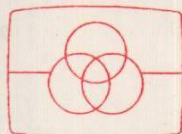


AIWA®

S/M Code No. 84-009

DATE OF ISSUE 3/1984

SERVICE MANUAL

STEREO TURNTABLE SYSTEM**MODEL NO.****LX-50**

Free service manuals

Gratis schema's

Digitized by

www.freeservicemanuals.info**TYPE. H, HB, E, EB, K, KB, G**

SPECIFICATIONS

<GENERAL>

Power source:	H. HB models AC 120V/220V/240V switchable, 50/60 Hz
	E. EB models AC 220V. 50/60 Hz
	K. KB, G models AC 240V. 50/60 Hz
Power consumption:	10W
Dimensions:	330(W)×88(H)×330(D) mm (13"×3-1/2"×13")
Weight:	4.1kg (9 lbs)
<TURN TABLE SECTION>	
Drive system:	Frequency generated direct drive system
Motor:	4-phase 8-pole linear torque DD hall motor
Turntable platter:	Aluminum alloy diecast
Speeds:	33-1/3 and 45 rpm
Wow & Flutter:	0.045% (WRMS)
S/N ratio:	70 dB (DIN-B)

<TONE ARM SECTION>

Type:	Linear tracking type Straight static balanced type
Effective arm length:	131 mm
Tracking error:	10'
Arm elevation time:	1.2s/1.2s (DOWN/UP) (normal temperature)

<CARTRIDGE SECTION>

Type:	VM type
Frequency response:	20~20,000 Hz
Out put voltage:	2.3+1.5/-0.5 mV (1 kHz 3.54 cm/s)
Separation:	More than 18 dB (33-1/3 rpm. at 1 kHz)
Stylus pressure:	1.5±0.3g
Load impedance:	47 kΩ
Dynamic compliance:	5×10 ⁻⁸ cm/dyne
Stylus tip:	0.6 mil. Diamond

• The specifications and external appearance of this set are subject to change without prior notice.

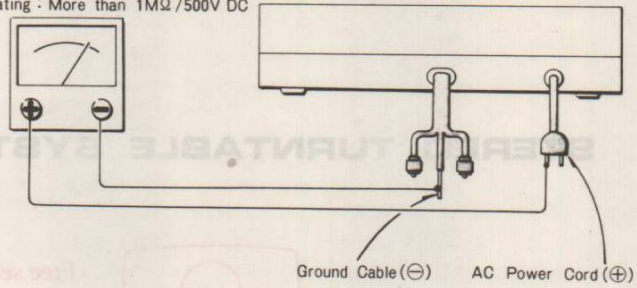
Follow the instructions carefully, which will allow the user to optimise the products' performance and give many years of service.

1. No scratch and melting shall be made to covered lead-wires of an a.c. primary circuit including mains leads.
2. No illegibility shall be given to the specification plate, the caution labels, the fuse labels and others.
3. When, on pattern sides of circuit boards, additional repair-parts have been made up, the parts shall be firmly glued to circuit boards or other components, unless the parts can be attached firmly.
4. The following matters shall be maintained as they are, when repairing.
 - 1) Soldering of lead-wire ends
 - * Care should be taken of the space distance in an a.c. primary circuit as well as soldering.
 - 2) Wiring and holding of lead-wires with wire-clips and binders
 - 3) Materials of lead-wires
 - * e.g.; For UL models, lead-wires to be used shall be approved or accepted by the UL.
 - 4) Location of all kinds of insulators
 - 5) Setting of voltage selector switch
 - * Set the Voltage Selector Switch to 240V, 220V, or 120V, According to your Local Voltage.

5. After repaired, the insulation resistance or leakage current shall be measured with $500 \pm 5V$ D.C and shall be not less than $1M\Omega$.

Measuring Point

Rating : More than $1M\Omega / 500V$ DC



As to the disassembling instructions, refer to the service manual of LX-110.

SPECIFICATIONS

<TONE ARM SECTION>		<CARTRIDGE SECTION>		<TURN TABLE SECTION>		<GENERAL>	
Type:	Linear tracking type	Type:	VM type	Frequency generator:	Direct drive	Drive system:	Drive system
Effective arm length:	181 mm	Frequency response:	20-20,000 Hz	4-phase 5-pole 1.8 sec torque DD	Ball motor	Motor:	Motor
Tracking error:	10"	Out cut voltage:	± 0.1-0.2 mV	Aluminum alloy disc	33-1/3 and 45 rpm	Interchangeable platter:	33-1/3 and 45 rpm
Arm elevation time:	1.5s (UL model)	Separation:	More than 15 dB (33-1/3 rpm, ac)	Frequency generator:	Direct drive	Spindle:	3-0.125 (VER2)
(normal temperature)				Dimensions:	330(W)×88(H)×330(D) mm	Wow & flutter:	0.04% (DNR-B)
				Weight:	4.1kg (9 lbs)	2/N ratio:	70 dB (DNR-B)
				Power consumption:	10W		
				Power source:	AC 120V/220V/240V switchable		
					AC 220V, 50/60 Hz		
					E. EB model		
					E. EB-C model		
					AC 240V, 50/60 Hz		
					N. HB model		

The specifications and external appearance of this set are subject to change without prior notice.

ELECTRICAL MAIN PARTS LIST

“***” shows unavailable Repair Part.

Symbol No.	Part No.	Description	Remark	Symbol No.	Part No.	Description	Remark
<MAIN CIRCUIT BOARD SECTION>				<LED CIRCUIT BOARD SECTION>			
PCB-A	*	MAIN CIRCUIT BOARD		PCB C	*	LED CIRCUIT BOARD	
IC1	84-124-635	IC, TLCS-43		D115	84-195-638	LED, LN55	
IC2	87-027-827	IC, TC4069UBP		<POWER SW CIRCUIT BOARD SECTION>			
IC3	87-020-147	IC, M54547		PCB D	*	POWER SW CIRCUIT BOARD	
IC4	87-020-149	IC, BA6208		SW107	87-031-739	PUSH SWITCH, (POWER)	
Q101	89-415-090	TRANSISTOR, 2SD1509		<ANGLE SENSOR CIRCUIT BOARD SECTION>			
Q102	89-404-713	TRANSISTOR, 2SD471 (L)		PCB E	*	ANGLE SENSOR CIRCUIT BOARD	
Q103	89-318-464	TRANSISTOR, 2SC1846R, S		CP101	87-020-150	SENSOR, KU107	
Q104	89-110-153	TRANSISTOR, 2SA-1015 (O)		CON102	84-127-637	CONNECTOR Ass'y, 3P	***
Q105	84-195-639	PHOTO TRANSISTOR, PN150		<PHONO MOTOR CIRCUIT BOARD SECTION>			
Q106	89-318-154	TRANSISTOR, 2SC1815 (Y)		M1	84-128-603	DC MOTOR (PHONO)	
Q107,108,109	89-320-011	TRANSISTOR, 2SC2001 (K)		<MISCELLANEOUS>			
Q110,111	87-026-198	TRANSISTOR, DTA124		△T1	84-128-615	POWER TRANSFORMER (H, HB only)	
D101,102	87-027-365	DIODE, S5277B		△T1	84-128-613	POWER TRANSFORMER (E, EB only)	
D103,108,109,110,111,112,113,114	87-027-097	DIODE, IS1555		△T1	84-128-614	POWER TRANSFORMER (K, KB, G only)	
D104	87-027-364	ZENER DIODE, HZ12A3L		M2,M3	84-127-601	DC MOTOR (UP/DOWN, LINEAR)	
D105	87-027-556	ZENER DIODE, HZ11B3		SW108,109	87-031-736	LEAF SWITCH (UP SENSOR, DOWN SENSOR)	
D106	87-027-332	ZENER DIODE, HZ6B1L		△SW110		ROTRARY SWITCH (AC VOLTAGE)	
D107	87-027-943	LED, PR573IK (REPEAT)			87-033-140	SPLICE CONNECTOR (H, HB only)	
L101	84-128-602	COIL, OSC500N		△	87-085-165	CORD BUSHING (H, HB only)	
SW101,102,103,104,105	87-031-741	TACT SWITCH, (START/CUT, RIGHT, LEFT, UP/DOWN, REPEAT)		△	87-085-185	CORD BUSHING (E, EB, K, KB, G only)	
SW106	87-031-737	PUSH-SWITCH, (SPEED)		△	87-034-956	AC POWER CORD (H only)	
SFR101	87-021-745	SEMI-FIXED RESISTOR, 47kΩ-B		△	87-034-958	AC POWER CORD (HB only)	
PIN101,102	87-049-273	PIN, 3P	***	△	87-034-877	AC POWER CORD (E, EB only)	
PIN103	87-049-404	PIN, 7P	***	△	87-034-711	AC POWER CORD (K, KB, G only)	
PIN104,105	87-049-275	PIN, 5P	***		84-199-606	OUTPUT CORD Ass'y (L-CH, R-CH OUTPUT)	
PIN106	87-049-396	PIN, 2P	***		84-124-665	REC SYNC CORD Ass'y	
PIN107	87-049-407	PIN, 6P	***				
PIN108	87-049-397	PIN, 2P	***				
PIN109	87-049-260	PIN, 2P	***				
PIN110	87-049-398	PIN, 2P	***				
PIN111	87-049-357	PIN, 5P	***				
<CAPACITOR>							
C101,102,103	87-010-119	1000μF 35V ELECTROLYTIC					
<POSITION SENSOR PHT CIRCUIT BOARD SECTION>							
PCB-B	*	POSITION SENSOR PHT CIRCUIT BOARD					
Q112,113	84-195-667	PHOTO TRANSISTOR PN150					
CON104	84-127-638	CONNECTOR Ass'y, 5P					

