

SERVICE MANUAL

FULLY AUTOMATIC DD TURNTABLE

SANSUI P-L45/L55

(Silver & Black Model)



● SPECIFICATIONS

Type	Direct-drive turntable
Rated speeds	33-1/3, 45 rpm
Platter	Aluminum alloy diecast, 306 mm (12-1/16") diameter, 0.75 kg (1.7 lbs.) weight
Motor	Coreless and Brushless DC/FG Servo
Wow/flutter	0.04% (WRMS)
Signal-to-noise ratio	Better than 72 dB (DIN-B) Better than 60 dB (IEC-B)
Effective tonearm length	140 mm (5-1/2")
Power voltage	110 ~ 120/220 ~ 240 V (50/60Hz)
For U.S.A. and Canada	120 V (60 Hz)
Power consumption	
P-L45	20 W
P-L55	22 W
Dimensions	430 mm (16-29/32") W 95 mm (3-3/4") H 374mm (14-23/32") D
Weight	5.6 kg (12.4 lbs.) net 6.7 kg (14.7 lbs.) packed

Specifications of the cartridge (applicable only to the units with cartridge)

Model SV-P313

Type	Dual Magnet type
Output voltage	2.5 mV (1,000 Hz, 35.4 mm/sec)
Correct load impedance	47 kohms
Frequency response	20 ~ 20,000 Hz
Stylus	0.6 mil diamond stylus (SN-P313 replacement stylus)

- Design and specifications subject to change without notice for improvements.
- Due to local laws and regulations, this unit sold in some areas are not equipped with variable voltage selectors.

CAUTION

1. Parts identified by the \triangle symbol on the schematic diagram and the parts list are critical for safety. Use only replacement parts that have critical characteristics recommended by the manufacturer.
2. Make leakage-current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit before returning the appliance to the customer.

Sansui

SANSUI ELECTRIC CO., LTD.

CAUTION

1. The symbols, UL, CSA, SA, BS, UK, EU, AS and XX on the parts list and the schematic diagram mean followings respectively.
 - UL Manufactured for U.S.A market.
(Underwriters Laboratories approved model.)
 - CSA Manufactured for Canadian market.
 - SA Manufactured for South African market.
 - BS, UK Manufactured for United Kingdom market.
 - EU Manufactured for European market.
 - AS Manufactured for Australian market.
 - XX Standard Version.
 - NON MARK Common Parts.

2. Some printed circuit boards are not supplied as the assembled. To separate these in this service manual, the stock No's are not indicated at the ends of the board names. However, the individual parts on the circuit boards are provided by orders.

3. Since some of capacitors and resistors are omitted from parts lists in this service manual, refer to the Common Parts List for capacitors & resistors, which was issued on February 1983.

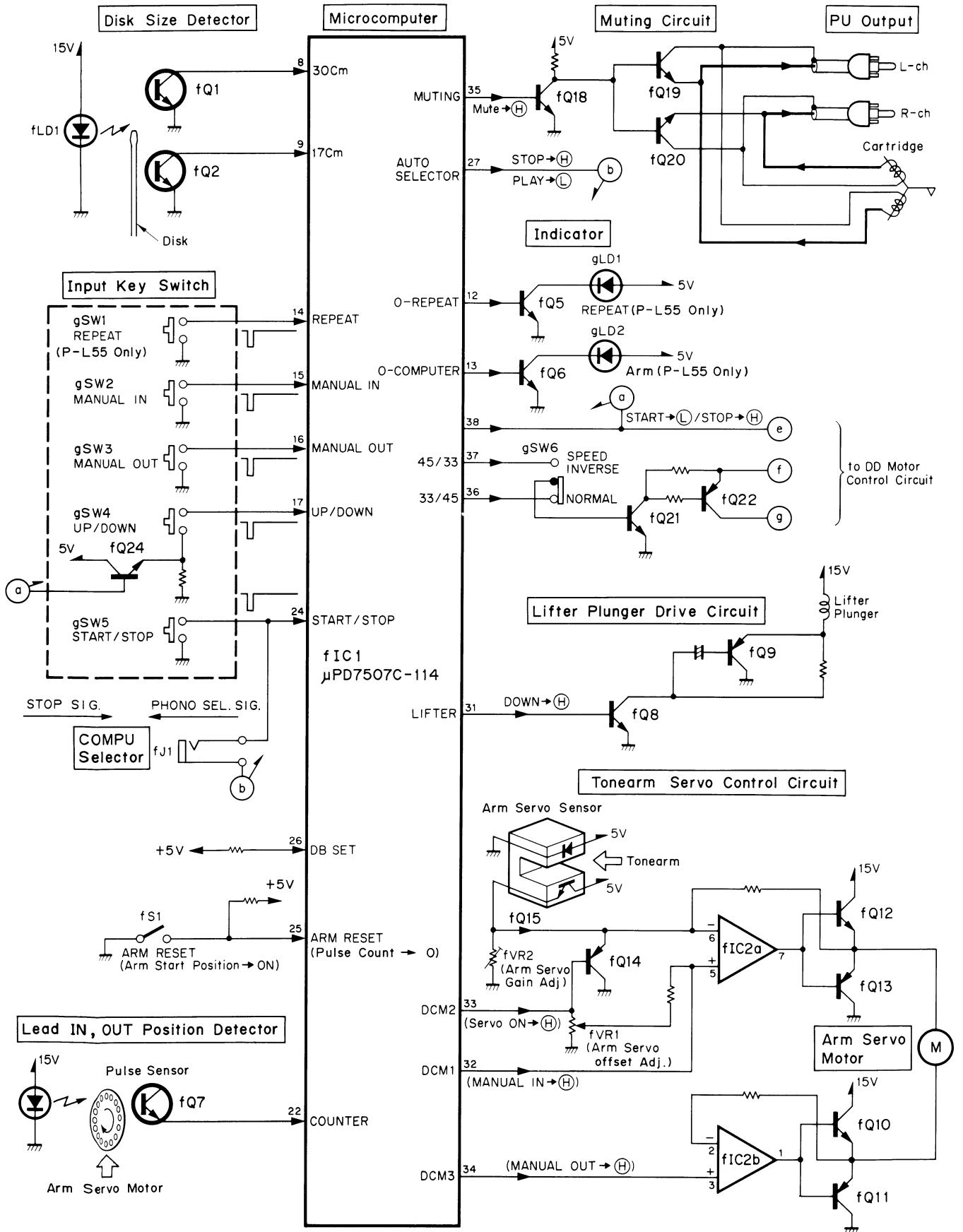
4. Abbreviations in this service manual are as follows.

