with a stereo miniplug to **PHONES REC OUT** jack.
- 2 Set the **SIZE** selector and the **SPEED** selector depending on the record.
- 3 Make sure that the **DISC HOLD** knob is set to **RELEASE**. Insert the record with the desired side facing you and set the **DISC HOLD** knob to **DISC HOLD**.
- 4 In general 17-cm records can be played without a hole adaptor. Press the **START/STOP** button. The record will start rotating, and the tonearm will move and lower onto the record. Play will begin.
- 5 Adjust the volume.



When the tonearm reaches the end of the record, the record will stop rotating and the tonearm will automatically return.

Notes

- Do not let your hand or objects nearby touch the record during play.
- 25-cm records cannot be played.
- If the record is badly warped, it may be impossible to play it because the rotation will be distorted.
- If a 17-cm record does not rotate or rotates irregularly, use the supplied 45-rpm adaptor.



- If a 30-cm record rotation is irregular or distorted sound is heard when the PS-F5 stands upright, play the record with the PS-F5 in the horizontal position.
- You can connect a second pair of stereo headphones having the same impedance as the first one to the extra **PHONES REC OUT** jack.
- If your headphones are equipped with a stereo phone plug, use an optional Sony PC-33 plug adaptor (stereo miniplug ↔ stereo phone jack).

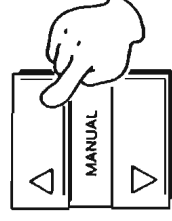
About the POWER switch

Normally set this switch to **ON**. Set to **OFF** when you carry the set. Even if you touch the function buttons inadvertently, power will not be supplied.

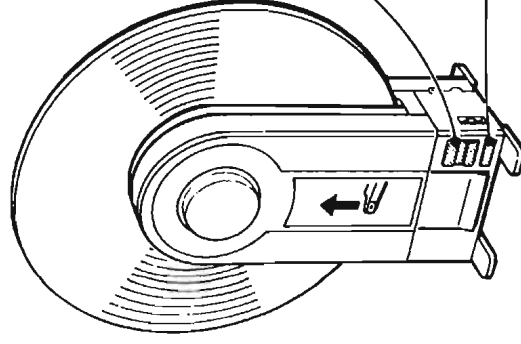
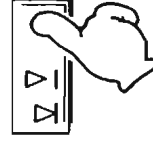
Do not set it to **OFF** before the tonearm returns. If you do so, the next time you set it to **ON** and press the function button, the tonearm will automatically start returning, but play will not begin. If this happens, press the **START/STOP** button again after the tonearm has returned.

TO BEGIN RECORD PLAY AT A PARTICULAR POINT

1 Move the tonearm over the record to your desired point by pressing the **MANUAL Δ** (forward) button. For fine adjustments, press and immediately release the **Δ** button or **MANUAL ∇** (back) button.



2 Press the **Σ ∇** button. The tonearm will lower onto the record, and play will begin.



When the tonearm reaches the end of the record, the record will stop rotating and the tonearm will return to its rest position.

TO STOP DURING PLAY

Press the START/STOP button. The record rotation will stop and the tonearm will return to its rest position.

To start the play again, press the START/STOP button after the tonearm has returned.

TO LIFT UP THE TONEARM DURING PLAY

Press the ∇ button. The tonearm lifts up from the record while the record is rotating. You can restart the play at about the same point by pressing the ∇ button again. This is useful when you want to stop the play briefly.

TO MOVE TO A DIFFERENT PART OF A RECORD DURING PLAY

1 Move the tonearm to another point by pressing the MANUAL Δ or ∇ button. To play a selection ahead, press the Δ button. To play a previous selection, press the ∇ button.

2 Press the ∇ button. The tonearm will lower onto the record and play will begin.

WHEN PLAY IS FINISHED

Set the DISC HOLD knob to RELEASE and remove the record. Remember to replace the supplied dust guard band on the set.

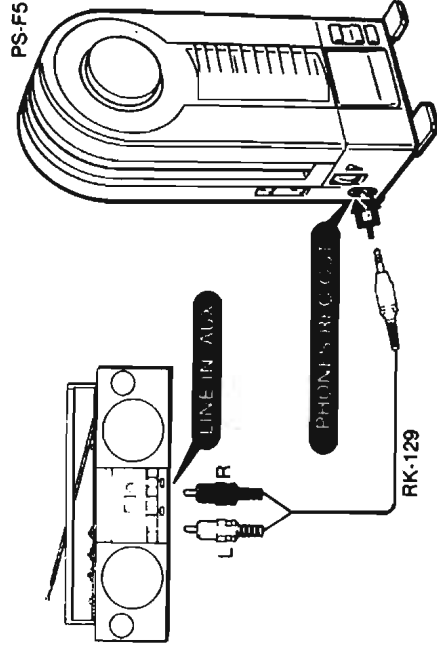
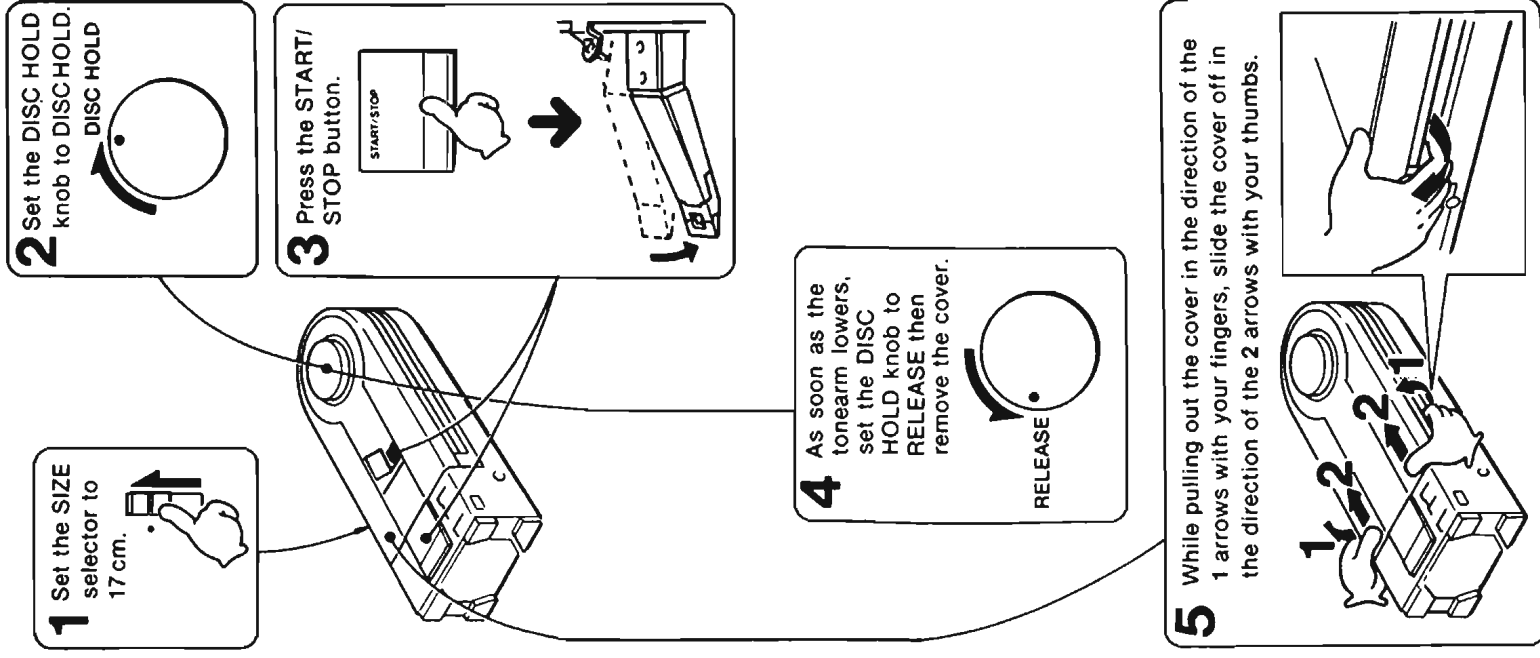
TO CONNECT TO A RADIO CASSETTE RECORDER

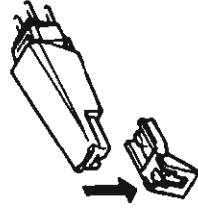
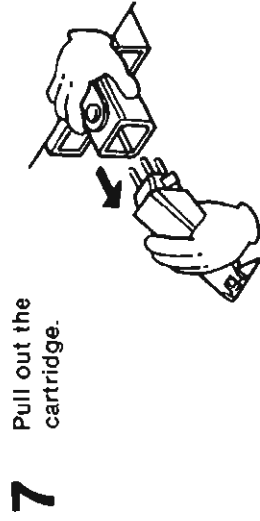
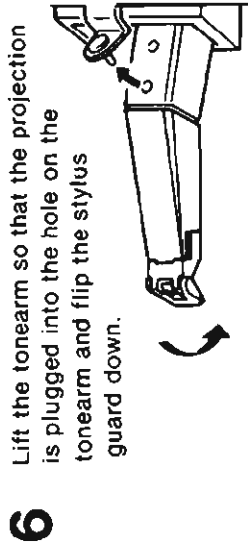
- Turn off a radio cassette recorder before making connections.
 - Be sure to insert the cable connectors firmly into the jacks. Loose connections may cause hum and noise.
 - Leave a little slack in the connecting cord to allow for inadvertent shock or vibration.
 - Use the supplied RK-129 connecting cord.
 - White phono plug to L terminal
 - Red phono plug to R terminal
 - Set the VOLUME control of the PS-F5 from 3 to 6.
- If your radio cassette recorder is equipped with a LINE IN/PHONO input selector, set it to LINE IN.
- The program on a disc can be recorded on a radio cassette recorder. A small stereo cassette recorder can also be connected. If the cassette recorder is equipped with a LINE IN jack (stereo minijack), use an optional Sony RK-136 connecting cord. If the cassette recorder is equipped with a MIC jack (stereo minijack), use an optional Sony RK-134 connecting cord.

MAINTENANCE

Stylus

Before playing a record, clean the stylus with a soft brush or the supplied brush.





Brush the stylus from back to front. Never attempt to clean the stylus with your finger tip. If a fluid stylus cleaner is used, make sure not to moisten the stylus too much.

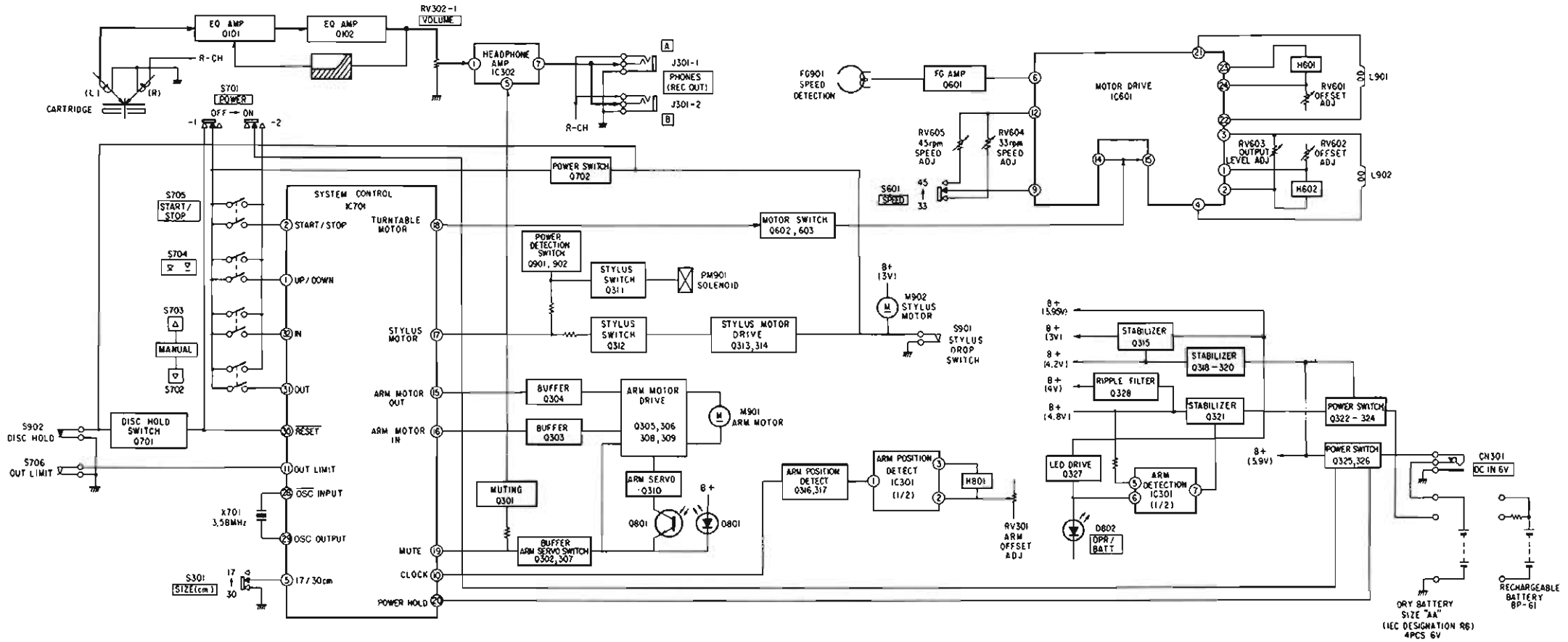
Replacing the stylus

Replace the stylus every 400 hours of use. For the replacement stylus, use the Sony ND-144G (optional). Detach the cartridge, then remove the stylus. Handle the stylus carefully as it is very delicate. Install a new replacement stylus in the cartridge and then plug the cartridge into the tonearm. Replace the cover and return the tonearm to its rest position.