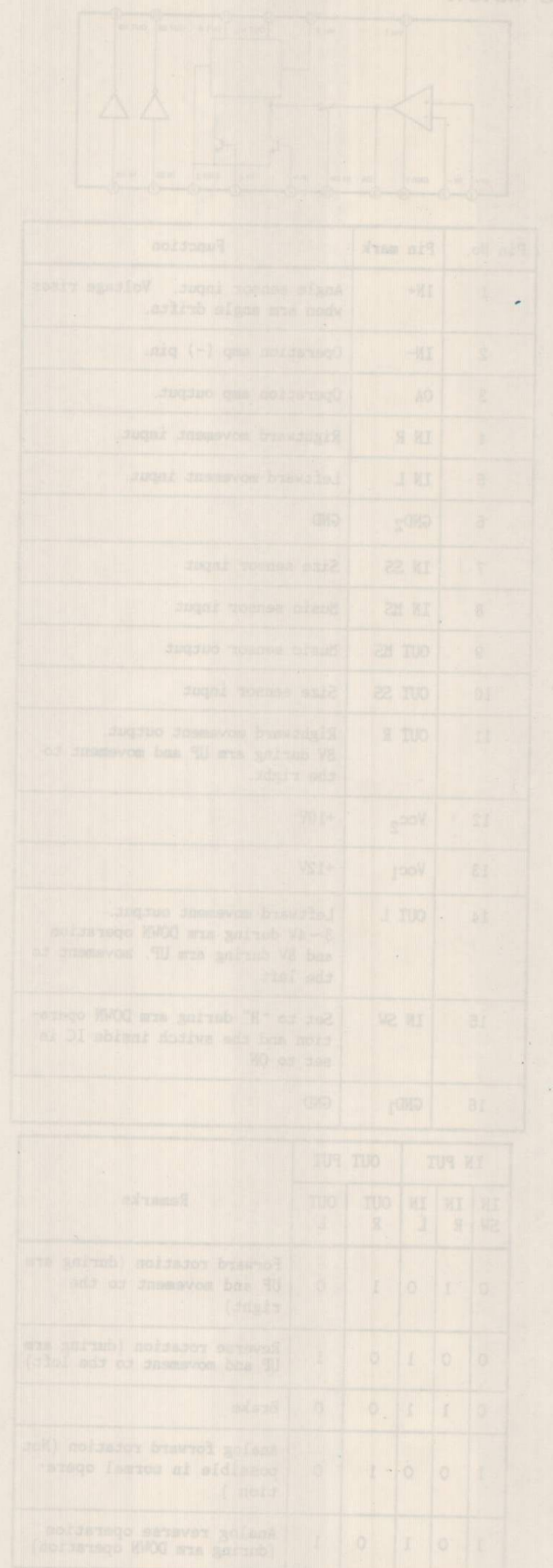
△ Safety component symbol
This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

C-MOS IC handling precaution
The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.
1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
2. To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (⊕).

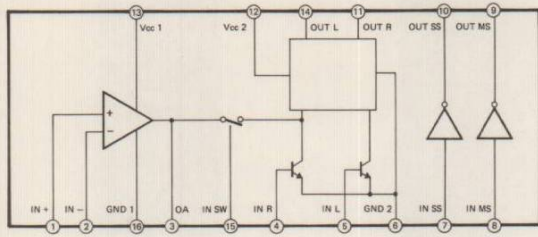
Note; Combination Circuit Board
The parts on the electrical parts list which are indicated by an asterisk (*) are supplied as one single combined circuit board. Therefore, they will not be supplied separately. If this becomes necessary, please order the entire circuit board.

Combination circuit board A 84-128-620-11
PCB-A 84-128-621-11
PCB-D 84-128-622-11

Combination circuit board B 84-127-626-01
PCB-B 84-127-629-01
PCB-E 84-127-627-01
PCB-C 84-127-628-01



IC 說明
IC M54547



Pin No.	Pin mark	Function
1	IN+	Angle sensor input. Voltage rises when arm angle drifts.
2	IN-	Operation amp (-) pin.
3	OA	Operation amp output.
4	IN R	Rightward movement input.
5	IN L	Leftward movement input.
6	GND ₂	GND
7	IN SS	Size sensor input
8	IN MS	Music sensor input
9	OUT MS	Music sensor output
10	OUT SS	Size sensor input
11	OUT R	Rightward movement output. 8V during arm UP and movement to the right.
12	Vcc ₂	+10V
13	Vcc ₁	+12V
14	OUT L	Leftward movement output. 3~4V during arm DOWN operation and 8V during arm UP. movement to the left.
15	IN SW	Set to "H" during arm DOWN operation and the switch inside IC is set to ON.
16	GND ₁	GND

IN PUT		OUT PUT		Remarks	
IN SW	IN R	IN L	OUT R		OUT L
0	1	0	1	0	Forward rotation (during arm UP and movement to the right)
0	0	1	0	1	Reverse rotation (during arm UP and movement to the left)
0	1	1	0	0	Brake
1	0	0	1	0	Analog forward rotation (Not possible in normal operation)
1	0	1	0	1	Analog reverse operation (during arm DOWN operation)

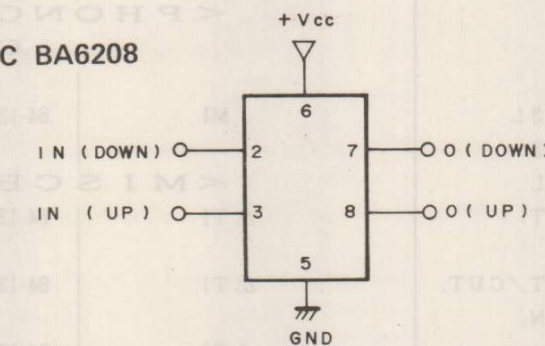
(Note) . 1Nsw = 1 Inhibit
. 1Ni = 1
. Oscillation may occur when the brake is applied.

IC TLCS-43

IC1 TLCS-43 Pin specifications		
Pin No.	Pin mark	Function
1	TEST	Power pin
2~5	KEY 1 KEY 4	Key inputs
6	UP	Arm UP output. Set to "LOW" during arm UP operation.
7	DOWN	Arm DOWN output. Set to "HIGH" during arm DOWN operation.
8	ARM.R	Arm rightward movement output. Set to "LOW" while arm is moving to the right.
9	ARM.L	Arm leftward movement output. Set to "LOW" while arm is moving to the left.
10~16	PRG 1 PRG 7	Not used.
17	REPEAT	REPEAT indication output. Lit at "LOW".
18	RPM	Phonomotor speed select output. "LOW" → 45 rpm "HIGH" → 33 rpm
19	PHM	Phonomotor ON/OFF output. Rotates at "LOW" and stops at "HIGH".
20	DK.MUTE	Not used.
21	GND	GND
22	INT	Not used.
23	RST	RESET input. Reset at "LOW".
24	X IN	Clock input. 5Vp-p. 500kHz.
25	X OUT	Clock output. 2Vp-p. 500kHz.
26 27	LOAD OUT M LOAD IN M	Grounded and not used in LX-50.
28	A.KILL	Arm UP: "LOW". Angle sensor muting output. Arm DOWN: "HIGH".
29	RMT.B	Remote control input. Starts musical performance at the rise to "HIGH" from "LOW".
30	KEY 9	GND (not used)
31 32 33	KEY 8 KEY 7 KEY 6	Key matrix inputs.

Pin No.	Pin mark	Function
34	DK SNS	+5V (not used)
35	S SNS	Record size detection input. Judges a 17cm record when an "L" pulse is output from the 30T position of the sensor. and judges a 30cm record when it "H" at the 30T position of the sensor.
36	DWN S	Arm sensor input. "LOW" during DOWN operation.
37	UP S	Arm UP sensor input. "LOW" during UP operation.
38	POS 2	Tone arm position detection input. Detects 30cm TOP, 25cm TOP, 17cm TOP, 30cm END.
39	POS 1	Tone arm movement range detection input. Detects the rest position 17cm END.
40	RMT A	+5V (not used)
41	KEY 5	Key input
42	Vpp	+5V

IC BA6208



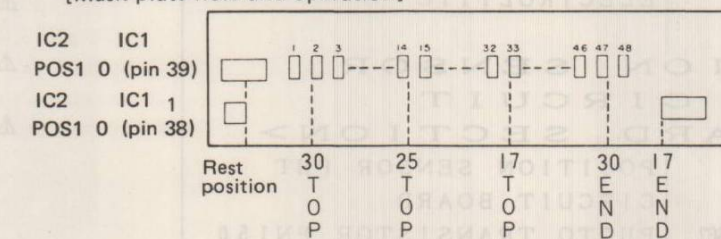
IN (DOWN)	IN (UP)	O (DOWN)	O (UP)	Arm operation
1	0	H	L	DOWN
0	1	L	H	UP
1	1	L	L	None in general
0	0	H	H	Stop

[Arm position and microprocessor port]

	POSI 0	POSI 1
Rest position	1	1
30 TOP	No. 2	0
25 TOP	No. 14	0
17 TOP	No. 33	0
30 END	No. 47	0
17 END	0	1

POSITION SENSOR

[Mask plate hole and operation]



ADJUSTMENT

1. Stylus height adjustment

- 1) Place a service jig on the external circumference of the rubber sheet and turn the adjustment screw to adjust so that the stylus height is at the position shown in the diagram. (Refer to Fig. 1)

- 2) Turn the turntable 180° after adjusting the height at adjustment point (1); if the stylus height at adjustment point (2) is 4.7mm or more, adjust it again. (Refer to Fig. 2)

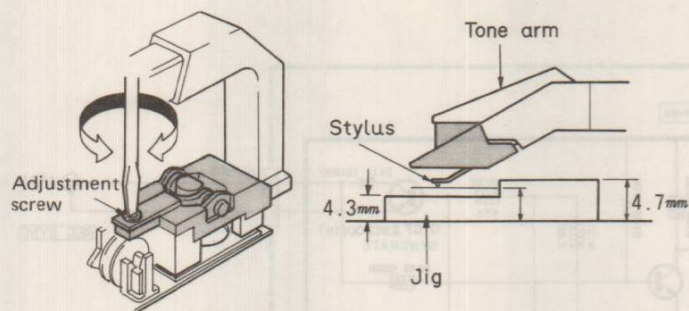


Fig. 1

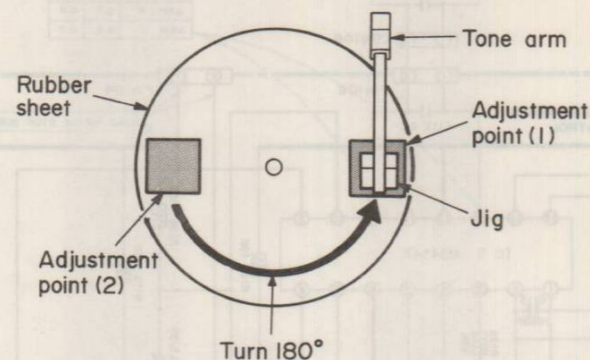


Fig. 2

Reference

1. Standard : 3.5~5.5mm.
2. When the cabinet is attached, the adjustment height may be approx. 0.2mm higher.

2. Angle sensor (A sensor) adjustment

Perform this adjustment after adjusting the stylus height.