• Abbreviations List

C.R. : Carbon Resistor	E.B.L. : Low Leak Bi-Polar Electrolytic Capacitor
S.R. : Solid Resistor	Ta.C. : Tantalum Capacitor
Ce.R : Cement Resistor	F.C. : Film Capacitor
M.R. : Metal Film Resistor	M.P. : Metalized Paper Capacitor
F.R. : Fusing Resistor	P.C. : Polystyrene Capacitor
N.I.R. : Non-Inflammable Resistor	G.C. : Gimmic Capacitor
A.R. : Array Resistor	A.C. : Array Capacitor
C.C. : Ceramic Capacitor	V.R. : Variable Resistor
C.T. : Ceramic Capacitor, Temperature Compensation	S.V.R. : Semi Variable Resistor
E.C. : Electrolytic Capacitor	SW. : Switch
E.L. : Low Leak Electrolytic Capacitor	Chip R. : Chip Resistor
E.B. : Bi-Polar Electrolytic Capacitor	Chip C. : Chip Capacitor

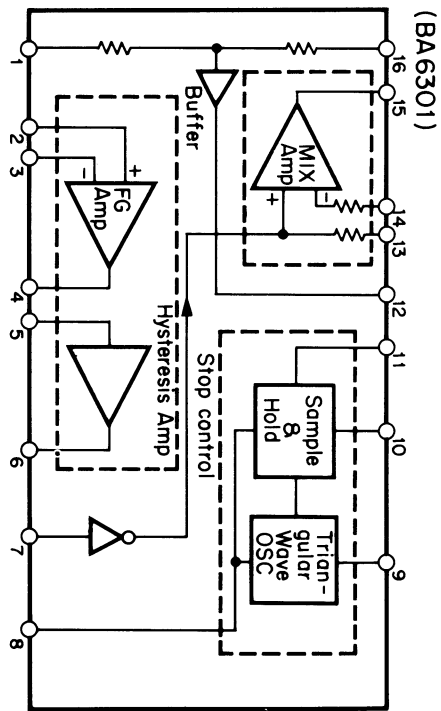
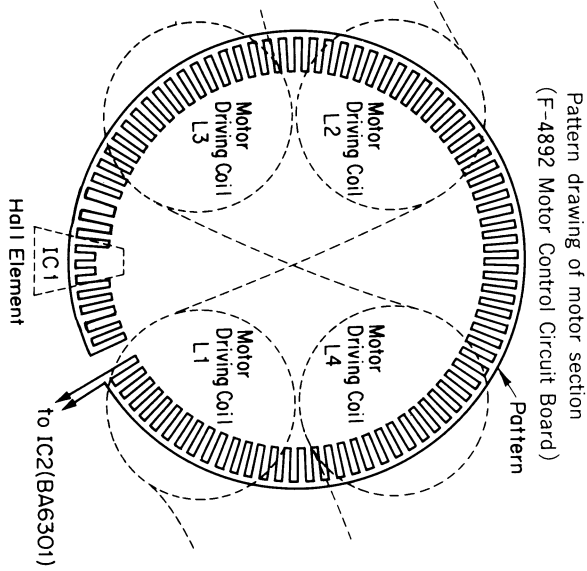
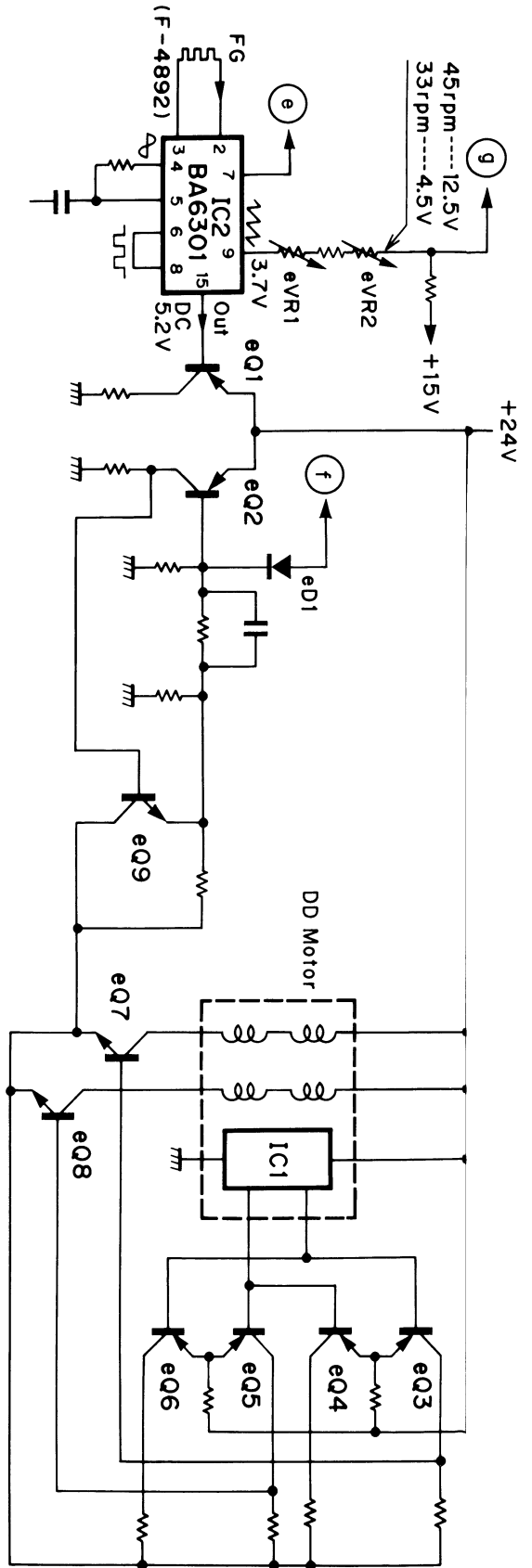
1. BLOCK DIAGRAM

1-1. Tonearm Control Circuit



1-2. Disk Motor Drive Section

e, f, g connected to Tonearm Control Circuit on Page 2.