If there is a line of dust running across the record

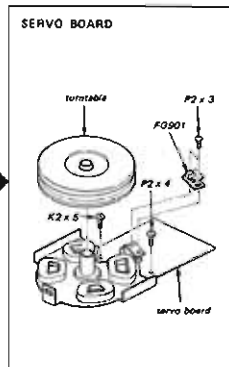
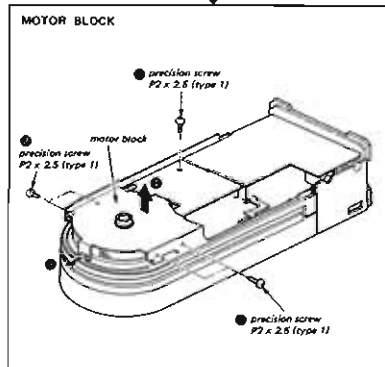
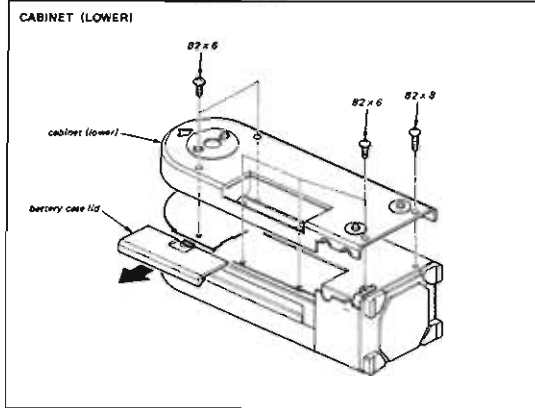
A line of dust appearing on the record after the record has been played has probably been left there by the dusty record cleaning brush (which is under the tonearm). Clean the record cleaning brush with the supplied small brush.

1-2. BLOCK DIAGRAM

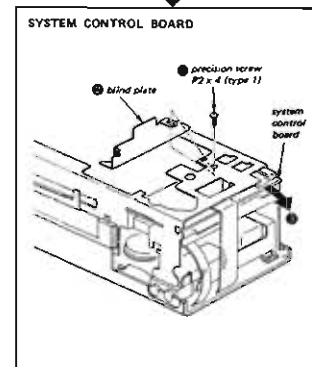
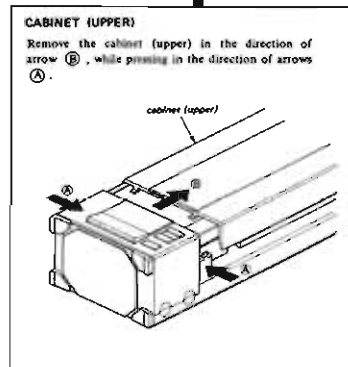
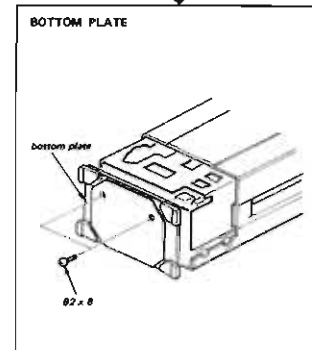
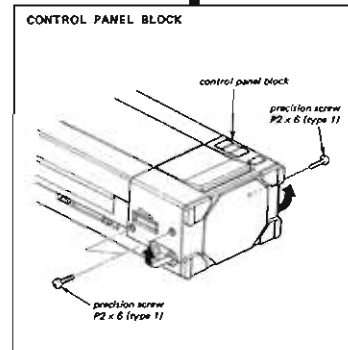


SECTION 2 DISASSEMBLY

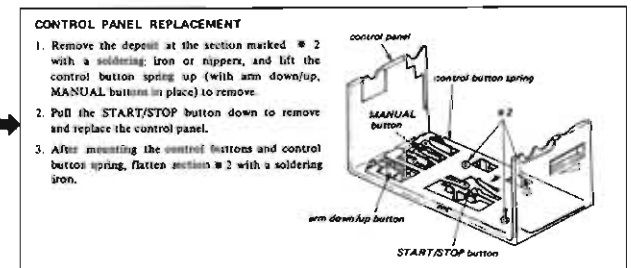
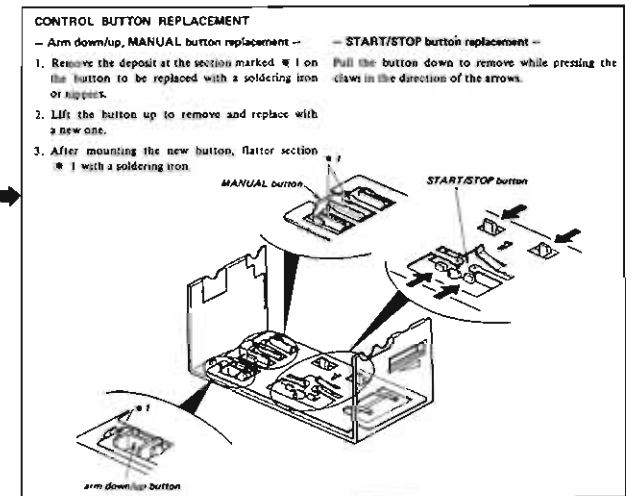
2-1. REMOVAL Note: Follow the disassembly procedure in the numerical order given.



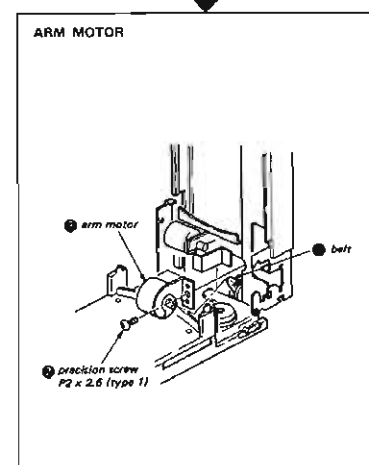
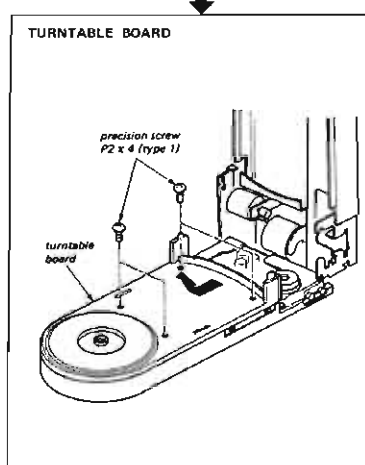
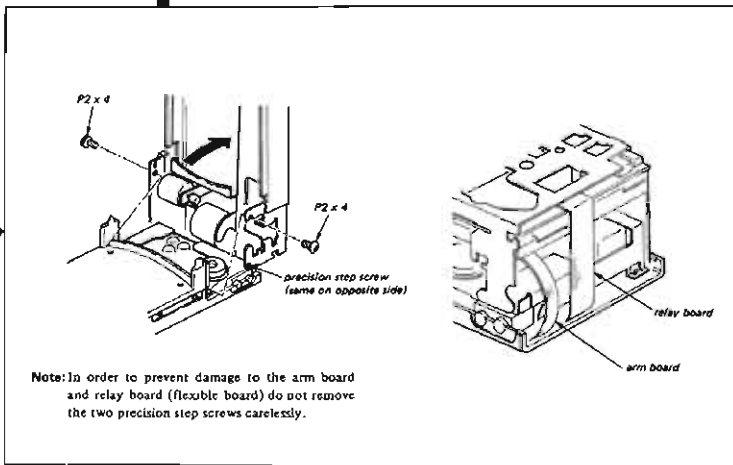
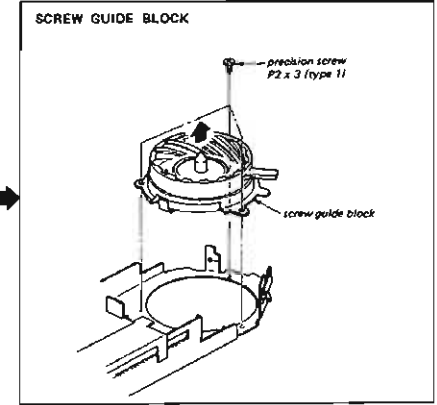
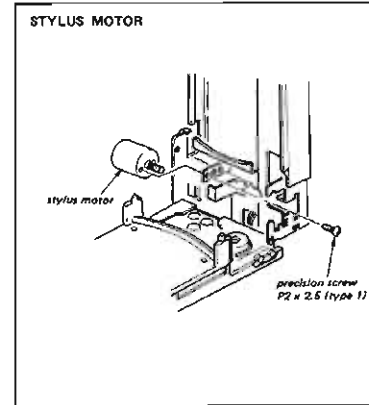
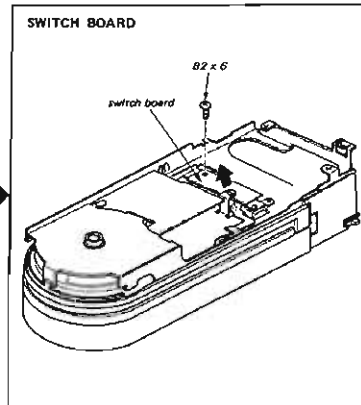
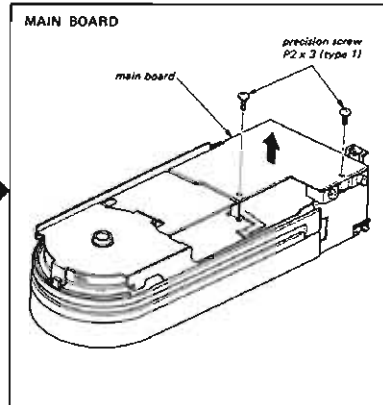
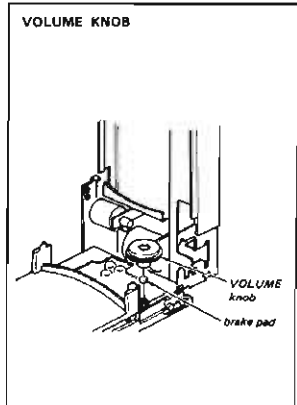
-9-



-10-



-11-



SECTION 3 ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

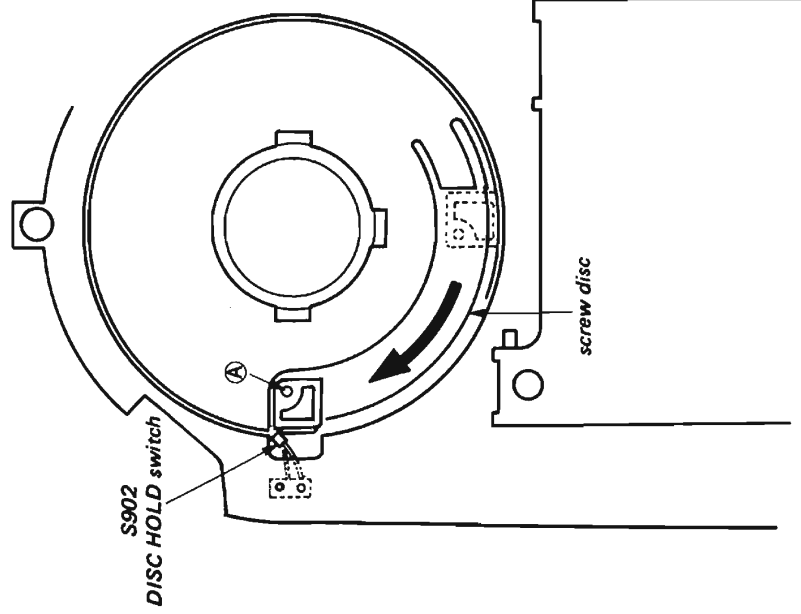
Preparation:

Perform as follows to operate the unit with the cabinet (upper) removed.