- 1) Remove the belt of the linear motor.
- 2) Short-circuit PIN 109 and stop the turntable.
- 3) Place a test record (ATR-003) on the turntable.
- 4) Turn the adjustment boss clockwise (in the direction of the arrow) and move the holder fully in the direction of the arrow. (Refer to Fig. 3)
- 5) Move the tone arm to the auto check 25cm position by hand.
- 6) Adjust SFR101 so that the voltage between test points TP1 and TP2 is $7 \pm 1V$. (UP condition)
- 7) Press the UP/DOWN button to lower the arm.
- 8) Turn the adjustment screw clockwise so that the voltage is $1 \pm 0.1V$. (DOWN condition)

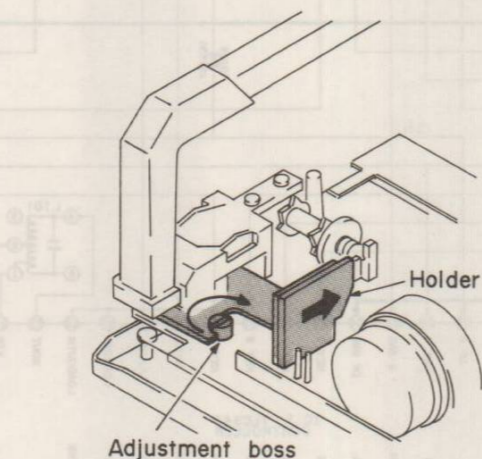


Fig. 3

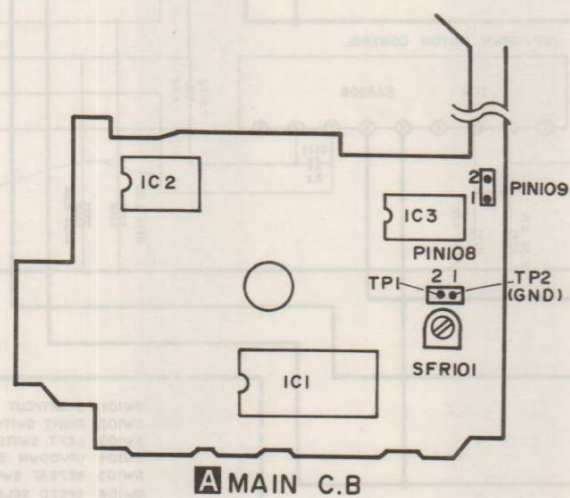


Fig. 4

3. Auto-in/out adjustment

30cm record

- 1) Place AIWA test record (ATR-003) on the turntable, press the START/CUT button and turn the adjustment boss to adjust so that the auto-in count is 19~28. (Refer to Fig. 5)
- 2) Check that the auto-out count is 11~14 after adjustment is completed. Adjust the auto-in again when the auto-out count is out of the specified range (11~14).

17cm record

- 1) Press the START/CUT button and check that the auto in count is 24~37.
- 2) Check that the auto-out count is 15 or more after adjustment is completed.

[Method to check]

Prepare paper as shown in the diagram. Place it under the stylus and move the tone arm and pull out the paper when the tone arm passes the 25cm lead-in. (Refer to Fig. 6)

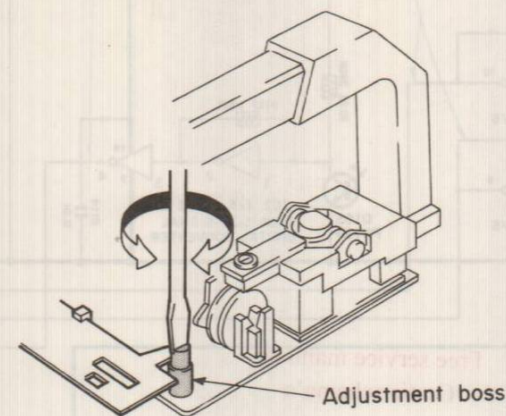


Fig. 5

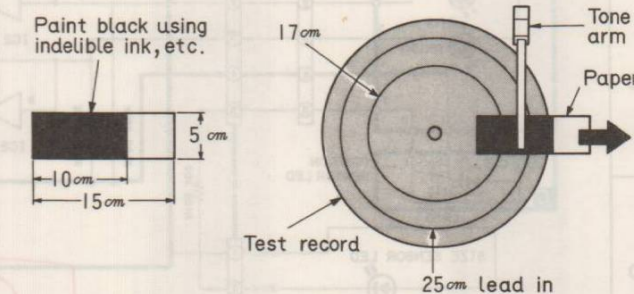
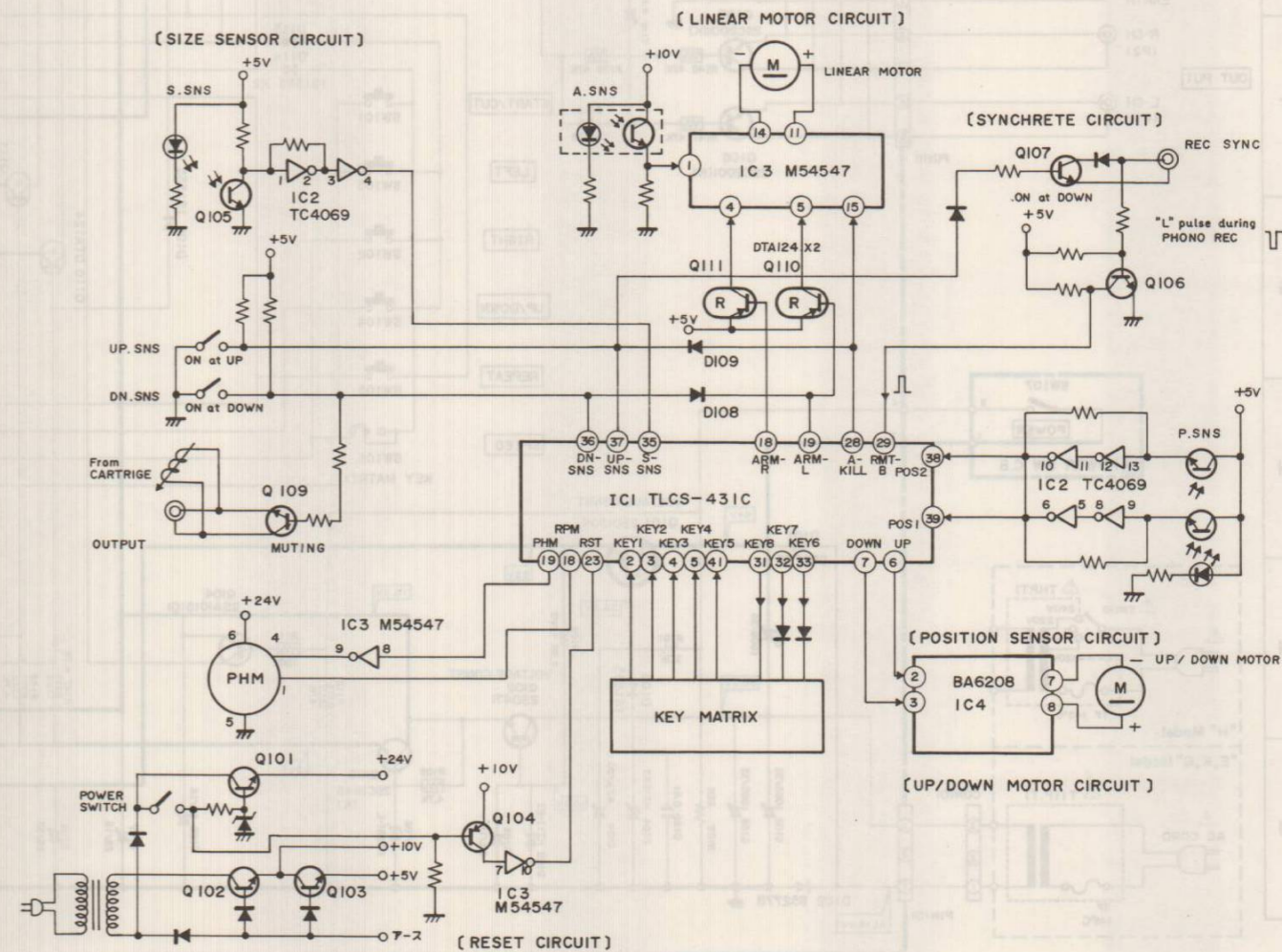
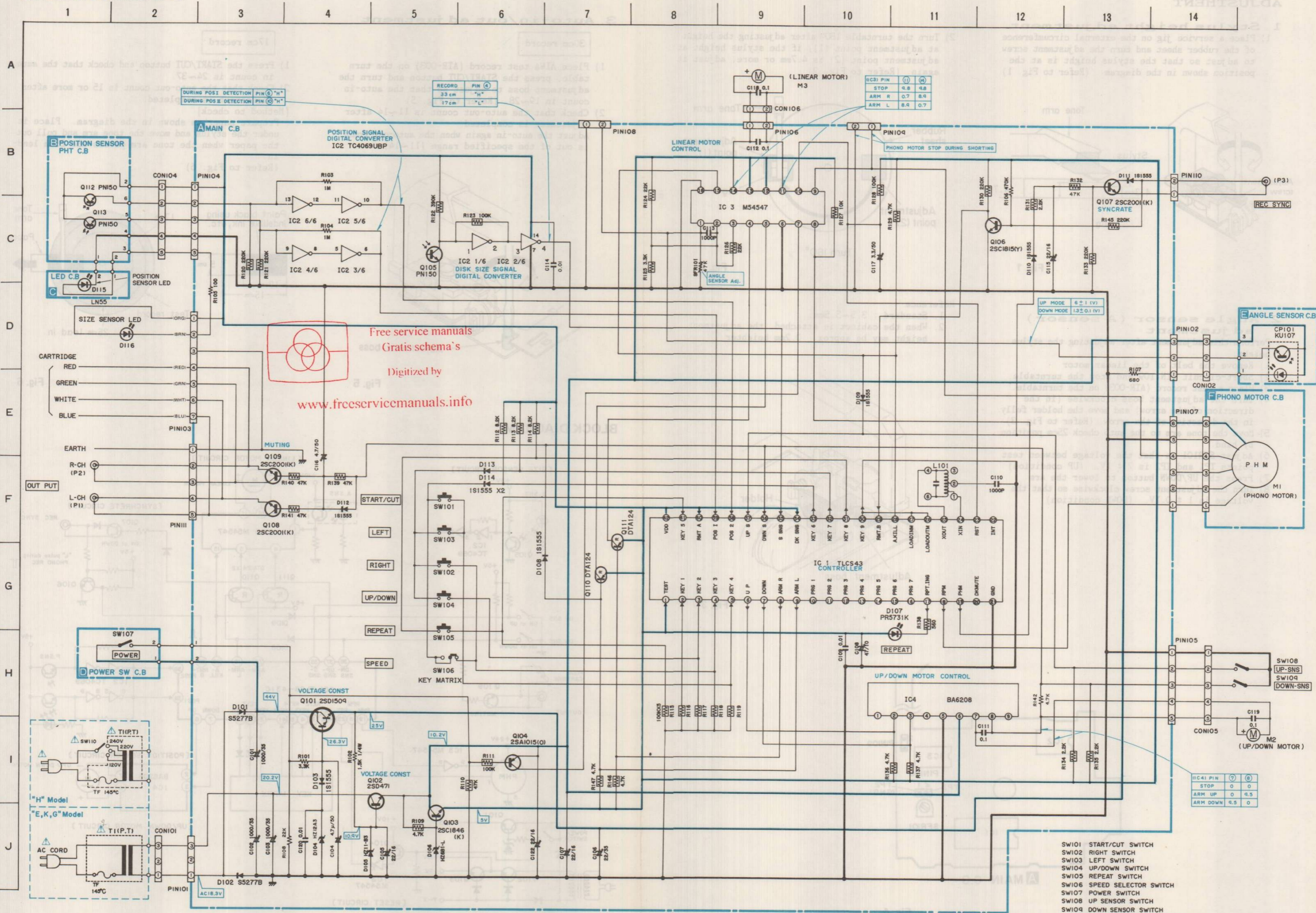