2. Microcomputer IC, μ PD7507C-114 operation timing

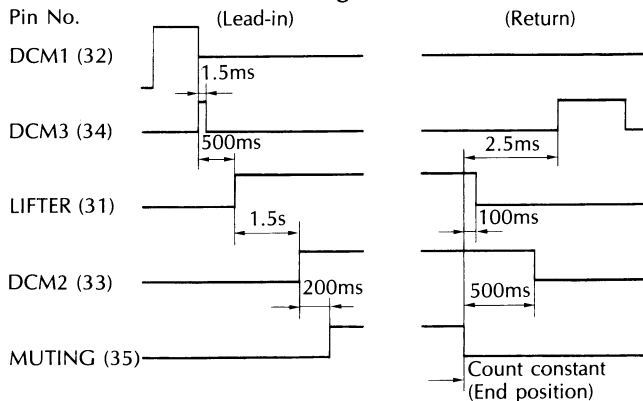
2-1. Automatic record disk selection timing

Automatic record disk selection (When pin 7 is set to High)

	Input for 2.5 sec		Output after 2.5 sec
	Pin 8	Pin 9	Pin 36
No disk			L
30 cm disk			L
17 cm disk			H

• When the DD Motor is kept ON after the above, the input is checked and output every 1.5s, and in the case of the input "no disk", it returns and the DD Motor is set to OFF.

2-2. Lead-in & Return timing



2-3. DC motor control

	DCM 1 Pin 32	DCM 2 Pin 33	DCM 3 Pin 34
Tonearm inward direction movement	H	L	L
Tonearm outward direction movement	L	L	H
Stop	L	L	L
Selection of servo operation	L	H	L

2-4. Key operation

• START/STOP (pin 24) key

Condition				Result		
LIFTER (Pin 31)	ARM RESET (Pin 25)	DDM 4/3 (Pin 38)		Auto-operation	DDM s/s (Pin 38)	REPEAT
Up L	Arm rest L	OFF H		Start		—
Up L	Arm rest H	OFF H		—	ON L	—
Down H	Arm rest H	OFF H		—	ON L	—
* Up L	Arm rest H	ON L		Return		Clear
Down H	Arm rest H	ON L		Return		Clear
During auto start operation				Return		Clear
During auto return operation				—		Clear

* Returns after 2.5s via the key operation during the UP operation using the UP/DOWN key.

• UP/DOWN (pin 17) key

Condition			Result
LIFTER (Pin 31)		ARM RESET (Pin 25)	LIFTER (Pin 31)
Up L	L	Arm rest L	—
Up L	L	Arm rest H	Down H
Up L	L	End position	—
Down H	H	Arm rest H	Up L
During auto-start horizontal operation			—
During auto-return horizontal operation			—

• Manual-in (pin 15) key

Condition			Result
LIFTER (Pin 31)			
Up L	L	Position other than end	Moves inwards while this key is pressed *1
Up L	L	End position	—
Down H	H		—
During auto-start/return operation			—

• Manual-out (pin 16) key

Condition			Result
LIFTER (Pin 31)			
Up L	L	Position other than arm-rest	Moves outwards while this key is pressed *2
Up L	L	Arm-rest	—
Down H	H		—
During auto-start/return operation			—

Cautions:

- The manual-in/manual-out key operations can be accepted by the UP/DOWN key-in after 2.5s during the lift-up operation.
- *1. Stops at the end position. Stops at the 30cm stop position when the DDM is set to OFF.
- *2. Stops at the arm-rest. DDM is also set to OFF.

• REPEAT (pin 14) key

- (1) This key operation is always accepted by the push on/push off operation. Synchronized with repeat indication.
- (2) Cleared when there is no record disk for auto-start with the START/STOP key set to the stop mode.
- (3) The lead-in resets the count at the arm-rest and returns lead-in to the set position of the record disk. With the automatic record disk type selection, the last record disk selection input is checked at the arm-rest and lead-in takes place.
- (4) Repeat ON/OFF is effective during the auto return operation.
- (5) With the repeat OFF during the auto start operation, repeat is set to OFF but the operation is left as it is and lead-in takes place.

2-5. Other items

• Chattering prevention time: 20ms

Applicable input: 1~7

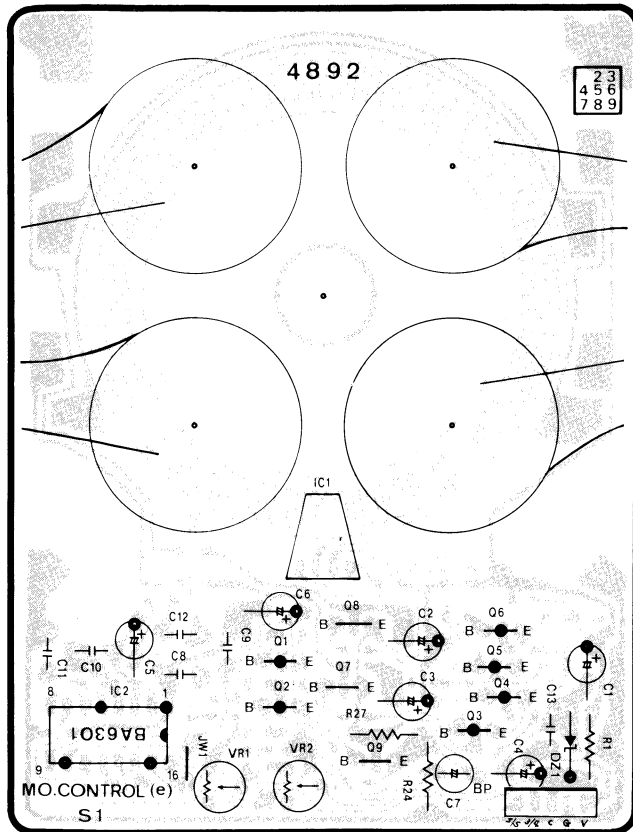
• Operation indication (13)

- (1) Set to H/L at 2.5Hz (Duty 50%) under the following conditions.
 - From the START/STOP key-in until the muting OFF in the auto start mode
 - From the muting ON until the arm is reset \bar{L} in the auto return mode
 - While the tonearm is being moved by the manual IN/OUT key operation
 - For 2.5s from the UP/DOWN key-in during the UP operation and until the muting OFF during the DOWN operation
- (2) Set to H/L at 9Hz (Duty 50%) under the following conditions.
 - For 2.5s from the judgement time until the arm is reset \bar{L} , when "no record disk" is input during the auto start operation with automatic record disk selection.