1. After placing a record, rotate the screw disc in the direction of the arrow as shown below, and lock the record.

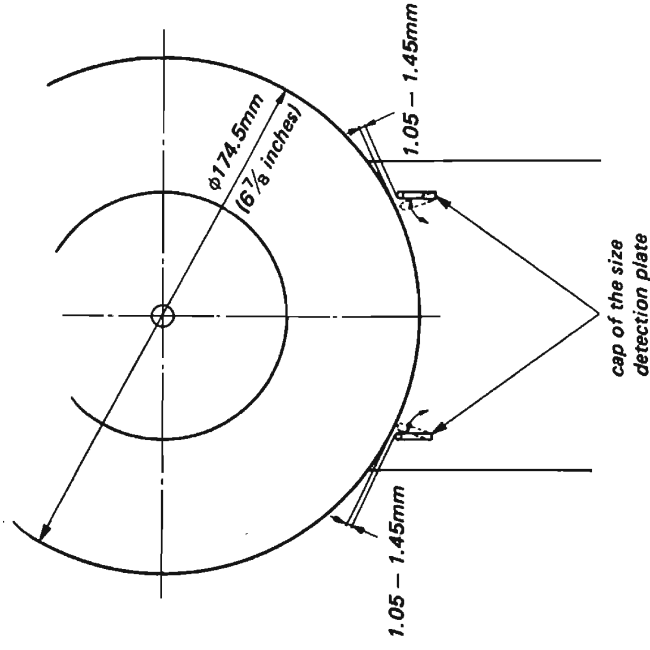
2. Push the actuator **(A)** of the DISC HOLD switch (S902) to turn the switch on with plastic tape. After the adjustment, remove the plastic tape.

Note: The unit does not operate even if each control button is pushed unless S902 turns on.



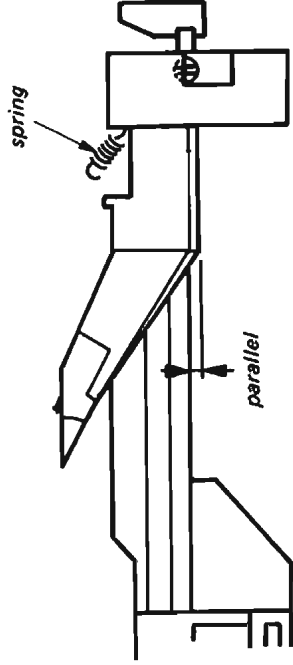
17cm Size Detection Plate Adjustment

1. SIZE switch: 17
2. Set a 17cm record (diameter: 174.5mm).
3. Adjust the caps by bending to the left and right so that the clearance between the caps and the record is 1.05 – 1.45mm.

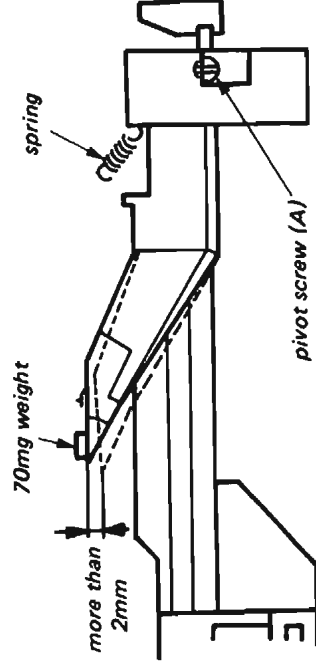


Vertical Balance and Sensitivity Adjustment

1. With the spring removed, confirm that the arm is balanced, as shown in the figure.

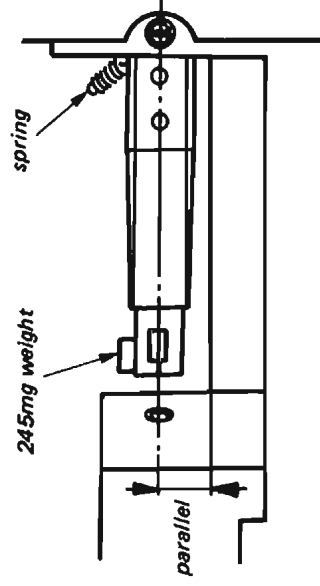


2. Adjust the pivot screw (A) so that the stylus tip drops more than 2mm when a 70mg weight (use washer, etc.) is placed on the stylus tip.
3. After adjustment, secure the pivot screw (A) with screw lock.
4. Mount the spring.

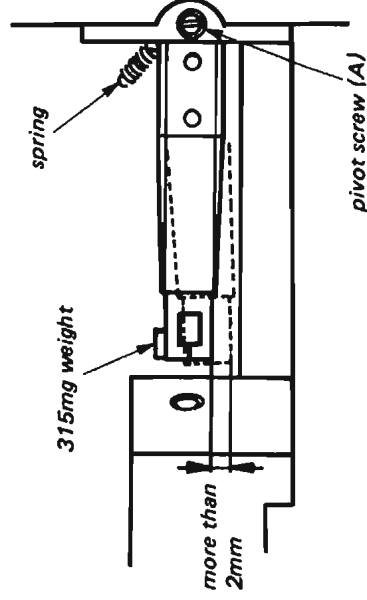


Horizontal Balance and Sensitivity Adjustment

1. With the spring removed, confirm that the arm is balanced when a 245mg weight is placed on the stylus tip, as shown in the figure.

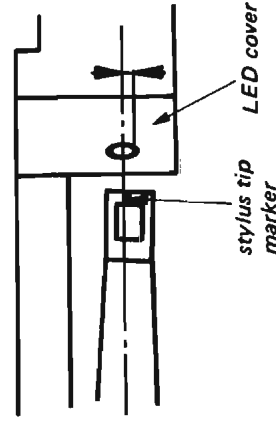


2. Adjust the pivot screw (A) so that the stylus tip drops more than 2mm when a 315mg weight is placed on the stylus tip.
3. After adjustment, secure the pivot screw (A) with screw lock.
4. Mount the spring.

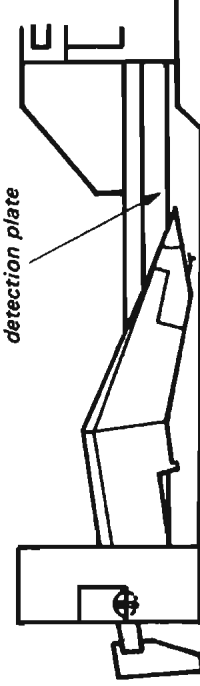


Arm Operation Point Check

1. SPEED switch: 33
SIZE switch: 30
2. Set a 30cm record (see page 16).
3. Press the START/STOP button, and confirm that the arm motor goes ON/OFF when the stylus is led in, with the stylus tip marker in the range shown in the figure.

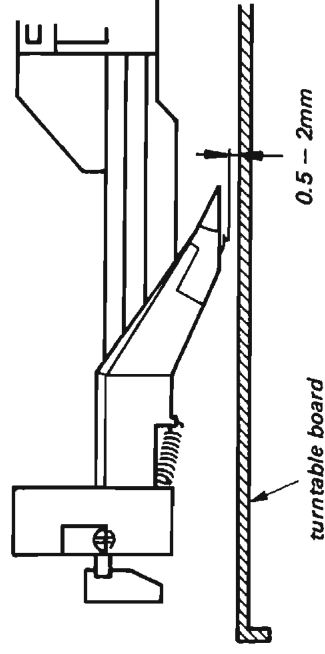


4. If it is not in the range shown, bend the detection plate to adjust.

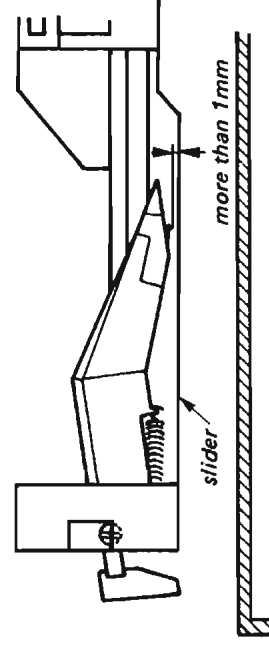


Stylus Tip Height Check

1. With no record placed, turn the DISC HOLD switch (S902) on (see page 16).
2. Press the arm down/up button and lower the arm.
3. At this time, confirm that the clearance between the stylus tip and turntable board surface is 0.5 - 2mm.



4. Press arm down/up button and raise the arm.
5. At this time, confirm that the clearance between the stylus tip and bottom of the slider is more than 1mm.



Drop Point Check

1. SPEED switch: 45
SIZE switch: 17
2. Set a 17cm test record (4RS-1170) (see page 16).
3. Press the START/STOP button and confirm that the drop point is 10 – 19 counts.
4. Press the START/STOP button and return the arm.
5. SPEED switch: 33
SIZE switch: 30
6. Press the DISC HOLD button and change to a 30cm test record (YFSC-16).
7. Press the START/STOP button and confirm that the drop point is 8 – 19 counts.
8. Perform this check with the set both standing up and lying down.

Return Position Check

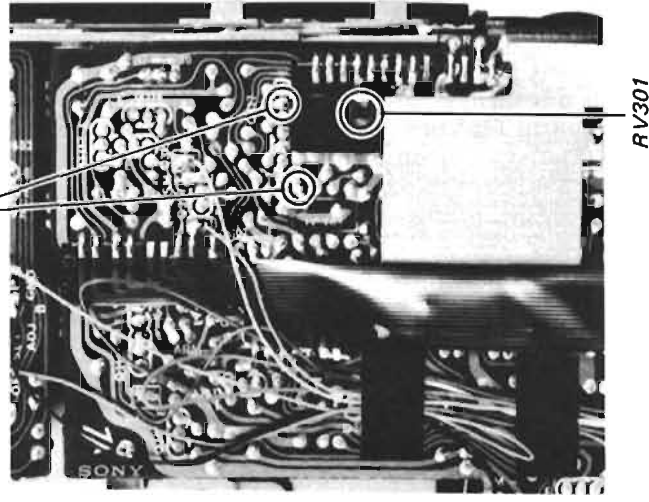
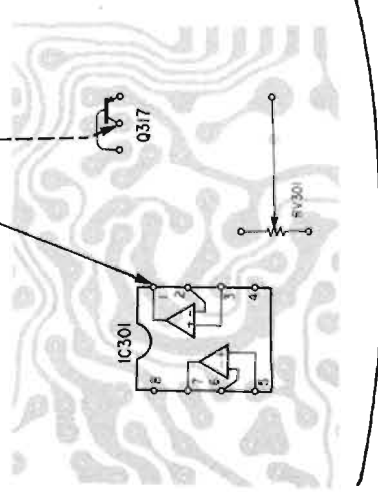
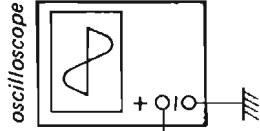
1. SPEED switch: 45
SIZE switch: 17
2. Set a 17cm test record (4RS-1170) (see page 16).
3. Press MANUAL (Δ) button and place the arm near the innermost circumference.
4. Press the arm down/up button to lower the arm, and check that the return position is 23 – 28 counts.
5. Press the START/STOP button and return the arm.
6. SPEED switch: 33
SIZE switch: 30
7. Press the DISC HOLD button and change to a 30cm test record (YFSC-16).
8. Press MANUAL (Δ) button and place the arm near the innermost circumference.
9. Press the arm down/up button to lower the arm, and check that the return position is 9 – 12 counts.
10. Perform this check with the set both standing up and lying down.