Fig. 6

BLOCK DIAGRAM



SCHEMATIC DIAGRAM-1

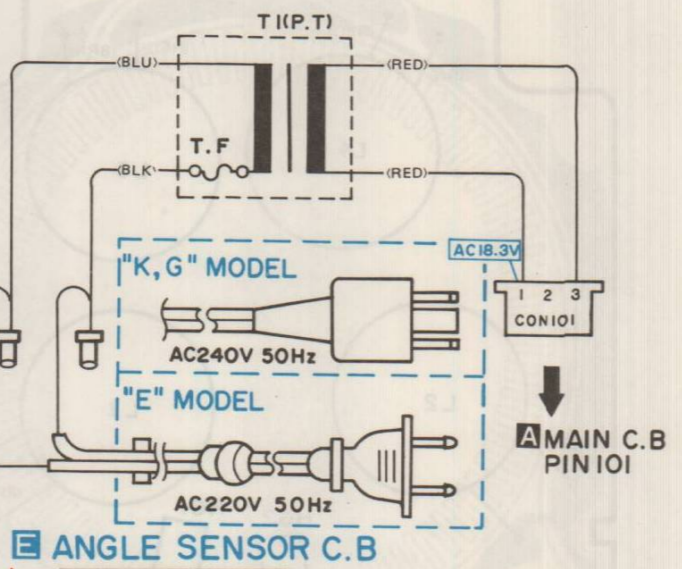
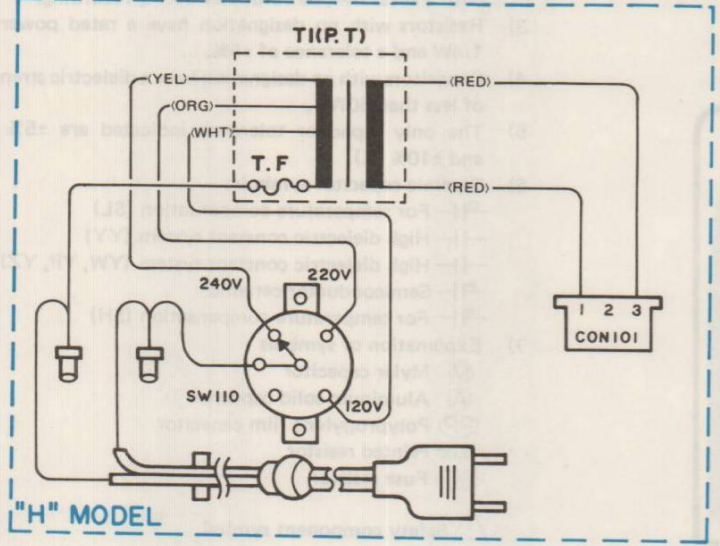
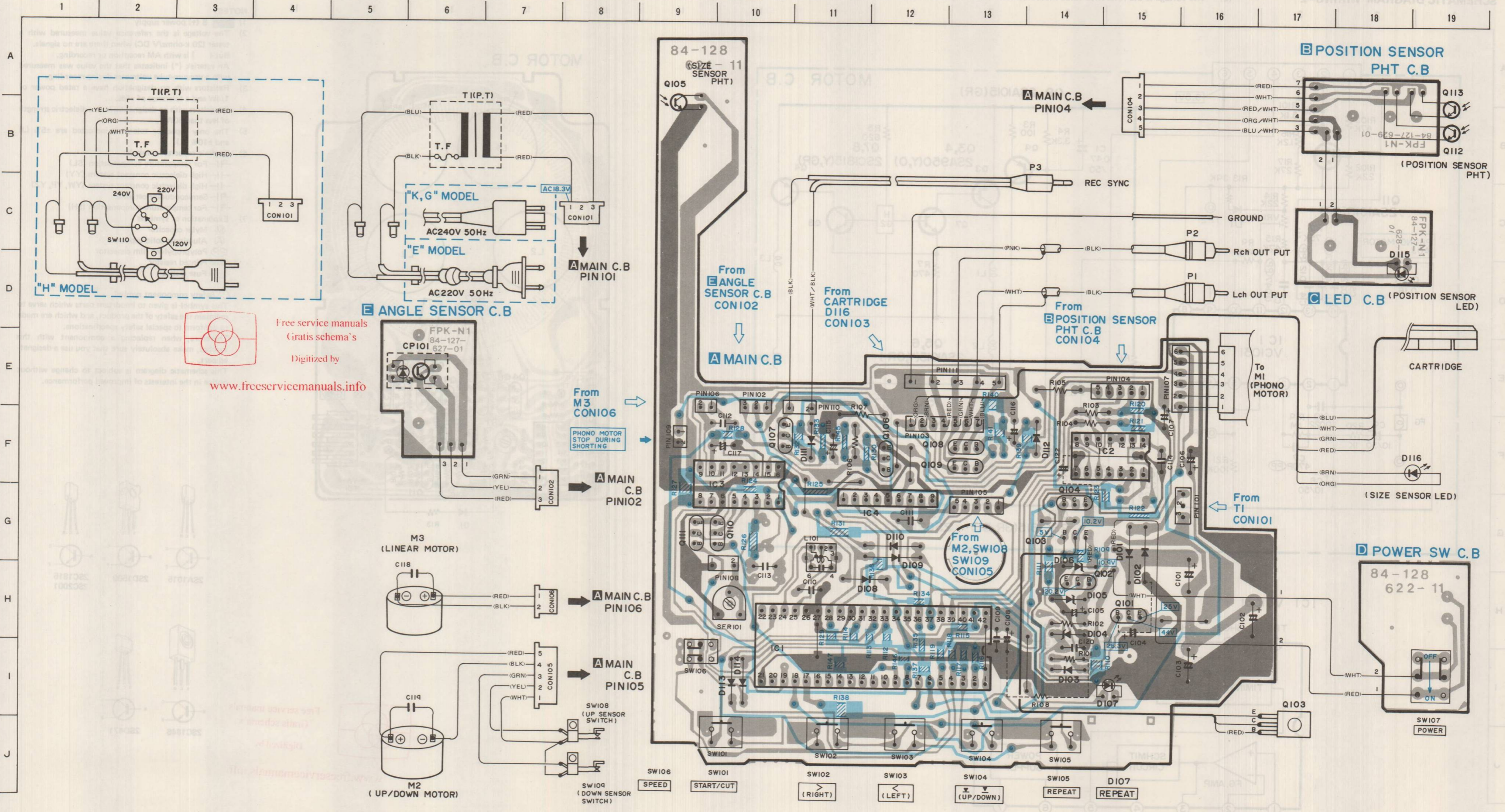