3. PARTS LOCATION & PARTS LIST

3-1. F-4892 DD Motor Control Board

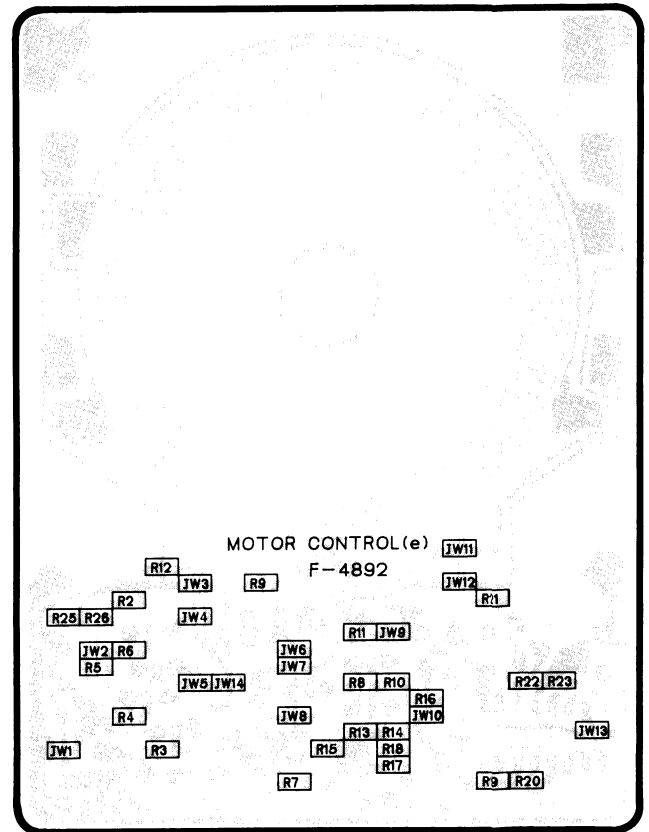
Component Side



Parts List

Parts No.	Stock No.	Description
• Transistor		
eQ1	46367001	2SA1115
	or 46367201	2SA1048
	or 46392001	2SA1175
	or 48058601	2SA933S
eQ2	46367001	2SA1115
	or 46367201	2SA1048
	or 46392001	2SA1175
	or 48058601	2SA933S
eQ3	46367001	2SA1115
	or 46367201	2SA1048
	or 46392001	2SA1175
	or 48058601	2SA933S
eQ4	46367001	2SA1115
	or 46367201	2SA1048
	or 46392001	2SA1175
	or 48058601	2SA933S
eQ5	46367001	2SA1115
	or 46367201	2SA1048
	or 46392001	2SA1175
	or 48058601	2SA933S
eQ6	46367001	2SA1115
	or 46367201	2SA1048
	or 46392001	2SA1175
	or 48058601	2SA933S
eQ7	46359801	2SC2001
	or 46614101	2SC3243
	or 48000901	2SC2060
eQ8	46359801	2SC2001
	or 46614101	2SC3243
	or 48000901	2SC2060
eQ9	03083901	2SD313AL
	or 46546701	2SD880

Pattern Side (Chip Parts)



Parts No.	Stock No.	Description
• IC		
eIC1	46354301	HW-301C-Q
	or 46354302	HW-301C-R
eIC2	46354400	BA6301
• Zener Diode		
eDZ1	46103700	05Z12-Y
eJW1 ~ 13	46741100	Cross Conductor (Chip)
△ eR1	46229900	560 Ω 1/2W N.I.F.
eR2	46747400	820 Ω 1/8W Chip R.
eR3	46749200	4.7 KΩ 1/8W Chip R.
eR4	46749200	4.7 KΩ 1/8W Chip R.
eR5	46749200	4.7 KΩ 1/8W Chip R.
eR6	46749200	4.7 KΩ 1/8W Chip R.
eR7	46750000	10 KΩ 1/8W Chip R.
eR8	46747600	1 KΩ 1/8W Chip R.
eR9	46747600	1 KΩ 1/8W Chip R.
eR10	46747600	1 KΩ 1/8W Chip R.
eR11	46747600	1 KΩ 1/8W Chip R.
eR12	46747300	750 Ω 1/8W Chip R.
eR13	46749100	4.3 KΩ 1/8W Chip R.
eR14	46751500	43 KΩ 1/8W Chip R.
eR15	46747000	560 Ω 1/8W Chip R.
eR16	46752600	120 KΩ 1/8W Chip R.
eR17	46753400	270 KΩ 1/8W Chip R.
eR18	46753300	240 KΩ 1/8W Chip R.
eR19	46750300	13 KΩ 1/8W Chip R.
eR20	46747900	1.3 KΩ 1/8W Chip R.
eR21	46745200	100 Ω 1/8W Chip R.
eR22	46753600	330 KΩ 1/8W Chip R.
eR23	46751600	47 KΩ 1/8W Chip R.

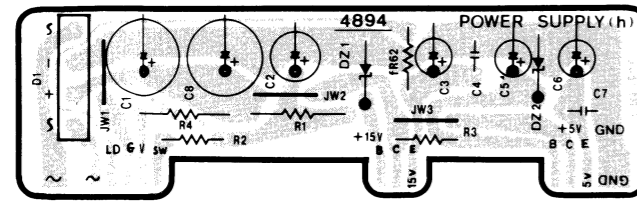
Parts List <F-4892>

Parts No.	Stock No.	Description
△ eR24	46227000	2.2 Ω 1/2W N.I.R.
eR25	46745200	100 Ω 1/8W Chip R.
eR26	46745200	100 Ω 1/8W Chip R.
△ eR27	46230000	680 Ω 1/2W N.I.R.
eC1	46929700	33 μF 25V E.C.
eC2	46929600	22 μF 25V E.C.
eC3	46929600	22 μF 25V E.C.
eC4	46928700	22 μF 16V E.C.