3-2. ELECTRICAL ADJUSTMENTS

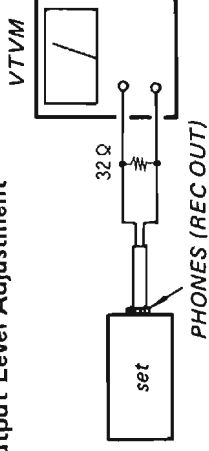
Arm Count Offset Adjustment

1. SPEED switch: 33
SIZE switch: 30
DISC HOLD knob: DISC HOLD
2. Press the MANUAL (Δ) button for about 0.5 seconds and put the arm into waiting state.
3. Adjust RV301 so that IC301 pin ① output voltage is 0.17 – 0.23V at this time.
4. Next, press the MANUAL (Δ) button continuously and check that Q317 collector voltage changes from 0V to 3.2 – 3.8V at 17cm record drop point position.

Adjustment Location: main board



Play Output Level Adjustment



1. SPEED switch: 33
SIZE switch: 30
2. Set a 30cm test record (YFSC-16) and turn the DISC HOLD knob fully clockwise.
3. Play the 1kHz portion of the test record and adjust the VOLUME control so that L-CH PHONES level is 0.17V (–13dB).
4. At this time, confirm that the VOLUME control scale and level difference between channels are the adjustment values.

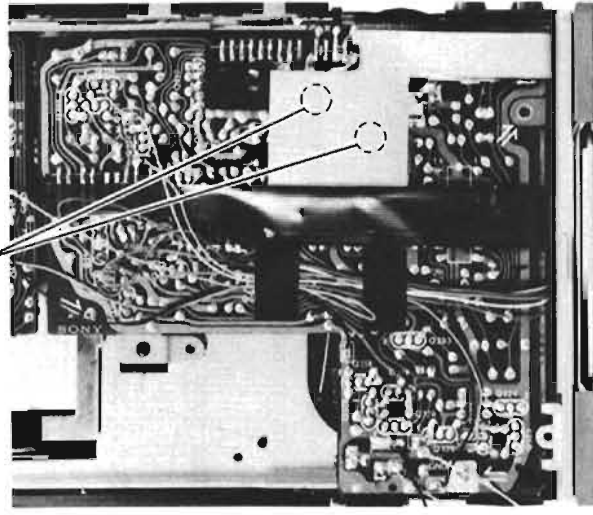
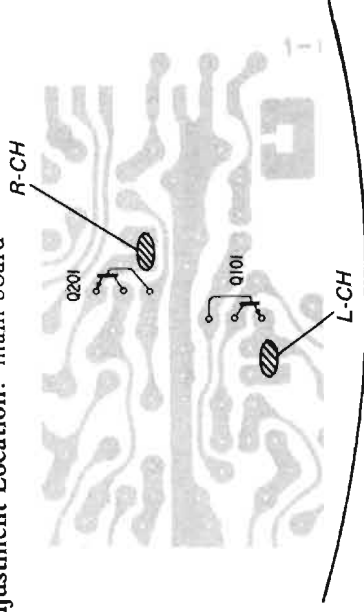
pattern	PHONES level
open	down
short	up

Adjustment Value:

VOLUME control scale: 3.5 – 5.5

Level difference between channels: less than 3dB

Adjustment Location: main board

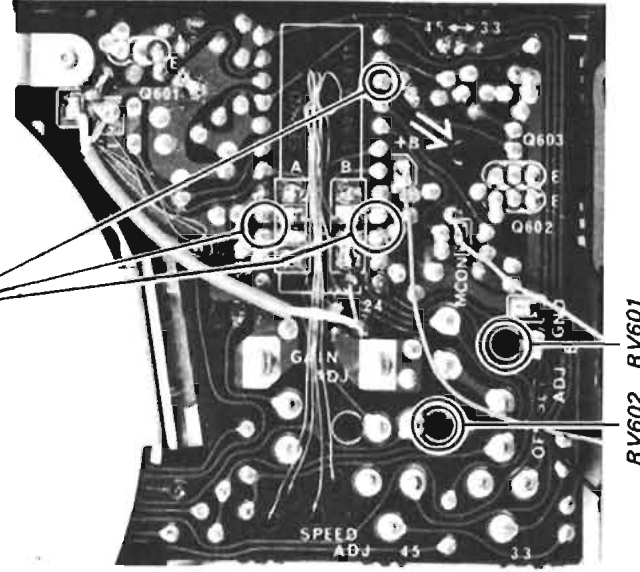
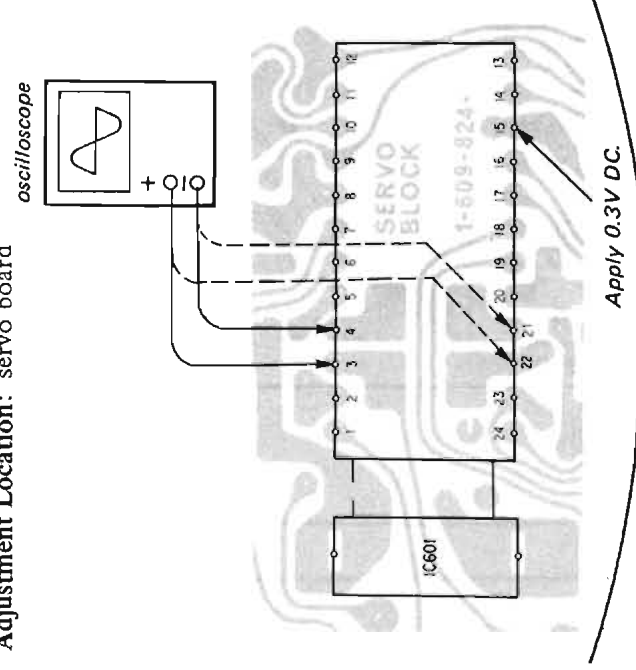


Servo Offset Adjustment

1. With POWER switch off, remove the motor block from the set and take off the turntable (see page9).
2. POWER switch: ON
DISC HOLD knob: DISC HOLD
3. Apply 0.3V DC to IC601 pin (15) (play mode).
4. Adjust RV602 so that the voltage between IC601 pins (3) and (4) is $0 \pm 3\text{mV}$.
5. In the same way, adjust RV601 so that the voltage between IC601 pins (21) and (22) is $\pm 3\text{mV}$.

Note: When the turntable is mounted, turn POWER switch off.

Adjustment Location: servo board

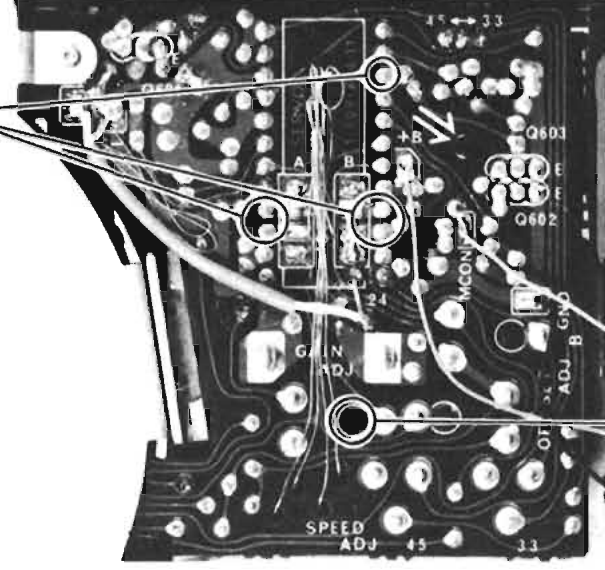
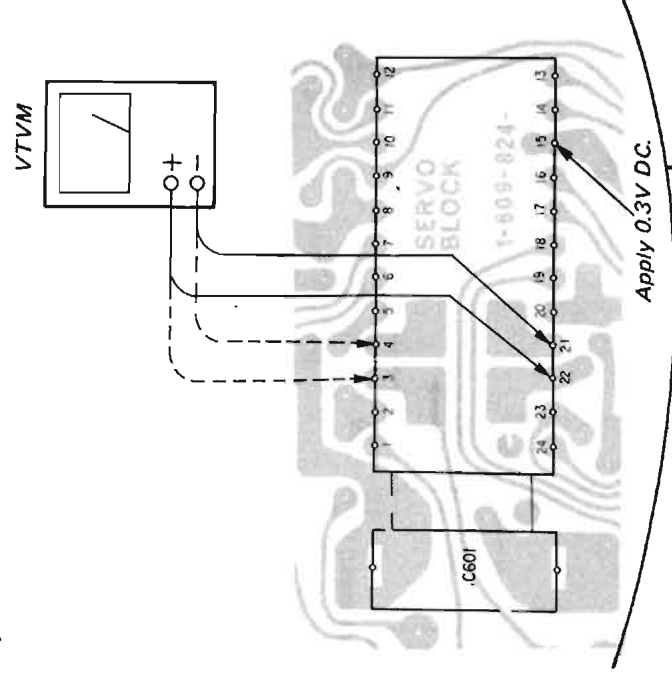


RV602 RV601

Servo Output Level Adjustment

1. SPEED switch: 33
SIZE switch: 30
2. Apply 0.3V DC to IC601 pin (15) and rotate the motor.
3. Measure the output level between IC601 pins (21) and (22).
4. Next, measure the output level between IC601 pins (3) and (4), and adjust RV603 so that the difference between the two output levels is -1.5 to 1.5dB .