Free service manuals
 Gratis schema's
 Digitized by
 www.freemove.com

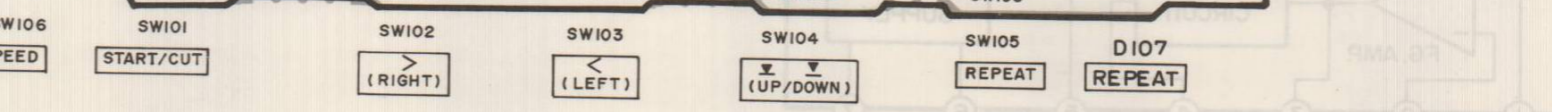
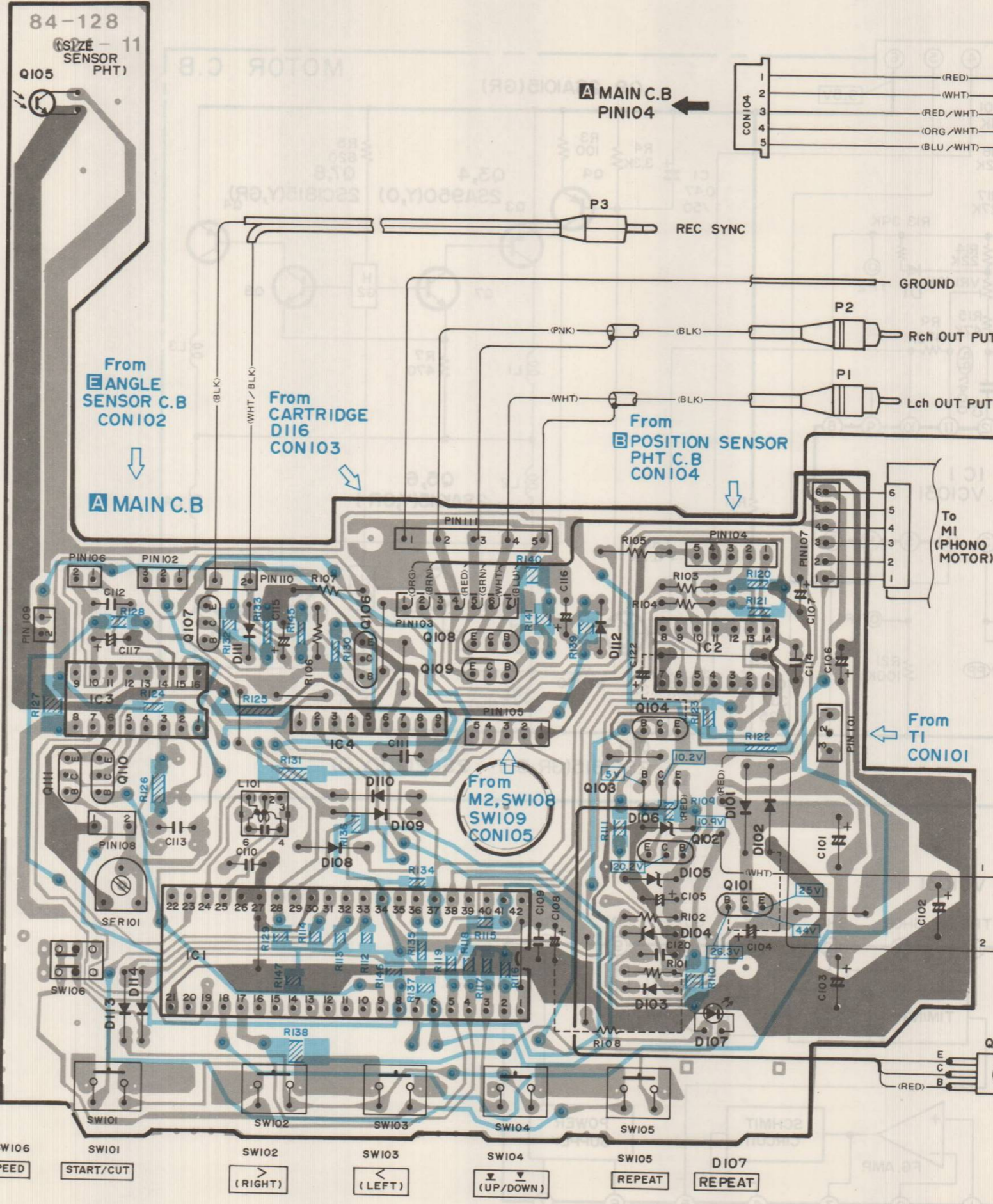
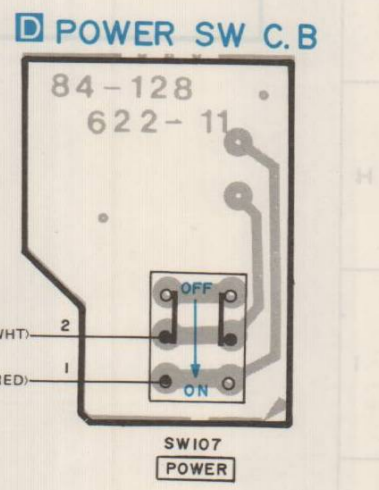
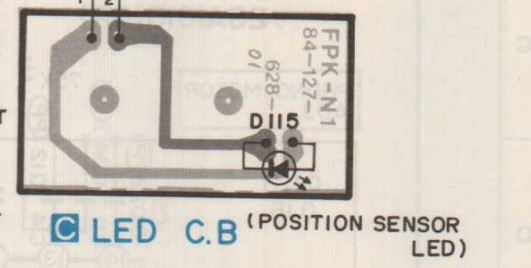
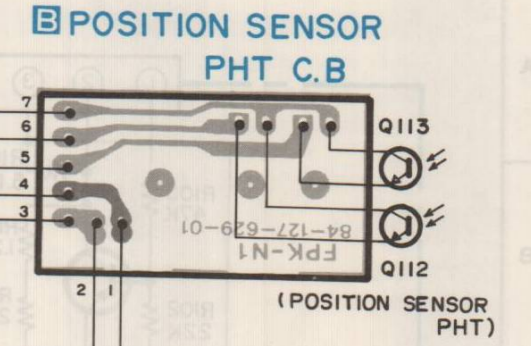
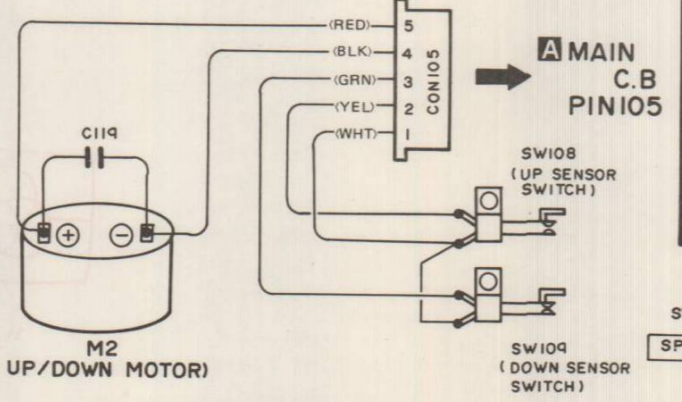
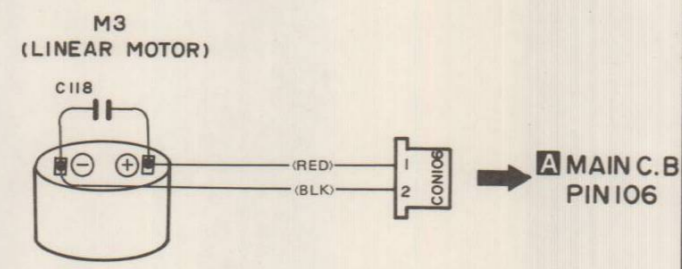
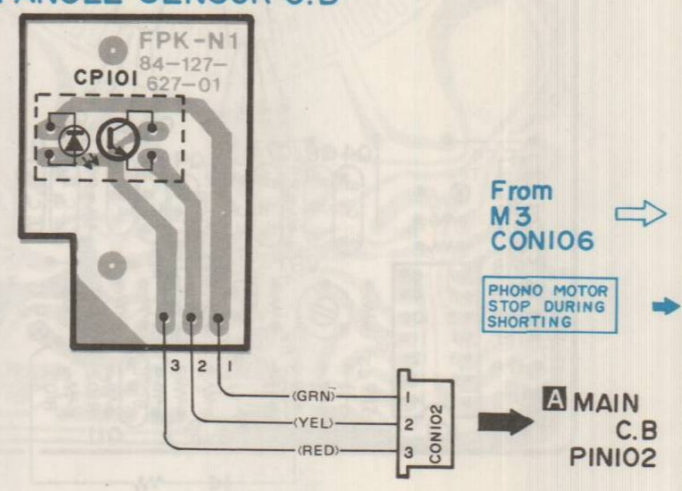
- SW101 START/CUT SWITCH
- SW102 RIGHT SWITCH
- SW103 LEFT SWITCH
- SW104 UP/DOWN SWITCH
- SW105 REPEAT SWITCH
- SW106 SPEED SELECTOR SWITCH
- SW107 POWER SWITCH
- SW108 UP SENSOR SWITCH
- SW109 DOWN SENSOR SWITCH
- SW110 VOLTAGE SELECTOR SWITCH

NOTES (1) Earth pattern Printed resistor pattern Others pattern
(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

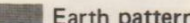
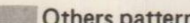
WIRING-1