Parts No.	Stock No.	Description
eC5	46929200	4.7 μF 25V E.C.
eC6	46930800	0.22 μF 50V E.C.
eC7	48165000	0.1 μF 50V E.B.
eC8	46284100	0.1 μF 50V F.C.
eC9	46282900	0.01 μF 50V F.C.
eVR1	46634900	100 KΩ S.V.R., 33rpm Adj.
eVR2	46635300	470 KΩ S.V.R., 45rpm Adj.

3-2. F-4894 Power Supply Board

Component Side

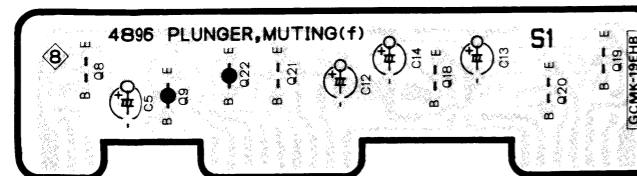


Parts List

Parts No.	Stock No.	Description
• Diode		
△ hD1	03117000	RB152-LFF
• Zener Diode		
hDZ1	46114600	05Z15-Z
	or 46114700	05Z16-X
hDZ2	46111400	05Z5.6-X
	or 46111500	05Z5.6-Y
△ hR1	46624900	330 Ω 2W N.I.R.
△ hR2	00130900	100 Ω 1/2W N.I.R.
△ hR3	00133100	2.2 KΩ 1/2W N.I.R.
△ hR4	00135800	4.7 Ω 1/2W N.I.R.

3-3. F-4896 Lifter Plunger & Muting Drive Board (Stock No. 00861301)

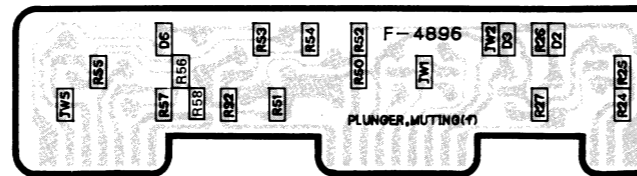
Component Side



Parts List

Parts No.	Stock No.	Description
• Transistor		
fQ8	46367101	2SC2603
fQ9	46359701	2SA952
	or 46614001	2SA1283
	or 48000801	2SA934
fQ18	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
fQ19	46540801	2SC2878
	or 46604301	2SC3327
	or 48055901	2SD1468S
fQ20	46540801	2SC2878
	or 46604301	2SC3327
	or 48055901	2SD1468S
fQ21	48171600	DTC114YS
fQ22	48183400	DTA114YS

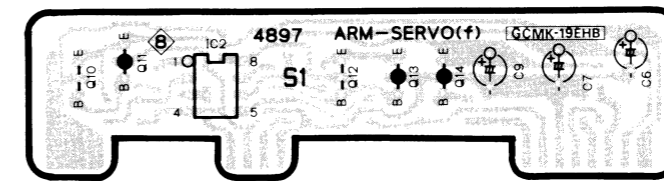
Pattern Side (Chip Parts)



Parts No.	Stock No.	Description
• Diode		
fD2	46852000	RLS-73
fD3	46852000	RLS-73
fD6	46852000	RLS-73
fR24	46749200	4.7 KΩ 1/8W Chip R.
fR25	46748800	3.3 KΩ 1/8W Chip R.
fR26	46751600	47 KΩ 1/8W Chip R.
fR27	46745200	100 Ω 1/8W Chip R.
△ fR28	46249600	180 Ω 1W N.I.R.
fR50	46750000	10 KΩ 1/8W Chip R.
fR51	46748400	2.2 KΩ 1/8W Chip R.
fR52	46752400	100 KΩ 1/8W Chip R.
fR53	46749200	4.7 KΩ 1/8W Chip R.
fR54	46750000	10 KΩ 1/8W Chip R.
fR55	46749600	6.8 KΩ 1/8W Chip R.
fR56	46749600	6.8 KΩ 1/8W Chip R.
fR57	46742800	10 Ω 1/8W Chip R.
fR58	46742800	10 Ω 1/8W Chip R.
fJW1,3,5	46741100	Cross Conductor (Chip)

3-4. F-4897 Tonearm Servo Board (Stock No. 00861401)

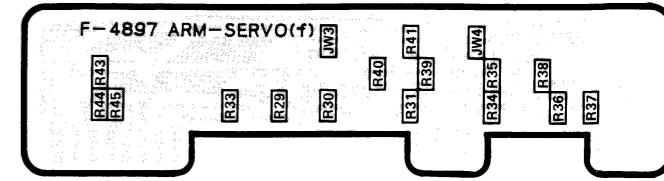
Component Side



Parts List

Parts No.	Stock No.	Description
• Transistor		
fQ10	46359801	2SC2001
	or 46614101	2SC3243
	or 48000901	2SC2060
fQ11	46359701	2SA952
	or 46614001	2SA1283
	or 48000801	2SA934
fQ12	46359801	2SC2001
	or 46614101	2SC3243
	or 48000901	2SC2060
fQ13	46359701	2SA952
	or 46614001	2SA1283
	or 48000801	2SA934
fQ14	46367001	2SA1115
	or 46367201	2SA1048
	or 48058601	2SA933S
• IC		
fIC2	46173100	NJM2904D
	or 48163600	BA728

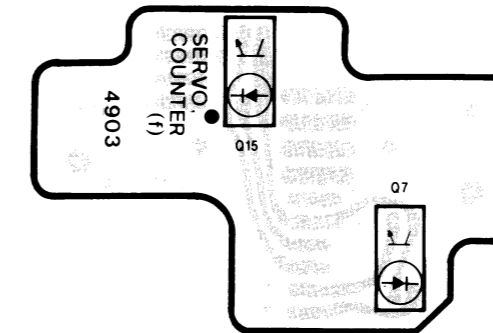
Pattern Side (Chip Parts)



Parts No.	Stock No.	Description
fJW3,4	46741100	Cross Conductor (Chip)
fR29	46750000	10 KΩ 1/8W Chip R.
fR30	46751400	39 KΩ 1/8W Chip R.
fR31	46750000	10 KΩ 1/8W Chip R.
fR33	46750000	10 KΩ 1/8W Chip R.
fR34	46751400	39 KΩ 1/8W Chip R.
fR35	46750000	10 KΩ 1/8W Chip R.
fR36	46750000	10 KΩ 1/8W Chip R.
fR37	46753200	220 KΩ 1/8W Chip R.
fR38	46745200	100 Ω 1/8W Chip R.
fR39	46745200	100 Ω 1/8W Chip R.
fR40	46753200	220 KΩ 1/8W Chip R.
fR41	46749400	5.6 KΩ 1/8W Chip R.
fR43	46750400	15 KΩ 1/8W Chip R.
fR44	46747600	1 KΩ 1/8W Chip R.
fR45	46746200	270 Ω 1/8W Chip R.
△ fR90	00112800	4.7 Ω 1/4W F.R.