Adjustment Location: servo board

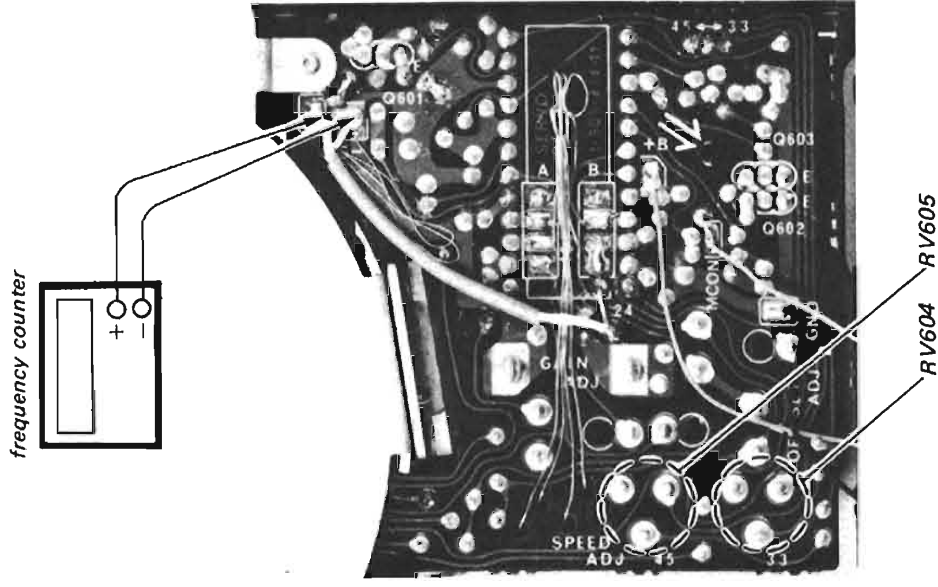


RV603

Servo Speed Adjustment

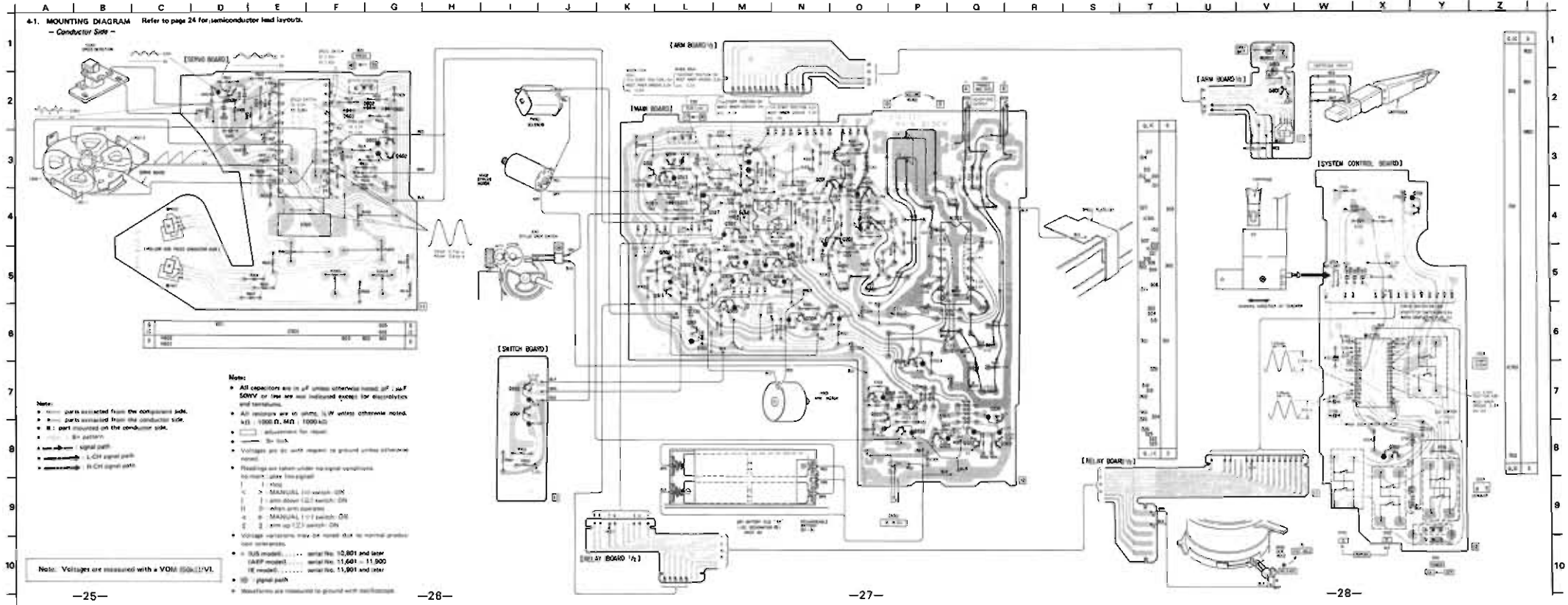
1. SPEED switch: 33
DISC HOLD knob: DISC HOLD
2. When rotate the turntable, adjust RV604 so that FG output frequency is 338Hz.
3. SPEED switch: 45
4. Adjust RV605 so that FG output frequency is 456Hz.

Adjustment Location: servo board

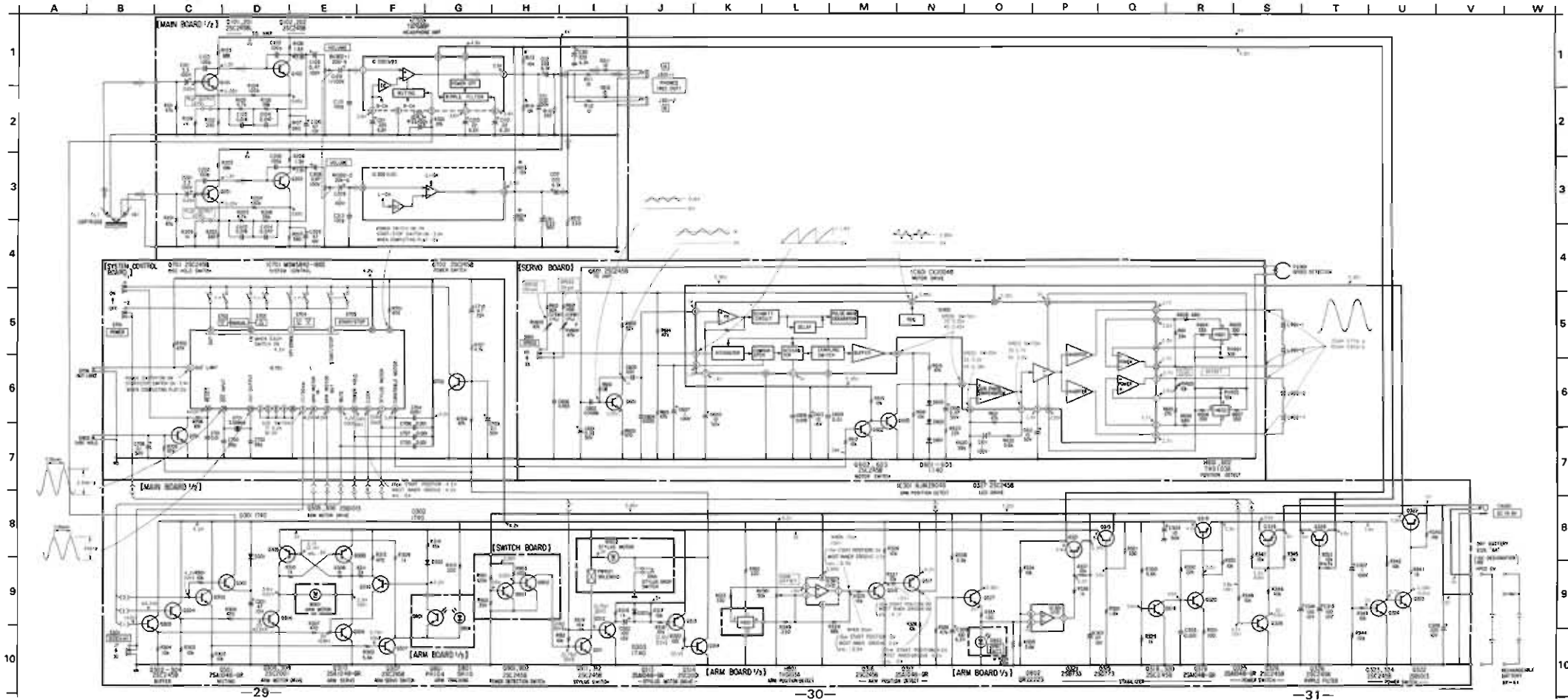


SECTION 4
DIAGRAMS

4-1. MOUNTING DIAGRAM Refer to page 24 for semiconductor lead layouts.
— Conductor Side —