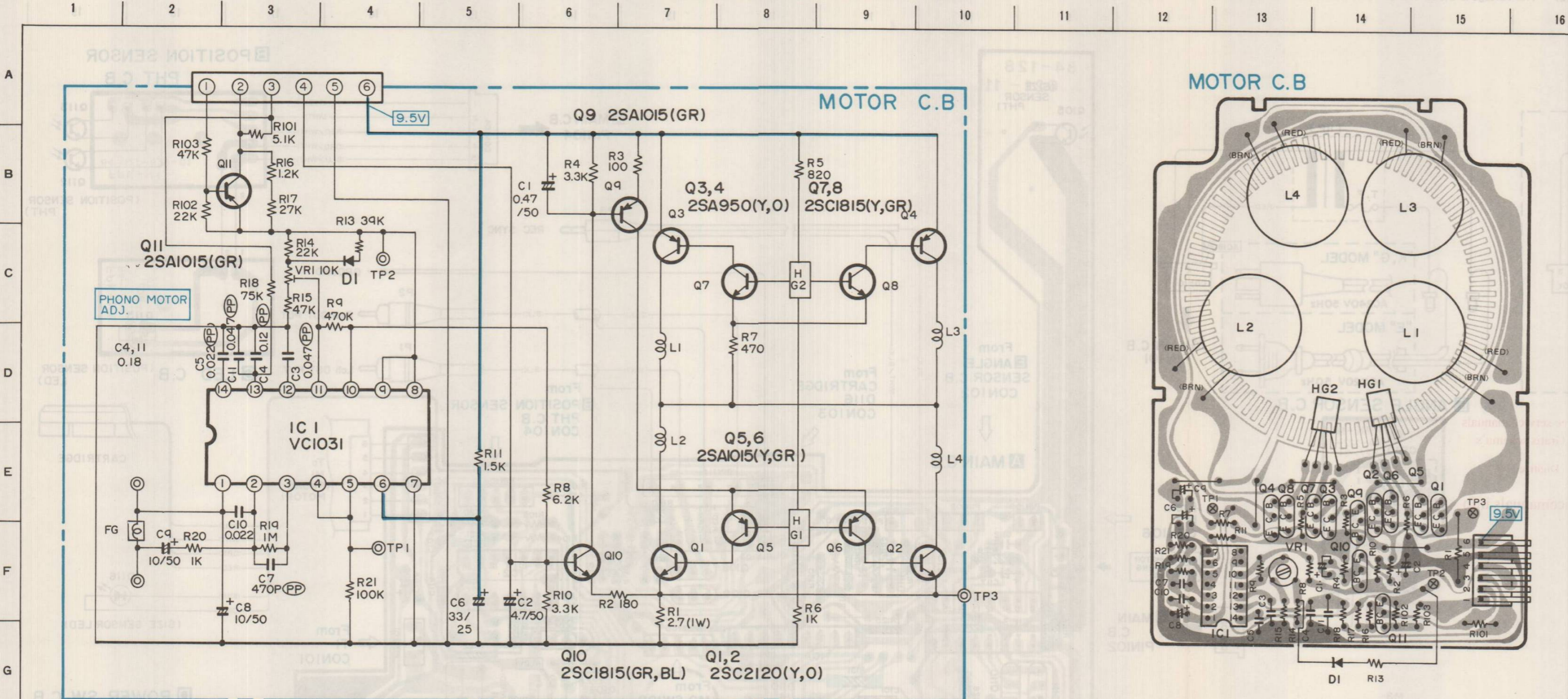


Free service manuals
 (gratis schema's)
 Digitized by
www.freesevicemanuals.info

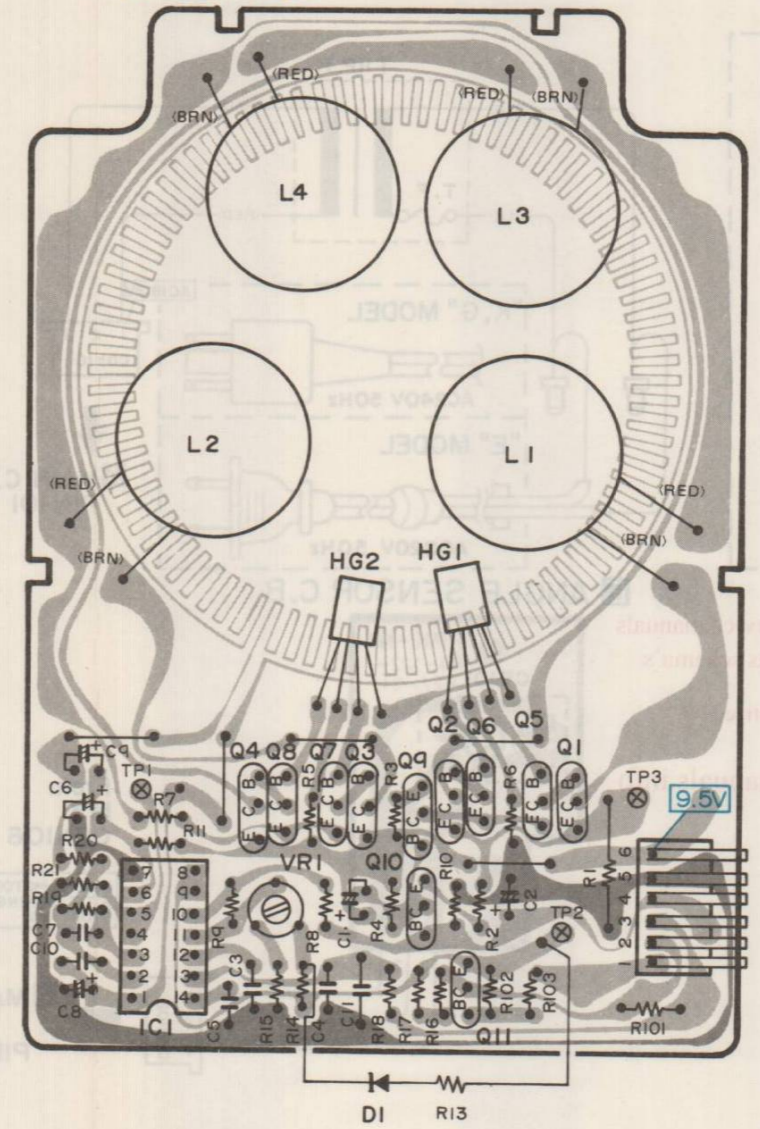














SCHEMATIC DIAGRAM WIRING-2

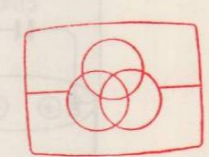
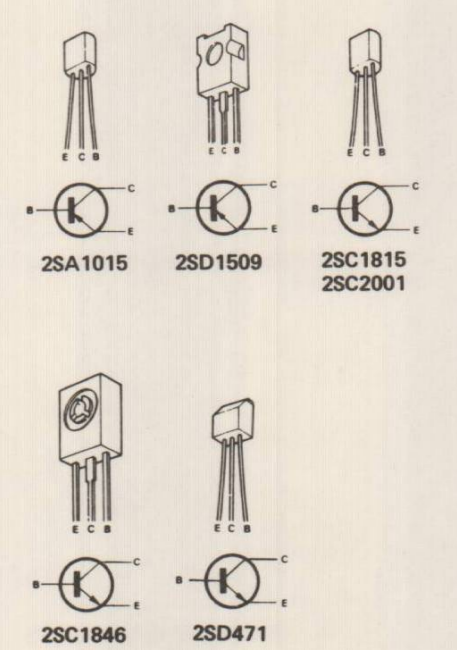
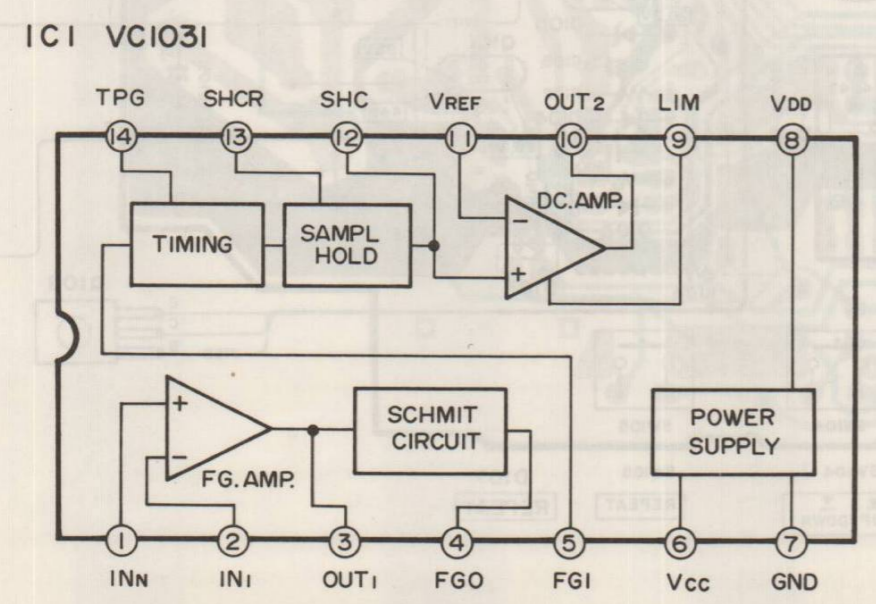
NOTES (1)  Earth pattern  Others pattern
 (2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.