3-5. F-4903 Pulse Counter & Arm Servo Sensor Board

Component Side

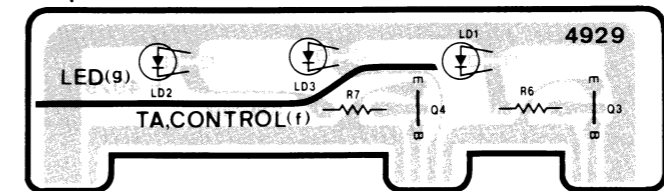


Parts List

Parts No.	Stock No.	Description
fQ7	46395800	Photo Interrupter GP-1S04
fQ15	46938400	Photo Interrupter ON1128

3-6. F-4929 Tonearm Indicator Board

Component Side

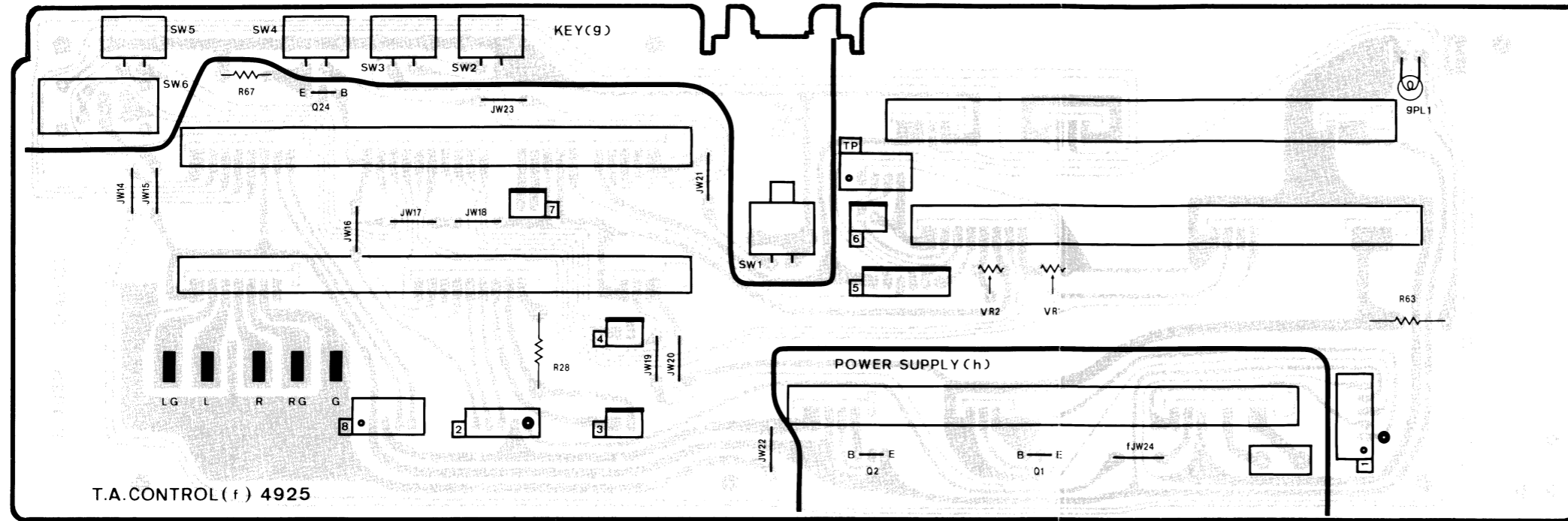


Parts List

Parts No.	Stock No.	Description
• Transistor		
fQ3	48171600	DTC114YS
fQ4	48183400	DTA114YS
gLD1	46095200	LED TLR123
	or 48126300	LED SEL2210S
gLD2	46095200	LED TLR123
	or 48126300	LED SEL2210S
gLD3	46095200	LED TLR123
	or 48126300	LED SEL2210S

3-7. F-4925 Tonearm Control Board (Stock No. 00865201=P-L55/00901001=P-L45)

Component Side

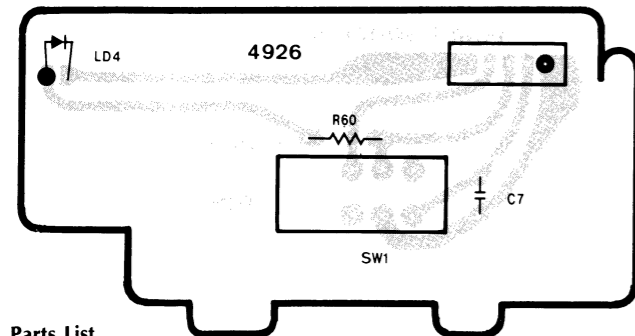


Parts List

Parts No.	Stock No.	Description
• Transistor		
fQ24	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
fVR1	46634300	10 KΩ S.V.R., offset adj.
fVR2	46634500	22 KΩ S.V.R., gain adj.
fR28	00139400	180 Ω 1W N.I.R.
gSW1	46395900	Push SW., REPEAT <P-L55 only>
gSW2	46395900	Push SW., MANUAL IN
gSW3	46395900	Push SW., MANUAL OUT
gSW4	46395900	Push SW., UP/DOWN
gSW5	46395900	Push SW., START/STOP
gSW6	46133600	Slide SW., SPEED
• Transistor		
△ hQ1	03083901	2SD313AL
△	or 46546701	2SD880
△ hQ2	03083901	2SD313AL
△	or 46546701	2SD880
gPL1	48180000	14V, Pilot Lamp