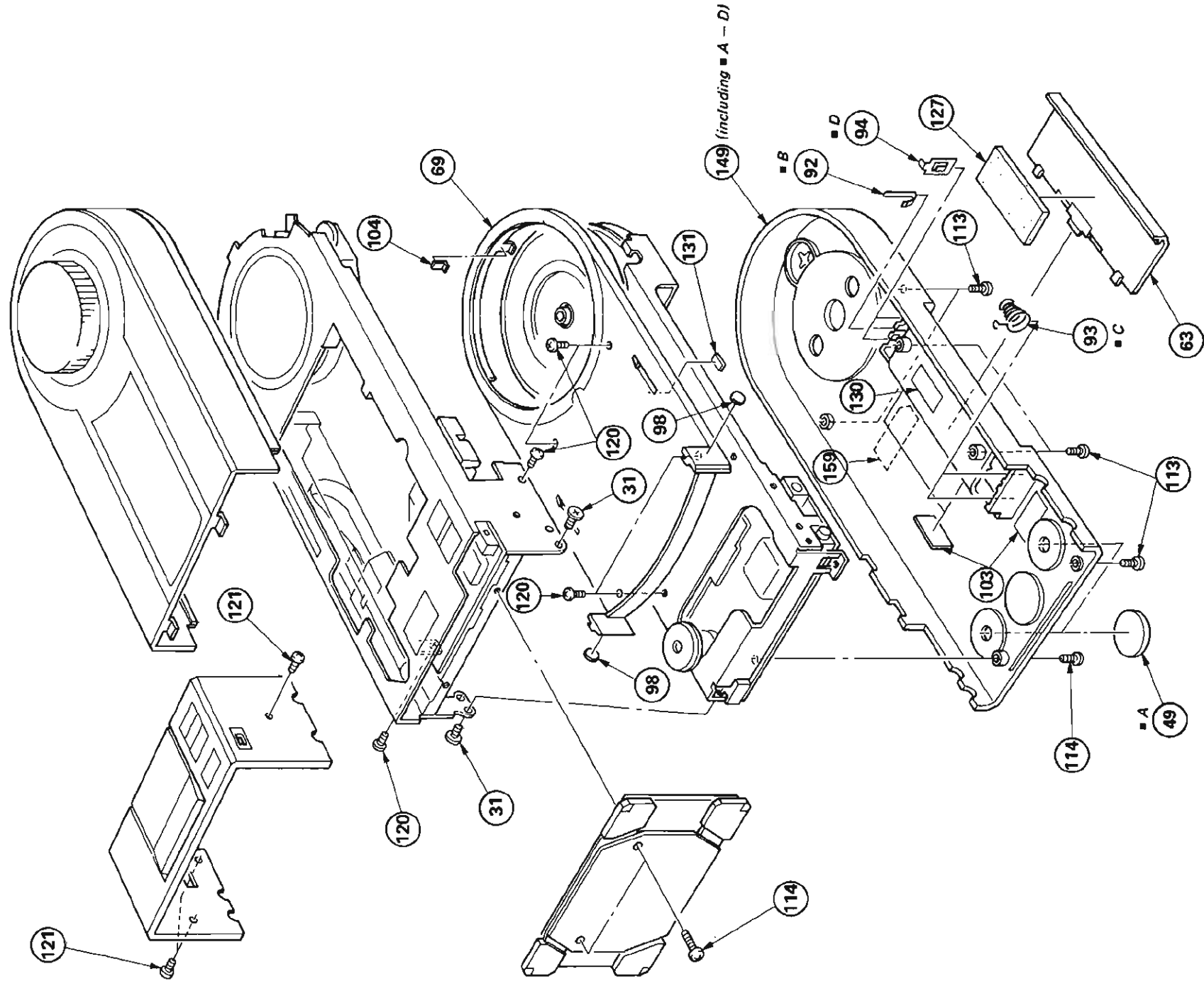


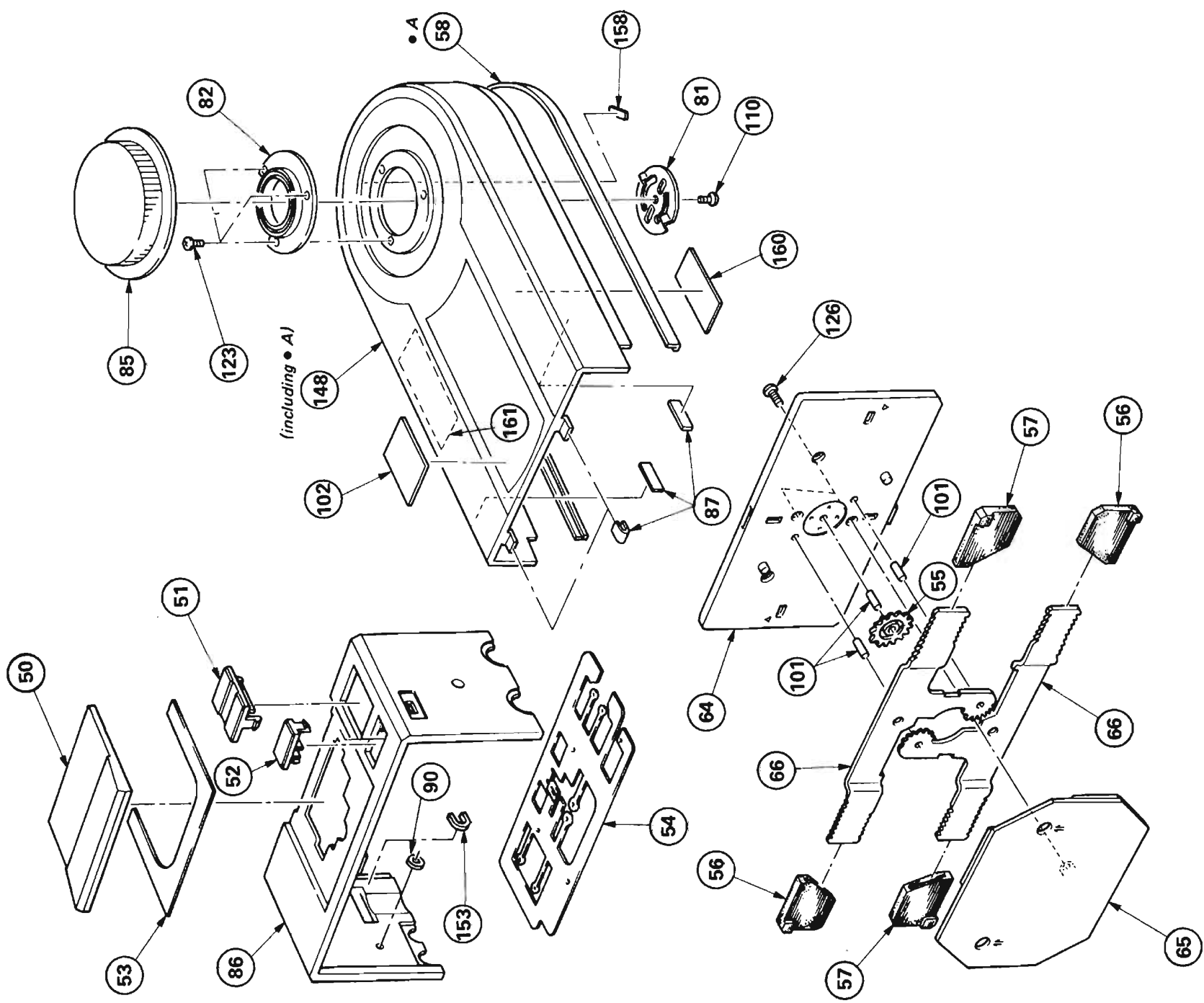
4-2. SCHEMATIC DIAGRAM (Refer to page 26 for notes.)

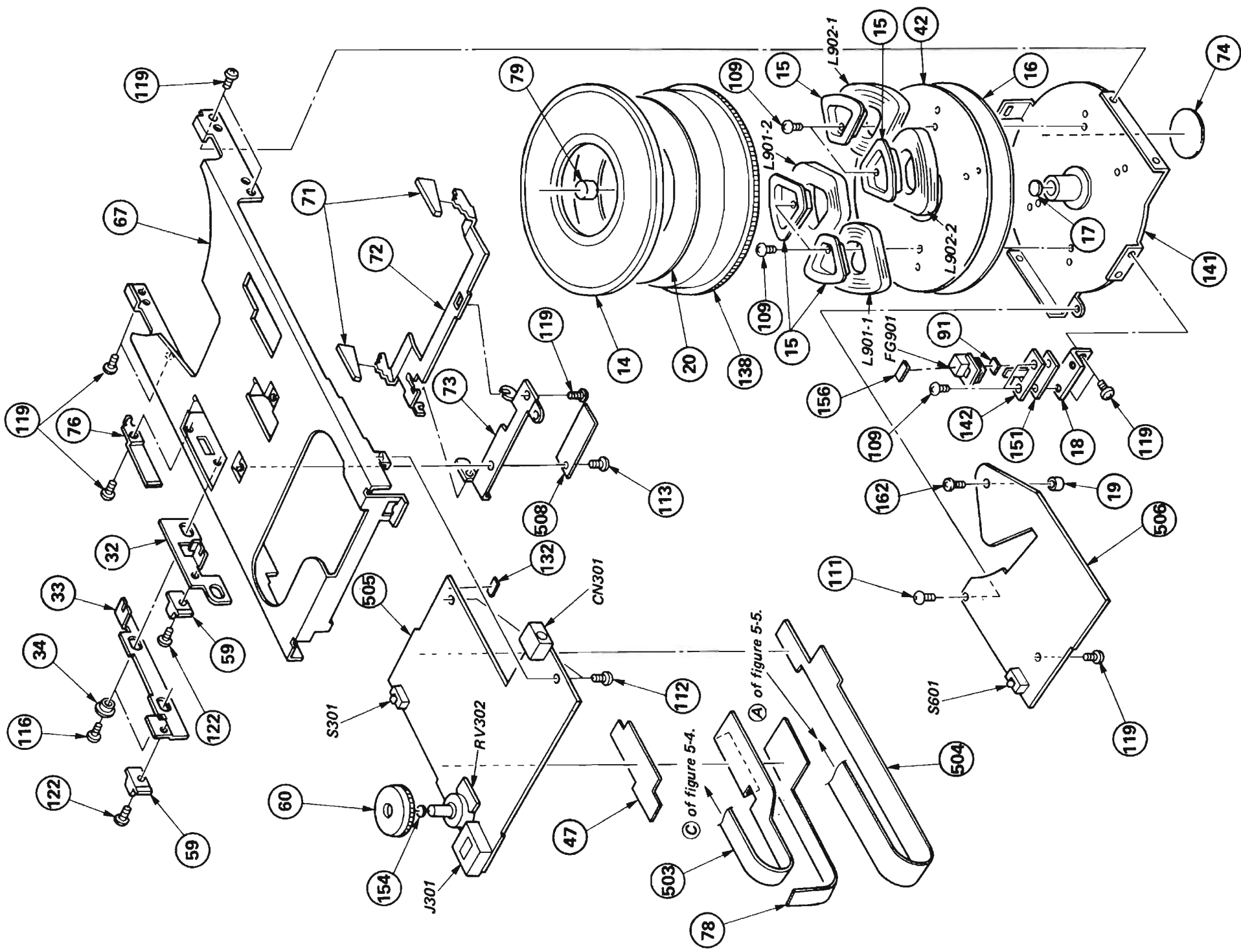


SECTION 5
EXPLODED VIEWS AND PARTS LIST

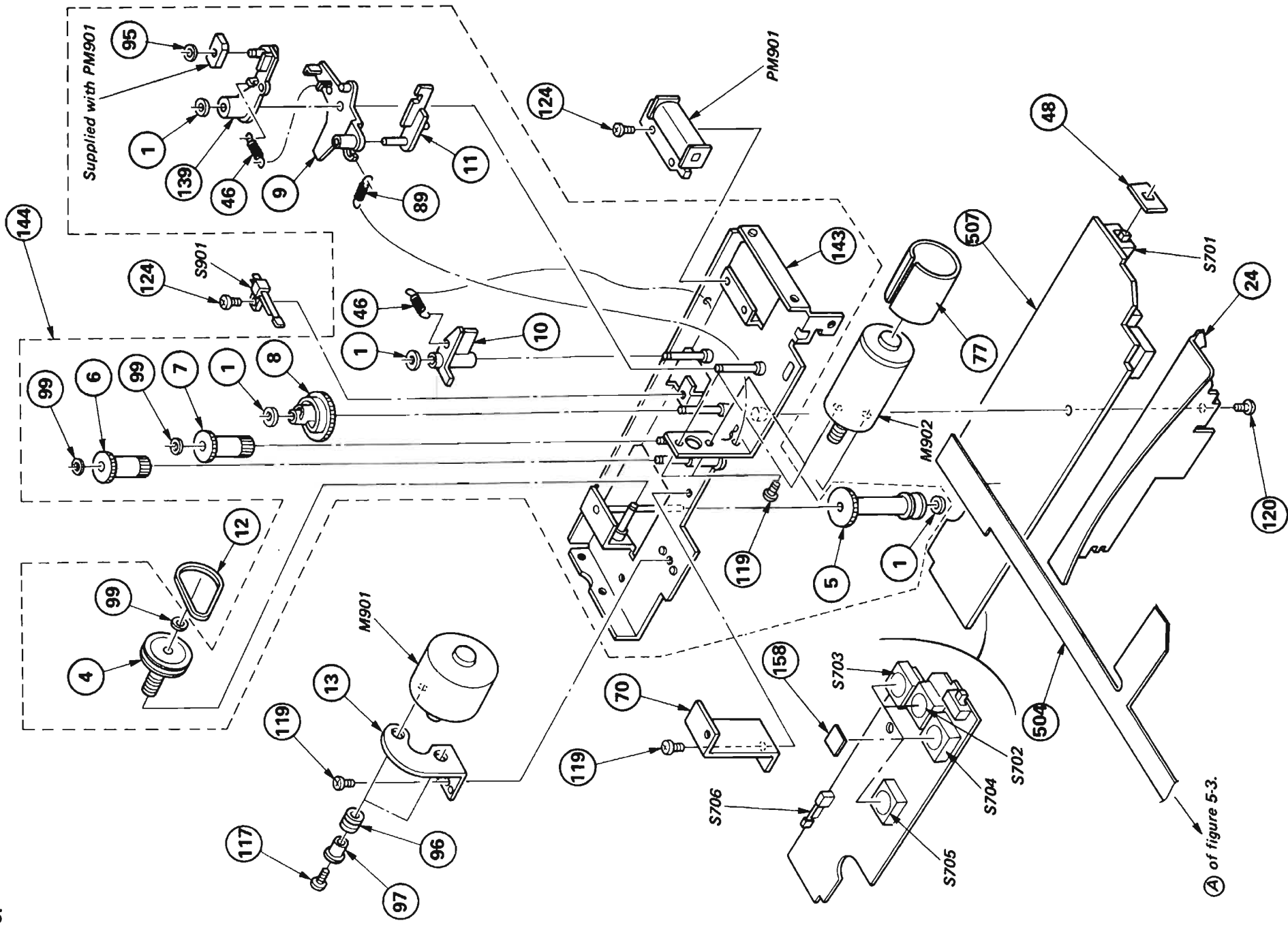
5-1.







5-5.



(A) of figure 5-3.

GENERAL SECTION

No.	Part No.	Description
1	3-307-948-01	WASHER, NYLON
2	
3	3-309-597-91	SCREW, TAPPING (1.4)
4	3-312-131-00	PULLEY, WORM
5	3-312-132-00	GEAR, DRUM
6	3-312-133-00	GEAR (A)
7	3-312-134-00	GEAR (B)
8	3-312-135-00	GEAR, CAM
9	3-312-136-00	LEVER, RELEASE, ARM
10	3-312-137-00	LEVER (S), ARM LOCK
11	3-312-138-00	LEVER (B), JOINT
12	3-312-139-00	BELT
13	♣;3-312-140-00	BRACKET (A), MOTOR
14	3-312-141-02	SHEET, TURNTABLE
15	3-312-142-00	RETAINER, COIL
16	♣;3-312-143-00	PLATE, YOKE
17	3-312-144-00	RETAINER, THRUST
18	♣;3-312-145-00	BRACKET, FG
19	3-312-146-00	SPACER
20	3-312-147-00	SHEET, ADHESIVE, TURNTABLE SHEET
21	3-313-023-00	SCREW (M) (B)
22	3-312-151-00	LEVER (A), JOINT
23	♣;3-312-153-00	PLATE, FULCRUM
24	♣;3-312-154-00	PLATE, BLIND
25	3-312-155-00	COLLAR
26	♣;3-312-156-00	SHAFT (M)
27	♣;3-312-157-00	SHAFT, GUIDE, SLIDER
28	♣;3-312-158-00	SHAFT, RELEASE, ARM
29	♣;3-312-159-00	SHEET, ADHESIVE, FLEXIBLE
30	♣;3-312-160-00	SHEET (B), ADHESIVE, FLEXIBLE
31	3-312-161-00	SCREW, STEP, PRECISION
32	♣;3-312-162-00	LEVER, SELECTION, SIZE
33	♣;3-312-163-00	LEVER, SELECTION, SPEED
34	3-312-164-00	SHAFT, SELECTION LEVER, SIZE
35	3-312-165-00	CASE, PHOTO
36	3-312-166-00	BALANCER
37	3-312-168-00	SCREW (A), PIVOT
38	3-312-169-00	SCREW (B), PIVOT
39	3-312-170-00	PLATE, DETECTION
40	3-312-171-00	GUIDE, CENTER RING
41	3-312-172-00	PLATE, SLIDER
42	3-312-271-00	SHEET, INSULATING, COIL
43	3-312-175-00	PLATE, BLIND
44	3-312-176-00	SPRING, TENSION
45	3-312-177-00	SPRING, TENSION

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- 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.