MOTOR C.B

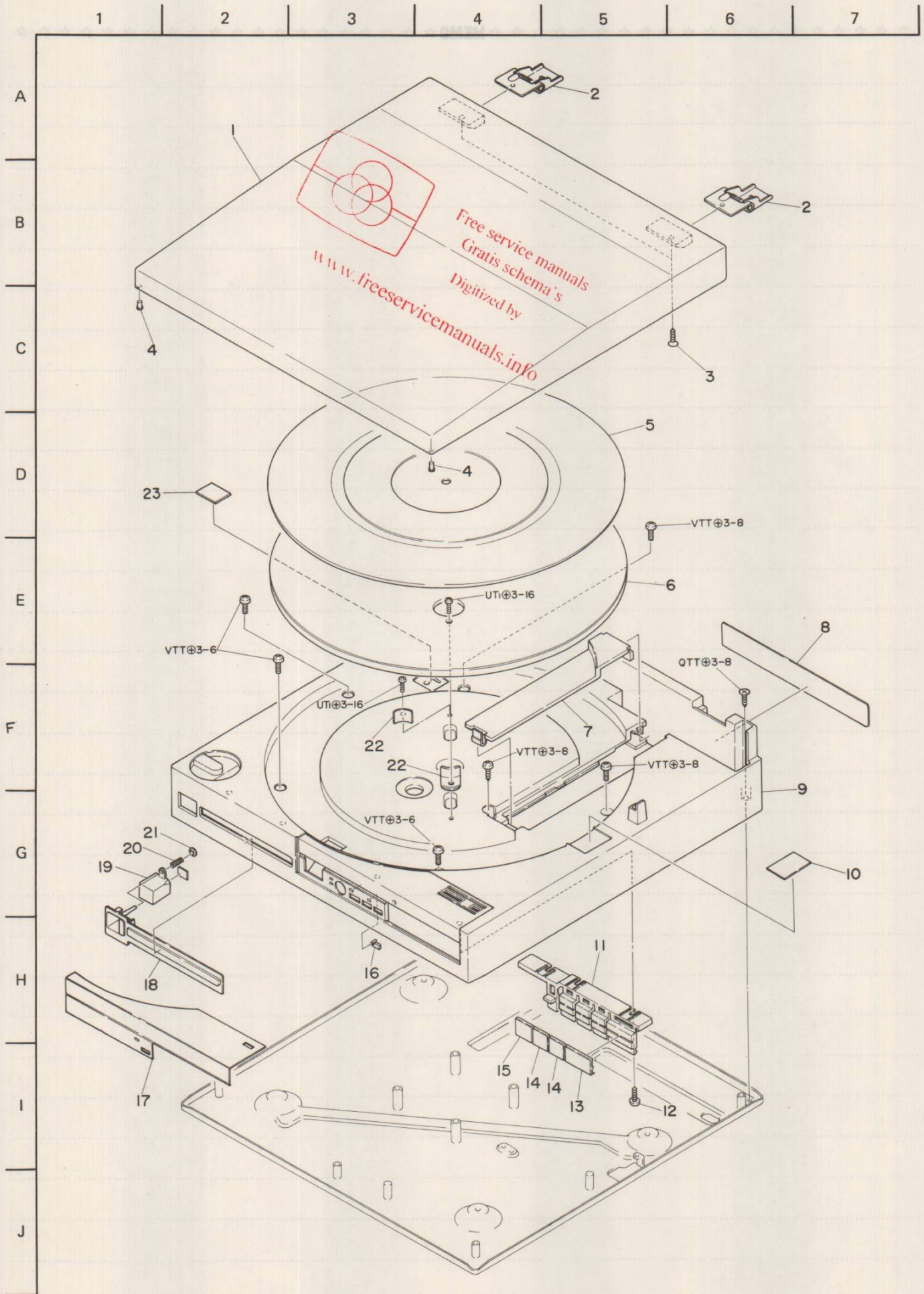


- NOTES:
-  B (+) power supply
 - The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals. But () is with AM reception or recording. An asterisk (*) indicates that the value was measured with a vacuum-tube voltmeter during recording.
 - Resistors with no designation have a rated power of 1/4W and a tolerance of ±5%.
 - Capacitors with no designation have a dielectric strength of less than 50WV.
 - The only capacitor tolerance indicated are ±5% (J) and ±10% (K).
 - Ceramic capacitor symbols:
 -  For temperature compensation (SL)
 -  High dielectric constant system (YY)
 -  High dielectric constant system (YW, YP, YZ)
 -  Semiconductor ceramic
 -  For temperature compensation (SH)
 - Explanation of symbols
 -  Mylar capacitor
 -  Aluminum solid capacitor
 -  Polypropylene film capacitor
 -  Printed resistor
 -  Fuse resistor
 -  Safety component symbol
 This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.
 This schematic diagram is subject to change without notice in the interests of improved performance.



Free service manuals
 Gratis schema's
 Digitized by

EXPLODED VIEW-1

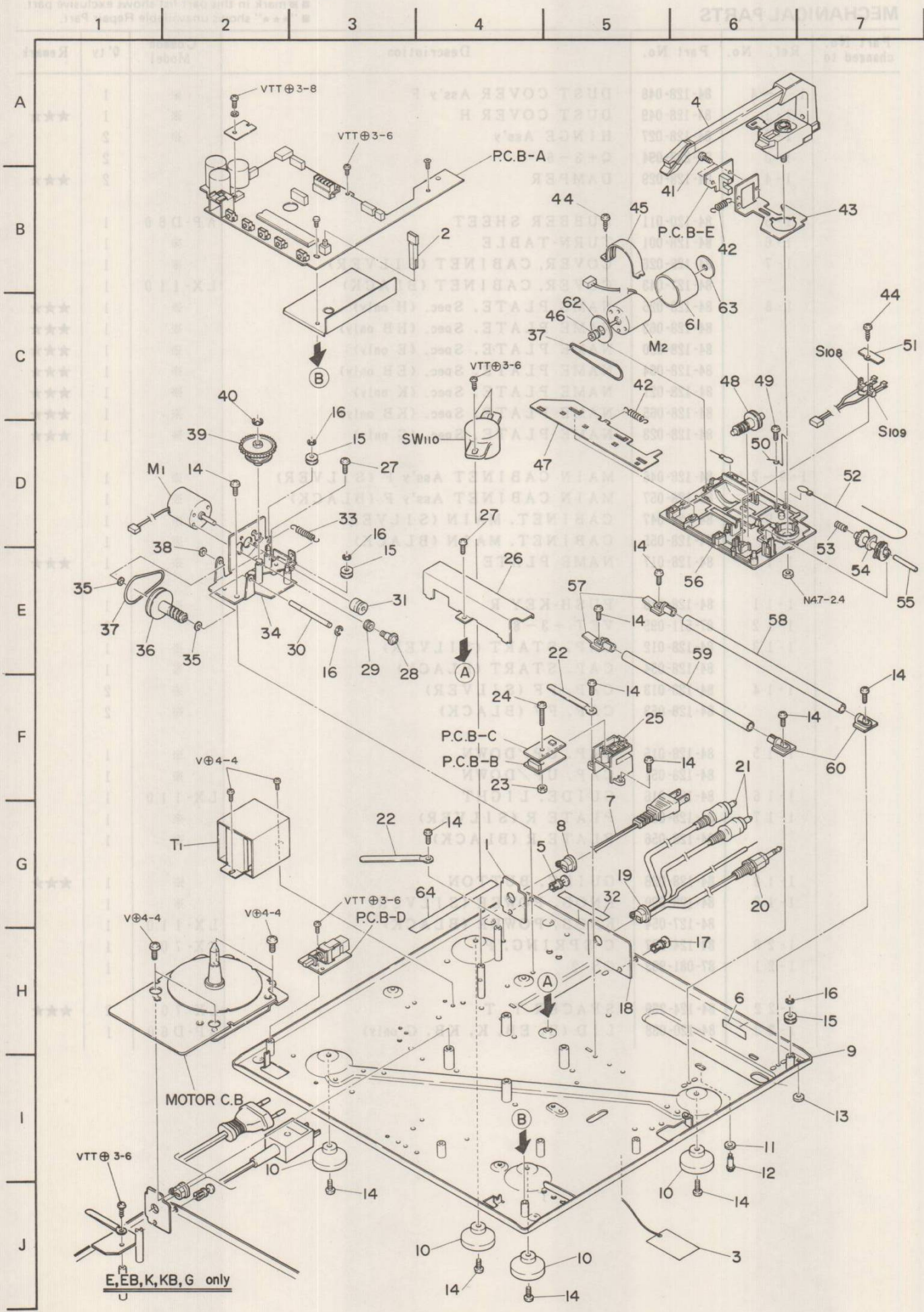


MECHANICAL PARTS

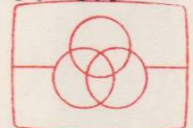
■ ※ mark in this part list shows exclusive part.
 ■ "★★★" shows unavailable Repair Part.

Part No. changed to	Ref. No.	Part No.	Description	Common Model	Q'ty	Remark
	1-1~4	84-128-048	DUST COVER Ass'y F	※	1	
	1-1	84-128-049	DUST COVER H	※	1	★★★
	1-2	84-128-027	HINGE Ass'y	※	2	
	1-3	87-233-094	Q+3-6		2	
	1-4	84-128-029	DAMPER		2	★★★
	1-5	84-120-011	RUBBER SHEET	AP-D60	1	
	1-6	84-128-001	TURN-TABLE	※	1	
	1-7	84-128-026	COVER, CABINET (SILVER)	※	1	
		84-127-043	COVER, CABINET (BLACK)	LX-110	1	
	1-8	84-128-025	NAME PLATE, Spec. (H only)	※	1	★★★
		84-128-063	NAME PLATE, Spec. (HB only)	※	1	★★★
		84-128-020	NAME PLATE, Spec. (E only)	※	1	★★★
		84-128-064	NAME PLATE, Spec. (EB only)	※	1	★★★
		84-128-021	NAME PLATE, Spec. (K only)	※	1	★★★
		84-128-065	NAME PLATE, Spec. (KB only)	※	1	★★★
		84-128-023	NAME PLATE, Spec. (G only)	※	1	★★★
	1-9~21	84-128-046	MAIN CABINET Ass'y F (SILVER)	※	1	
		84-128-057	MAIN CABINET Ass'y F (BLACK)	※	1	
	1-9	84-128-047	CABINET, MAIN (SILVER)	※	1	
		84-128-055	CABINET, MAIN (BLACK)	※	1	
	1-10	84-128-017	NAME PLATE	※	1	★★★
	1-11	84-128-016	PUSH-KEY R	※	1	
	1-12	87-511-095	VFT,+3-8		2	
	1-13	84-128-012	CAP. START (SILVER)	※	1	
		84-128-054	CAP. START (BLACK)	※	1	
	1-14	84-128-013	CAP. FF (SILVER)	※	2	
		84-128-053	CAP. FF (BLACK)	※	2	
	1-15	84-128-015	CAP. UP/DOWN	※	1	
		84-128-051	CAP. UP/DOWN	※	1	
	1-16	84-123-016	GUIDE, LIGHT	LX-110	1	
	1-17	84-128-008	PLATE R (SILVER)	※	1	
		84-128-056	PLATE R (BLACK)	※	1	
	1-18	84-128-028	GUIDE, BUTTON	※	1	★★★
	1-19	84-128-030	KNOB, POWER (SILVER)	※	1	
		84-127-054	KNOB, POWER (BLACK)	LX-110	1	
	1-20	84-124-227	C-SPRING, P	LX-70	1	
	1-21	87-081-903	CS-2		1	
	1-22	84-124-239	SPACER T, T	LX-70	2	★★★
	1-23	84-120-038	LID (E, EB, K, KB, G only)	AP-D60	1	