3-8. F-4926 Power Switch Board <P-L55>

Component Side

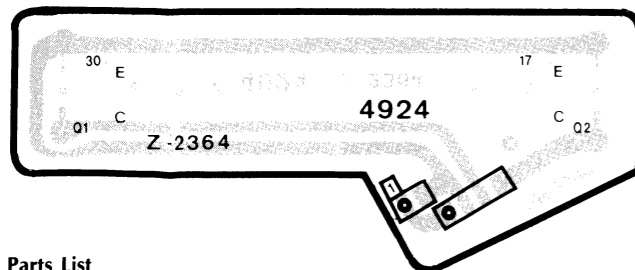


Parts List

Parts No.	Stock No.	Description
gLD4	46095200	LED TLR123
	or 48126300	LED SEL2210S
△ hSW1	48175900	Push SW., POWER

3-9. F-4924 Photo Transistor Board

Component Side

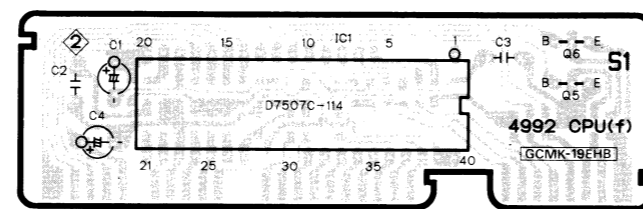


Parts List

Parts No.	Stock No.	Description
• Photo Transistor		
fQ1	46160000	TPS605
fQ2	46160000	TPS605

3-10. F-4992 Microcomputer Board (Stock No. 00901301=P-L45/00864701=P-L55)

Component Side

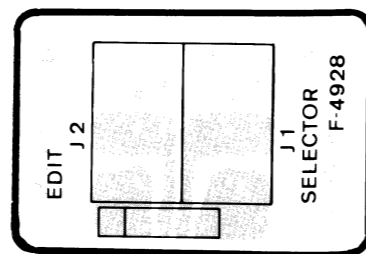


Parts List

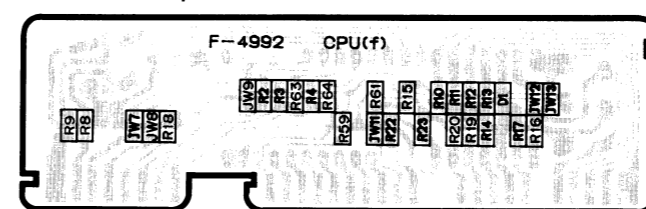
Parts No.	Stock No.	Description
• Transistor		
fQ5	48171600	DTC114YS <P-L55 only>
fQ6	48171600	DTC114YS <P-L55 only>
• IC		
fIC1	48158400	μPD7507C-114
• Diode		
fD1	46852000	RLS-73
fR2	46750000	10 KΩ 1/8W Chip R.
fR3	46751600	47 KΩ 1/8W Chip R.
fR4	46751600	47 KΩ 1/8W Chip R.
fR8	46746200	270 Ω 1/8W Chip R.<P-L55only>
fR9	46746200	270 Ω 1/8W Chip R.<P-L55only>
fR10	46750000	10 KΩ 1/8W Chip R.
fR11	46750000	10 KΩ 1/8W Chip R.

3-11. F-4928 Compu Selector Jack Board

Component Side



Pattern Side (Chip Parts)



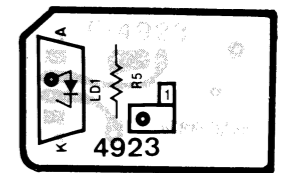
Parts No.	Stock No.	Description
fR12	46750000	10 KΩ 1/8W Chip R.
fR13	46750000	10 KΩ 1/8W Chip R.
fR14	46750000	10 KΩ 1/8W Chip R.
fR15	46750600	18 KΩ 1/8W Chip R.
fR16	46752200	82 KΩ 1/8W Chip R.
fR17	46750000	10 KΩ 1/8W Chip R.
fR18	46746000	220 Ω 1/8W Chip R.
fR19	46750000	10 KΩ 1/8W Chip R.
fR20	46750000	10 KΩ 1/8W Chip R.
fR22	46747600	1 KΩ 1/8W Chip R.
fR23	46750000	10 KΩ 1/8W Chip R.
fR59	46750000	10 KΩ 1/8W Chip R.
fR61	46750000	10 KΩ 1/8W Chip R.
fR63	46750000	10 KΩ 1/8W Chip R.
fR64	46750000	10 KΩ 1/8W Chip R.
fJW8,9, 11~13	46741100	Cross Conductor (Chip)