GENERAL SECTION

No.	Part No.	Description
46	3-312-179-00	SPRING, TENSION
47	♣;3-312-181-00	SHEET, PROTECTION
48	♣;3-312-182-00	PLATE, BLIND, SWITCH
49	3-312-185-01	FOOT, ROUND RUBBER
50	3-312-190-00	BUTTON, START
51	3-312-192-00	BUTTON, FAST FORWARD
52	3-312-193-00	BUTTON, UP DOWN
53	3-312-194-00	ORNAMENT, BUTTON
54	3-312-195-00	SPRING
55	3-312-196-00	GEAR, STAND
56	3-312-197-00	FOOT (A), RUBBER
57	3-312-198-00	FOOT (B), RUBBER
58	3-312-201-00	RUBBER, GUARD
59	3-312-206-00	KNOB, SELECTION
60	3-312-207-11	KNOB, CONTROL
61	♣;3-312-211-00	GUIDE, FLEXIBLE
62	3-312-212-00	COVER, LED
63	3-312-213-11	LID, BATTERY CASE
64	♣;3-312-214-00	PLATE, BOTTOM
65	3-312-215-00	RETAINER, STAND
66	3-312-216-00	STAND
67	♣;3-312-219-00	CHASSIS
68	3-312-220-00	SLIDER
69	♣;3-312-223-11	BOARD, TURNTABLE
70	3-312-225-00	REINFORCEMENT, SHAFT (A)
71	3-312-229-00	CAP
72	♣;3-312-230-00	PLATE, DETECTION, SIZE
73	X-3312-119-0	BRACKET ASSY, DETECTION, SIZE
74	♣;3-312-239-00	SHEET (A)
75	3-312-243-00	CLEANER
76	3-312-245-00	SPRING
77	♣;3-312-246-00	PLATE, SHIELD, MOTOR
78	♣;3-312-248-00	PLATE (B), SHIELD
79	9-911-815-02	CUSHION, SPINDLE
80	3-312-263-00	SLEEVE, DAMPER
81	♣;3-313-004-00	RETAINER, KNOB
82	♣;3-313-006-00	BEARING, HOLD KNOB
83	♣;3-313-009-00	GUIDE (A), SCREW
84	♣;3-313-012-00	STOPPER
85	3-313-013-00	KNOB, HOLD
86	3-313-014-00	PANEL (A), CONTROL
87	3-485-330-31	FELT, ABSORBER, VIBRATION
88	3-485-343-01	CUSHION, CABINET UPPER 10X7X0.5
89	3-534-558-00	SPRING, TENSION
90	3-563-514-11	WASHER (B), FIBER

CAPACITORS:

MF:μF, PF:μuF.

RESISTORS

All resistors are in ohms.

F : nonflammable

COILS

MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:

UA.... : μA..., UPA.... : μPA..., UPC.... : μPC,

UPD.... : μPD....

GENERAL SECTION

No.	Part No.	Description
91	3-561-685-00	SHEET (C), INSULATING
92	3-562-215-00	BOARD, TERMINAL, RECHARGEABLE
93	3-562-216-00	SPRING
94	3-562-223-00	TERMINAL BOARD, POSITIVE
95	3-570-615-00	POLY-WASHER (DIA.1.2)
96	3-570-770-00	CUSHION (A), MOTOR
97	3-570-772-00	SPACER (M)
98	3-566-226-11	LABEL, PUSH
99	3-578-224-00	WASHER
100	
101	3-703-358-00	PIN, PARALLEL (DIA. 2X6)
102	3-703-707-01	STICKER, SONY SYMBOL (21)
103	3-831-441-XX	CUSHION
104	3-831-441-XX	CUSHION
105	3-831-441-XX	CUSHION, CABINET UPPER 10X7X0.3
106	
107	3-834-636-00	PULLEY
108	4-863-604-00	BEARING, PIVOT
109	7-621-255-12	SCREW +P 2X3
110	7-621-255-20	SCREW +P 2X4
111	7-621-255-22	SCREW +P 2X4
112	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE1
113	7-621-772-38	SCREW +8 2X6
114	7-621-772-48	SCREW +8 2X8
115	7-621-775-10	SCREW +8 2.6X4
116	7-627-452-18	SCREW, PRECISION +K 2X3
117	7-627-552-67	SCREW, PRECISION +P 1.7X4.5
118	7-627-553-18	SCREW, PRECISION +P 2X2
119	7-627-553-28	SCREW, PRECISION +P 2X2.5
120	7-627-553-48	SCREW, PRECISION +P 2X4
121	7-627-554-27	SCREW, PRECISION +P 2X6 TYPE 1
122	7-627-850-08	SCREW, PRECISION +P 1.4X2
123	7-627-850-28	SCREW, PRECISION +P 1.4X3
124	7-627-850-58	SCREW, PRECISION +P 1.4X3.5
125	7-671-114-01	BALL 4, STEEL
126	7-685-104-29	SCREW +P 2X6 TYPE2 SLIT
127	9-911-815-01	CUSHION
128	
129	9-911-825-42	STRING, DIAL
130	9-911-838-XX	PACKING, KNOB
131	9-911-838-XX	CUSHION, METER
132	9-911-838-XX	CUSHION
133	
134	9-911-840-XX	CUSHION (A)
135	

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- 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.

GENERAL SECTION

No.	Part No.	Description
136	♣;A-3036-833-A	PLATE ASSY, DETECTION, POSITION
137	X-3312-117-1	HOLDER ASSY, BEARING
138	X-3312-118-1	TURNTABLE ASSY
139	X-3312-103-0	LEVER (P) ASSY, ARM LOCK
140	X-3312-104-0	PLATE ASSY, UPPER, STABILIZER
141	X-3312-105-0	CHASSIS ASSY, MOTOR
142	X-3312-106-0	HEAD ASSY, FG
143	X-3312-110-0	CHASSIS ASSY, SUB
144	♣;X-3312-116-0	DRIVING BLOCK COMP ASSY, ARM
145	X-3313-001-0	DISC ASSY, SCREW
146	♣;X-3313-002-0	CHASSIS (A) ASSY, ARM
147	X-3313-003-0	SCREW (M) (A) ASSY
148	X-3313-004-0	CABINET (UPPER) ASSY
149	X-3313-005-0	CABINET (LOWER) (A) ASSY
150	3-701-438-11	WASHER, 2.5
151	♣;3-312-261-00	SPACER, FG
152	
153	♣;3-312-255-00	PLATE, SIDE, CONTROL COVER
154	4-885-139-00	PAD, BRAKE
155	
156	9-911-850-XX	CUSHION
157	
158	3-572-862-11	SPACER
159	3-313-001-00	LABEL, MODEL NUMBER
160	3-313-021-00	LABEL (ENGLISH), CAUTION
161	3-313-019-00	(AEP,E)....LABEL (FRENCH), CAUTION
162	7-621-555-32	SCREW +K 2X5

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-555-658-00	CORD, CONNECTION (RK-129)
3-312-228-00	BAND, DISC
3-312-232-00	CUSHION
3-312-247-00	BRUSH
3-312-257-00	ADAPTOR
3-312-269-00	(E)...BAG, POLYETHYLENE
3-312-272-00	CUSHION, CORNER
3-313-020-00	INDIVIDUAL CARTON
3-313-025-00	INDIVIDUAL SUB CARTON
3-546-434-00	BAG, POLYETHYLENE
3-701-616-00	BAG, POLYETHYLENE
3-701-618-00	BAG, POLYETHYLENE
3-701-631-00	BAG, POLYETHYLENE
3-773-382-11	MANUAL, INSTRUCTION
8-951-151-91	(E)....MDR-W3 (B) SET

CAPACITORS:

MF:μF, PF:μμF.

RESISTORS

All resistors are in ohms.

F : nonflammable

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
501	1-549-115-21	CARTRIDGE
502	1-562-240-00	CONNECTOR
503	1-608-693-00	PC BOARD, ARM
504	1-609-347-00	PC BOARD, RELAY
505	♣:1-609-823-00	PC BOARD, MAIN
505	♣:A-3070-103-A	MOUNTED PCB, MAIN
506	♣:1-609-824-00	PC BOARD, SERVO
506	♣:A-3065-034-A	MOUNTED PCB, SERVO
507	♣:1-609-825-00	PC BOARD, SYSTEM CONTROL
508	♣:1-610-219-00	PC BOARD, SWITCH
509	1-549-119-00	STYLUS, ND-144G
C101	1-123-382-00	ELECT
C102	1-102-106-00	CERAMIC
C103	1-130-486-00	MYLAR
C104	1-130-491-00	MYLAR
C105	1-102-106-00	CERAMIC
C106	1-123-306-00	ELECT
C108	1-123-379-00	ELECT
C109	1-123-380-00	ELECT
C110	1-123-618-00	ELECT
C111	1-123-608-00	ELECT
C112	1-123-296-00	ELECT
C113	1-102-106-00	CERAMIC
C201	1-123-382-00	ELECT
C202	1-102-106-00	CERAMIC
C203	1-130-486-00	MYLAR
C204	1-130-491-00	MYLAR
C205	1-102-106-00	CERAMIC
C206	1-123-306-00	ELECT
C208	1-123-379-00	ELECT
C209	1-123-380-00	ELECT
C210	1-123-618-00	ELECT
C211	1-123-608-00	ELECT
C212	1-123-296-00	ELECT
C213	1-102-106-00	CERAMIC
C301	1-123-306-00	ELECT
C302	1-123-307-00	ELECT
C303	1-123-306-00	ELECT
C304	1-123-356-00	ELECT
C305	1-102-074-00	CERAMIC
C307	1-123-380-00	ELECT
C308	1-123-308-00	ELECT
C309	1-123-661-00	ELECT
C310	1-123-618-00	ELECT

(US).....UP TO SERIAL NO.10,800
(AEP).....UP TO SERIAL NO.10,300
(E).....SERIAL NO.11,401-11,600
SERIAL NO.10,301-11,400

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- 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.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
C310	1-123-382-00	ELECT
	(US).....SERIAL NO.10,801 AND LATER	
	(AEP).....SERIAL NO.11,601-11,900	
	(E).....SERIAL NO.11,901 AND LATER	
C311	1-123-296-00	ELECT
C312	1-123-296-00	ELECT
C313	1-123-307-00	ELECT
C314	1-123-307-00	ELECT
C601	1-123-609-00	ELECT
C602	1-130-514-00	MYLAR
C603	1-130-516-00	MYLAR
C604	1-130-522-00	MYLAR
C605	1-123-356-00	ELECT
C606	1-130-877-00	FILM
C607	1-123-380-00	ELECT
C608	1-130-519-00	MYLAR
C609	1-130-516-00	MYLAR
C610	1-123-610-00	ELECT
C611	1-123-380-00	ELECT
C612	1-123-356-00	ELECT
C613	1-123-617-00	ELECT
C701	1-130-516-00	MYLAR
C702	1-101-884-00	CERAMIC
C703	1-101-884-00	CERAMIC
C704	1-102-074-00	CERAMIC
C705	1-102-074-00	CERAMIC
C706	1-102-074-00	CERAMIC
C707	1-102-074-00	CERAMIC
C708	1-123-607-00	ELECT
C709	1-123-607-00	ELECT
C710	1-123-616-00	ELECT
CN301	1-507-749-00	JACK, EXTENTION POWER
D301	8-719-815-55	DIODE 1S1555
D302	8-719-815-55	DIODE 1S1555
D303	8-719-815-55	DIODE 1S1555
D601	8-719-815-55	DIODE 1S1555
D602	8-719-815-55	DIODE 1S1555
D603	8-719-815-55	DIODE 1S1555
D801	8-719-101-11	DIODE SR110
D802	8-719-922-24	DIODE BR2222S
F6901	1-459-449-00	COIL
H601	8-719-800-18	DIODE THS103A
H602	8-719-800-18	DIODE THS103A
H801	8-719-800-18	DIODE THS103A

CAPACITORS:

MF:μF, PF:μuF.