EXPLODED VIEW-2



Part No. changed to	Ref. No.	Part No.	Description	Common Model	Q'ty	Remark
	2-1	84-123-027	JACK PLATE B (H, HB only)	LX-100	1	★★★
		84-123-061	JACK PLATE EK (E, EB, K, KB, G only)	LX-100	1	★★★
	2-2	84-124-013	KNOB, SPEED	LX-70	1	
	2-3	84-124-952	TAG, CAUTION	LX-70	1	★★★
	2-4	84-128-101	TONE ARM Ass'y	*	1	
	2-5	87-084-063	NYLON RIVET 3-5.5 (H, HB only)		1	
		87-084-078	NYLON RIVET 3-4.5 (E, EB, K, KB, G only)		1	
	2-6	84-127-215	HIMELON 15-8	LX-110	1	★★★
	2-7	87-034-956	AC POWER CORD (H only)		1	
		87-034-958	AC POWER CORD (HB only)		1	
		87-034-877	AC POWER CORD (E, EB only)		1	
		87-034-711	AC POWER CORD (K, KB, G only)		1	
	2-8	87-085-165	CORD BUSHING (H, HB only)		1	
		87-085-185	CORD BUSHING (E, EB, K, KB, G only)		1	
	2-9~64	84-128-210	BOTTOM CABINET Ass'y F (H, HB only)	*	1	
		84-128-211	BOTTOM CABINET Ass'y F (E, EB, K, KB, G only)	*	1	
	2-9	84-128-208	CABINET, BOTTOM (H, HB only)	*	1	★★★
		84-128-209	CABINET, BOTTOM (E, EB, K, KB, G only)	*	1	★★★
	2-10	84-120-025	RUBBER FOOT Ass'y	AP-D60	4	
	2-11	84-123-060	RUBBER CUSHION 4-10-1.5	LX-100	1	★★★
	2-12	84-124-238	SCREW	LX-70	1	★★★
	2-13	84-124-246	SHEET 5-2-1.9	LX-70	1	★★★
	2-14	87-081-511	VTT+3-6		10	
	2-15	87-071-013	PULLEY A		3	
	2-16	87-441-005	STE-2			
	2-17	87-084-063	NYLON RIVET 3.5-5.5		1	
	2-18	84-124-045	JACK PLATE A	LX-70	1	★★★
	2-19	87-085-101	CORD BUSHING		1	
	2-20	84-199-606	PIN CORD		1	
	2-21	84-124-665	SYNCRATE CORD	LX-70	1	
	2-22	87-038-039	WIRE BINDER		2	★★★
	2-23	87-391-717	N3-2.4		1	
	2-24	87-261-100	V+3-16		1	
	2-25	84-124-211	HOLDER A, MASK	LX-70	1	
	2-26	84-124-225	LEAD HOLDER C	LX-70	1	★★★
	2-27	87-067-020	VTT+3-4		3	
	2-28	87-081-483	MOTOR SCREW, M2.6		2	
	2-29	87-087-029	RUBBER CUSHION		2	★★★
	2-30	84-123-206	SHAFT A, WORM	LX-100	1	
	2-31	84-127-205	MOTOR PULLEY L	LX-110	1	
	2-32	84-127-213	HIMELON 50-8	LX-110	1	★★★
	2-33	84-123-236	E-SPRING, SOLENOID	LX-100	1	
	2-34	84-124-231	MOTOR HOLDER B Ass'y	LX-70	1	★★★
	2-35	84-123-309	W3.2-8	LX-100	2	



Free service manuals
 gratis schema
 Digitized by

www.freesevicemanuals.info

Part No. changed to	Ref. No.	Part No.	Description	Common Model	Q'ty	Remark
	2-36	84-123-205	GEAR B, WORM	LX-100	1	
	2-37	82-541-268	RUBBER BELT, COUNTER		2	
	2-38	87-067-039	PW2.3-8-0.25		1	
	2-39	84-123-204	GEAR A, PULLEY	LX-100	1	
	2-40	87-441-011	STE-4		1	
	2-41	87-081-501	VTT+2.6-4		2	
	2-42	84-123-238	E-SPRING, SENSOR	LX-100	2	
	2-43	84-124-209	LEVER A, SENSOR	LX-70	1	
	2-44	87-351-094	VT,+3-6		2	
	2-45	84-127-201	COVER, MOTOR	LX-110	1	★★★
	2-46	84-127-206	MOTOR PULLEY S	LX-110	1	
	2-47	84-124-210	PLATE A, MASK	LX-70	1	★★★
	2-48	84-124-204	GEAR A, WORM	LX-70	1	
	2-49	87-261-071	V+2.6-4		1	
	2-50	84-124-242	T-SPRING, WIRE	LX-70	1	
	2-51	84-124-222	SWITCH HOLDER A	LX-70	1	★★★
	2-52	84-124-223	WIRE ROPE	LX-70	1	★★★
	2-53	84-124-228	C-SPRING, CAM A	LX-70	1	
	2-54	84-124-207	UP-DOWN CAM A	LX-70	1	★★★
	2-55	84-124-219	SHAFT A, UP/DOWN	LX-70	1	★★★
	2-56	84-124-201	MECHANISM CHASSIS Ass'y	LX-70	1	
	2-57	84-124-205	HOLDER A, PIPE	LX-70	2	★★★
	2-58	84-124-214	PIPE A	LX-70	1	★★★
	2-59	84-124-215	PIPE B	LX-70	1	
	2-60	84-124-206	HOLDER B, PIPE	LX-70	1	★★★
	2-61	84-127-209	PLATE A, MOTOR	LX-110	1	★★★
	2-62	84-127-210	PLATE B, MOTOR	LX-110	1	★★★
	2-63	84-127-211	PLATE C, MOTOR	LX-110	1	★★★
	2-64	84-127-212	HIMELON 100-8	LX-110	1	★★★

Part No.	Description
87-261-167-21	V+4-4
87-341-100-21	UT+3-16
87-081-511-01	VTT+3-6
87-081-512-01	VTT+3-8
87-089-532-01	QTT+3-8
87-067-156-01	N4.7-2.4

ACCESSORIES/PACKAGE LIST

Part No. changed to	Ref. No.	Part No.	Description	Common Model	Q'ty	Remark
	1	84-128-852	PRINTED INDIV. PACKING	※	1	★★★
	2	84-124-857	SHEET. CORRUGATED BOARD	LX-70	1	★★★
	3	84-124-858	SHEET. FOAMED MAT	LX-70	1	★★★
	4	84-124-861	SHEET. FOAMED MAT	LX-70	1	★★★
	5	84-127-852	CUSHION F. PRINTED INDIV.	LX-110	1	★★★
	6	84-127-853	CUSHION R. PRINTED INDIV.	LX-110	1	★★★
	7	84-128-855	PAD. CORRUGATED BOARD	※	1	★★★
	8	87-051-171	POLY-VINYL SACK		1	★★★
★★★	9	84-128-904	INSTRUCTIONS BOOKLET	※	1	★★★
	10	87-051-171	POLY-VINYL SACK(for instruction)		1	★★★
★★★	11	87-056-009	DISTRIBUTORS LIST		1	★★★
	12	87-056-059	GUARANTEE CARD(G only)		1	★★★
	13	87-032-845	SIEMENS PLUG(H, HB only)		1	
	14	84-190-965	4 5 ADAPTER(H, E, K, G only)	AP-2200	1	
	15	84-190-978	4 5 ADAPTER S(HB, EB, KB only)	AP-2200	1	

Part No.	Description
87-087-126-01	N.Y. 2.4
87-088-282-01	QT+3-8
87-081-212-01	VTT+3-8
87-081-211-01	VTT+3-8
87-241-100-21	UT+3-18
87-281-187-21	V+1-18

Part No. changed to	Ref. No.	Part No.	Description	Common Model	Q'ty	Remark
	2-1	84-123-027	JACK PLATE B (H, HB only)	LX-100	1	★★★
	2-2	84-123-021	JACK PLATE EK (E, EB, K, KB, G only)	LX-100	1	★★★
	2-3	84-124-013	KNOB. SPEED	LX-70	1	★★★
	2-3	84-124-202	TAG. CAUTION	LX-70	1	★★★
	2-4	84-122-101	TONE ARM Assy	W	1	
	2-5	87-084-002	NYLON RIVET 2-2.5 (H, HB only)		1	
	2-5	87-084-012	NYLON RIVET 2-4.5 (E, EB, K, KB, G only)		1	
	2-6	84-127-212	HIMELON 12-8	LX-110	1	★★★
	2-7	87-034-828	AC POWER CORD (H only)		1	
	2-7	87-034-808	AC POWER CORD (HB only)		1	
	2-7	87-034-877	AC POWER CORD (E, EB only)		1	
	2-7	87-034-711	AC POWER CORD (K, KB, G only)		1	
	2-8	87-082-182	CORD BUSHING (H, HB only)		1	
	2-8	87-082-183	CORD BUSHING (E, EB, K, KB, G only)		1	
	2-9-8-4	84-128-210	BOTTOM CABINET Assy F (H, HB only)	W	1	
	2-9-8-4	84-128-211	BOTTOM CABINET Assy F (E, EB, K, KB, G only)	W	1	
	2-9	84-128-208	CABINET. BOTTOM (H, HB only)	W	1	★★★
	2-9	84-128-209	CABINET. BOTTOM (E, EB, K, KB, G only)	W	1	★★★
	2-10	84-120-022	RUBBER FOOT Assy	AP-220	4	
	2-11	84-123-022	RUBBER CUSHION 4-18-1.2	LX-100	1	★★★
	2-12	84-124-228	SCREW		1	★★★
	2-13	84-124-240	SHEET 2-2-1.8		10	★★★
	2-14	87-081-211	VTT+3-8		3	
	2-15	87-071-013	PULLEY A		3	
	2-16	87-441-002	STE-2		1	
	2-17	87-084-002	NYLON RIVET 2.5-2.5		1	
	2-18	84-124-042	JACK PLATE A	LX-70	1	★★★
	2-19	87-082-101	CORD BUSHING		1	
	2-20	84-122-008	PIN CORD		1	
	2-21	84-124-022	SYNCRATE CORD	LX-70	1	★★★
	2-22	87-038-022	WIRE BINDER		2	
	2-23	87-081-717	W3-2.4		1	
	2-24	87-081-100	V+3-18		1	
	2-25	84-124-211	HOLDER A. MASK	LX-70	1	★★★
	2-26	84-124-222	LEAD HOLDER C	LX-70	1	★★★
	2-27	87-081-020	VTT+3-4		3	
	2-28	87-081-422	MOTOR SCREW. M.T.		2	
	2-29	87-081-022	RUBBER CUSHION		2	★★★
	2-30	84-123-202	SHAFT A. WORM	LX-100	1	
	2-31	84-127-202	MOTOR PULLEY 1	LX-110	1	★★★
	2-32	84-127-212	HIMELON 20-8	LX-110	1	★★★
	2-33	84-128-228	E-SPRING. SOLENOID	LX-100	1	
	2-34	84-124-231	MOTOR HOLDER B Assy	LX-70	1	★★★
	2-35	84-123-208	W3-2-8	LX-100	2	

AIWA Co., Ltd. Tokyo Japan