RESISTORS

. All resistors are in ohms.

. F : nonflammable

COILS

. MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:

UA....: μA...., UPA....: μPA...., UPC....: μPC.

UPD....: μPD....

ELECTRICAL PARTS

ELECTRICAL PARTS

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
IC301	8-759-700-42	IC NJM2904D	Q602	8-729-245-83	TRANSISTOR 25C2458
IC302	8-759-201-23	IC TA7688P	Q603	8-729-245-83	TRANSISTOR 25C2458
IC601	8-752-004-80	IC CX20048	Q701	8-729-245-83	TRANSISTOR 25C2458
IC701	8-759-907-19	IC MSM5842-186S	Q702	8-729-245-83	TRANSISTOR 25C2458
J301	1-507-727-00	JACK 2P	Q801	8-729-102-10	TRANSISTOR PH104
L901	1-462-204-00	COIL, MOTOR (STATOR)	Q901	8-729-245-83	TRANSISTOR 25C2458
L902	1-462-204-00	COIL, MOTOR (STATOR)	Q902	8-729-245-83	TRANSISTOR 25C2458
M901	8-835-087-01	MOTOR, DC (DNR-4601A)	R101	1-247-871-00	CARBON 47K 5% 1/6W
M902	A-3133-175-A	MOTOR ASSY, STYLUS	R102	1-247-819-00	CARBON 330 5% 1/6W
PM901	1-454-350-00	SOLENOID, PLUNGER	R103	1-247-875-00	CARBON 68K 5% 1/6W
Q101	8-729-245-83	TRANSISTOR 25C2458	R104	1-247-879-00	CARBON 100K 5% 1/6W
Q102	8-729-245-83	TRANSISTOR 25C2458	R105	1-247-847-00	CARBON 4.7K 5% 1/6W
Q103	8-729-245-83	TRANSISTOR 25C2458	R106	1-247-869-00	CARBON 39K 5% 1/6W
Q201	8-729-245-83	TRANSISTOR 25C2458	R107	1-247-825-00	CARBON 560 5% 1/6W
Q301	8-729-204-83	TRANSISTOR 2SA1048-GR	R108	1-247-835-00	CARBON 1.5K 5% 1/6W
Q302	8-729-245-83	TRANSISTOR 25C2458	R109	1-247-831-00	CARBON 1K 5% 1/6W
Q303	8-729-245-83	TRANSISTOR 25C2458	R110	1-247-819-00	CARBON 330 5% 1/6W
Q304	8-729-245-83	TRANSISTOR 25C2458	R111	1-247-783-00	CARBON 10 5% 1/6W
Q305	8-729-801-83	TRANSISTOR 2SB1013	R112	1-247-783-00	CARBON 10 5% 1/6W
Q306	8-729-100-13	TRANSISTOR 25C2001	R113	1-247-855-00	CARBON 10K 5% 1/6W
Q307	8-729-245-83	TRANSISTOR 25C2458	(US).....SERIAL NO.10,801 AND LATER (AEP).....SERIAL NO.11,601-11,900 (E).....SERIAL NO.11,901 AND LATER		
Q308	8-729-801-83	TRANSISTOR 2SB1013			
Q309	8-729-100-13	TRANSISTOR 25C2001			
Q310	8-729-204-83	TRANSISTOR 2SA1048-GR	R114	1-247-855-00	CARBON 10K 5% 1/6W
Q311	8-729-245-83	TRANSISTOR 25C2458	(US).....SERIAL NO.10,801 AND LATER (AEP).....SERIAL NO.11,601-11,900 (E).....SERIAL NO.11,901 AND LATER		
Q312	8-729-245-83	TRANSISTOR 25C2458			
Q313	8-729-204-83	TRANSISTOR 2SA1048-GR			
Q314	8-729-100-13	TRANSISTOR 25C2001	R201	1-247-871-00	CARBON 47K 5% 1/6W
Q315	8-729-177-32	TRANSISTOR 2SD773	R202	1-247-819-00	CARBON 330 5% 1/6W
Q316	8-729-245-83	TRANSISTOR 25C2458	R203	1-247-875-00	CARBON 68K 5% 1/6W
Q317	8-729-204-83	TRANSISTOR 2SA1048-GR	R204	1-247-879-00	CARBON 100K 5% 1/6W
Q318	8-729-245-83	TRANSISTOR 25C2458	R205	1-247-847-00	CARBON 4.7K 5% 1/6W
Q319	8-729-204-83	TRANSISTOR 2SA1048-GR	R206	1-247-869-00	CARBON 39K 5% 1/6W
Q320	8-729-245-83	TRANSISTOR 25C2458	R207	1-247-825-00	CARBON 560 5% 1/6W
Q321	8-729-113-33	TRANSISTOR 2SB733	R208	1-247-835-00	CARBON 1.5K 5% 1/6W
Q322	8-729-801-83	TRANSISTOR 2SB1013	R209	1-247-831-00	CARBON 1K 5% 1/6W
Q323	8-729-245-83	TRANSISTOR 25C2458	R210	1-247-819-00	CARBON 330 5% 1/6W
Q324	8-729-245-83	TRANSISTOR 25C2458	R211	1-247-783-00	CARBON 10 5% 1/6W
Q325	8-729-204-83	TRANSISTOR 2SA1048-GR	R212	1-247-783-00	CARBON 10 5% 1/6W
Q326	8-729-245-83	TRANSISTOR 25C2458	R213	1-247-855-00	CARBON 10K 5% 1/6W
Q327	8-729-245-83	TRANSISTOR 25C2458	(US).....SERIAL NO.10,801 AND LATER (AEP).....SERIAL NO.11,601-11,900 (E).....SERIAL NO.11,901 AND LATER		
Q328	8-729-245-83	TRANSISTOR 25C2458			
Q601	8-729-245-83	TRANSISTOR 25C2458			
R214	1-247-855-00	CARBON 10K 5% 1/6W	(US).....SERIAL NO.10,801 AND LATER (AEP).....SERIAL NO.11,601-11,900 (E).....SERIAL NO.11,901 AND LATER		

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- 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 - $\Delta\Delta$ - $\Delta\Delta$ -XX or Δ - $\Delta\Delta\Delta$ - $\Delta\Delta$ -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:

MF: μ F, PF: μ Pf.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

- MH : mH, UH : μ H

SEMICONDUCTORS

In each case, U : μ , for example:
 UA...: μ A..., UPA...: μ PA..., UPC...: μ PC,
 UPD...: μ PD...

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R301	1-247-855-00	CARBON
R302	1-247-849-00	CARBON
R303	1-247-855-00	CARBON
R304	1-247-855-00	CARBON
R305	1-247-855-00	CARBON
R306	1-247-823-00	CARBON
R307	1-247-823-00	CARBON
R308	1-247-831-00	CARBON
R312	1-247-855-00	CARBON
R313	1-247-823-00	CARBON
R314	1-247-859-00	CARBON
R315	1-247-815-00	CARBON
R316	1-247-831-00	CARBON
R317	1-247-855-00	CARBON
R309	1-247-831-00	CARBON
R310	1-247-831-00	CARBON
R311	1-247-838-00	CARBON
R318	1-247-855-00	CARBON
R319	1-247-855-00	CARBON
R320	1-247-807-00	CARBON
R321	1-247-819-00	CARBON
R322	1-247-837-00	CARBON
R323	1-247-819-00	CARBON
R324	1-247-875-00	CARBON
R325	1-247-855-00	CARBON
R326	1-247-855-00	CARBON
R327	1-247-855-00	CARBON
R328	1-247-855-00	CARBON
R329	1-247-831-00	CARBON
R330	1-247-849-00	CARBON
R331	1-247-807-00	CARBON
R332	1-247-863-00	CARBON
R333	1-247-855-00	CARBON
R334	1-247-855-00	CARBON
R335	1-247-849-00	CARBON
R336	1-247-831-00	CARBON
R337	1-247-855-00	CARBON
R338	1-247-849-00	CARBON
R339	1-247-847-00	CARBON
R340	1-247-855-00	CARBON
R341	1-247-831-00	CARBON
R342	1-247-855-00	CARBON
R343	1-247-855-00	CARBON
R344	1-247-855-00	CARBON
R345	1-247-855-00	CARBON

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- 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 - $\Delta\Delta\Delta$ - $\Delta\Delta\Delta$ -XX or Δ - $\Delta\Delta\Delta\Delta$ - $\Delta\Delta\Delta$ -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.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R346	1-247-855-00	CARBON
R347	1-247-855-00	CARBON
R348	1-247-855-00	CARBON
R349	1-247-815-00	CARBON
R350	1-247-815-00	CARBON
R351	1-247-807-00	CARBON
R352	1-247-863-00	CARBON
R353	1-247-855-00	CARBON
	(US).....UP TO SERIAL NO.10,800	
	(AEP).....UP TO SERIAL NO.10,300	
	(E).....SERIAL NO.11,401-11,600	
	(E).....SERIAL NO.10,301-11,400	
R353	1-247-847-00	CARBON
	(US).....4.7K 5% 1/6W	
	(AEP).....SERIAL NO.10,801 AND LATER	
	(E).....SERIAL NO.11,601-11,900	
	(E).....SERIAL NO.11,901 AND LATER	
R354	1-247-879-00	CARBON
	(US).....100K 5% 1/6W	
	(AEP).....SERIAL NO.10,801 AND LATER	
	(E).....SERIAL NO.11,601-11,900	
	(E).....SERIAL NO.11,901 AND LATER	
R601	1-247-903-00	CARBON
R602	1-247-863-00	CARBON
R603	1-247-823-00	CARBON
R604	1-247-819-00	CARBON
R605	1-247-819-00	CARBON
R606	1-247-819-00	CARBON
R607	1-247-819-00	CARBON
R608	1-247-827-00	CARBON
R609	1-247-827-00	CARBON
R610	1-247-865-00	CARBON
R611	1-247-867-00	CARBON
R612	1-214-778-00	METAL
R613	1-214-775-00	METAL
R614	1-247-871-00	CARBON
R615	1-247-871-00	CARBON
R616	1-247-855-00	CARBON
R617	1-247-855-00	CARBON
R618	1-247-855-00	CARBON
R619	1-247-871-00	CARBON
R620	1-247-869-00	CARBON
R621	1-247-871-00	CARBON
R622	1-247-849-00	CARBON
R623	1-247-863-00	CARBON
R701	1-247-871-00	CARBON
R702	1-247-871-00	CARBON
R704	1-247-871-00	CARBON
R705	1-247-871-00	CARBON

CAPACITORS:

MF:µF, PF:µµF.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

MH : 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
R706	1-247-855-00	CARBON 10K 5% 1/6W
R707	1-247-847-00	CARBON 4.7K 5% 1/6W
R901	1-247-881-00	CARBON 120K 5% 1/6W
R902	1-247-863-00	CARBON 22K 5% 1/6W
R903	1-247-879-00	CARBON 100K 5% 1/6W
RV301	1-226-238-00	RES, ADJ, CARBON 50K
RV302	1-228-104-00	RES, VAR, CARBON 20K/20K
RV601	1-226-238-00	RES, ADJ, CARBON 50K
RV602	1-226-238-00	RES, ADJ, CARBON 50K
RV603	1-226-236-00	RES, ADJ, CARBON 10K
RV604	1-224-661-00	RES, ADJ, METAL FILM 47K
RV605	1-224-661-00	RES, ADJ, METAL FILM 47K
S301	1-554-142-00	SWITCH, SLIDE
S601	1-554-142-00	SWITCH, SLIDE
S701	1-554-123-00	SWITCH, SLIDE
S702	1-552-174-00	SWITCH, PUSH
S703	1-552-174-00	SWITCH, PUSH
S704	1-552-174-00	SWITCH, PUSH
S705	1-552-174-00	SWITCH, PUSH
S706	1-554-297-00	SWITCH, LEAF
S901	1-553-226-00	SWITCH, LEAF
S902	1-553-226-00	SWITCH, LEAF
X701	1-567-094-00	VIBRATOR, CERAMIC

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- 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:

MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

- MH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:

UA....: μA..., UPA....: μPA..., UPC....: μPC,

UPD....: μPD....