Parts List <F-4928>

Parts No.	Stock No.	Description
	46547200	Mini Jack, COMPU-SELECTOR

3-12. F-4923 Sensor Lamp Board

Component Side

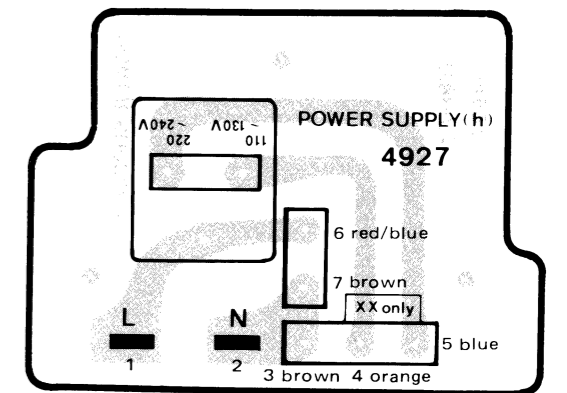


Parts List

Parts No.	Stock No.	Description
fLD1	46396000	LED GL-520

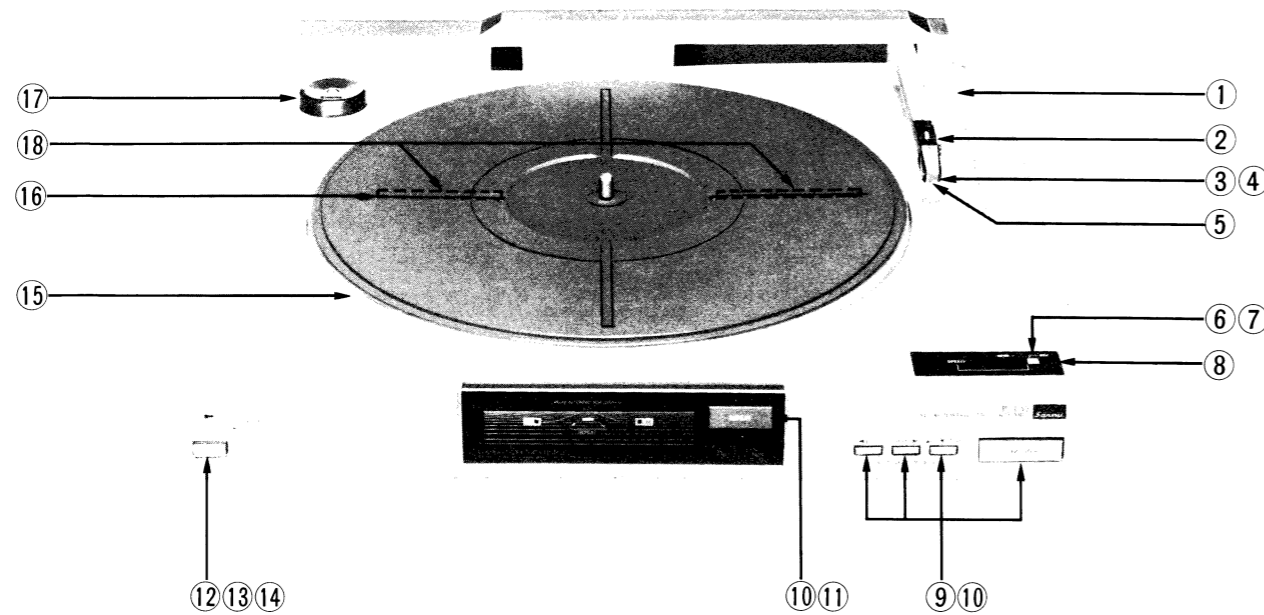
3-13. F-4927 Voltage Selector Board

Component Side



4. OTHER PARTS

4-1. Front View



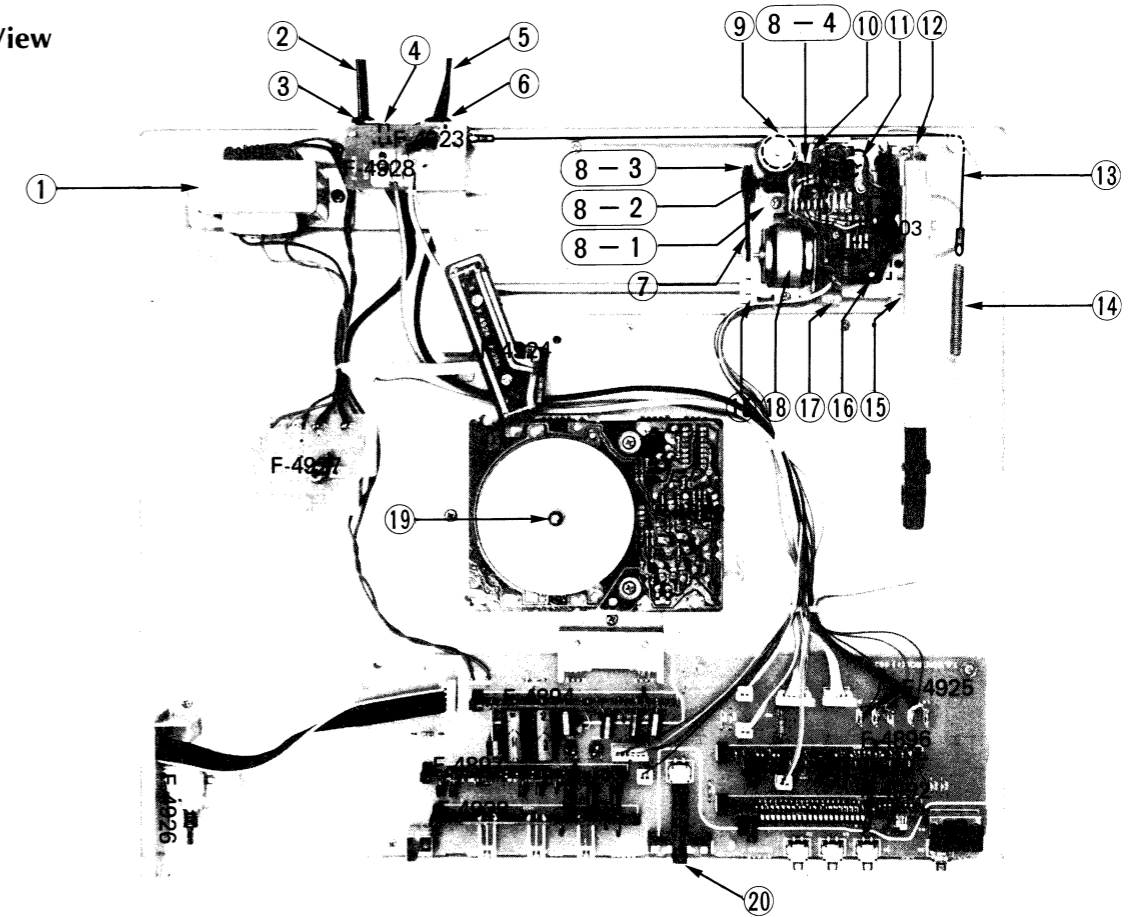
Parts List <Front View>

Parts No.	Stock No.	Description
1	47783200	Player Case Cover (Silver Model)
	47783300	Player Case Cover (Black Model)
2	13733100	Tonearm Ass'y <P-L45>
	13733000	Tonearm Ass'y <P-L55>
3	13283300	Cartridge, SV-P313
4	13233500	Screw for Cartridge
5	13283400	Stylus, SN-P313
6	46133600	Slide SW., SPEED
7	47766700	Knob, SPEED
8	47782100	Speed Selector Plate
9	47767300	Control Button (Silver Model)
	47799300	Control Button (Black Model)
10	46395900	Push SW., START/STOP, LEFT, RIGHT, UP/DOWN,
	46395900	Push SW., REPEAT <P-L55 only>
11	47766800	Knob, REPEAT SW., <P-L55 only>
12	47747000	Knob, Power SW., (Silver Model) <P-L55 only>
	47747100	Knob, Power SW., (Black Model) <P-L55 only>
13	47766600	Power SW., Knob Guide <P-L55 only>
Δ 14	48175900	Push SW., POWER <P-L55 only>
15	13143810	Turntable
16	13146700	Turntable Sheet (XX, CSA, EU, BS, AS)
	13146800	Turntable Sheet (UL)
17	13012300	45 rpm Adaptor
18	13037900	Prism, disk size detector

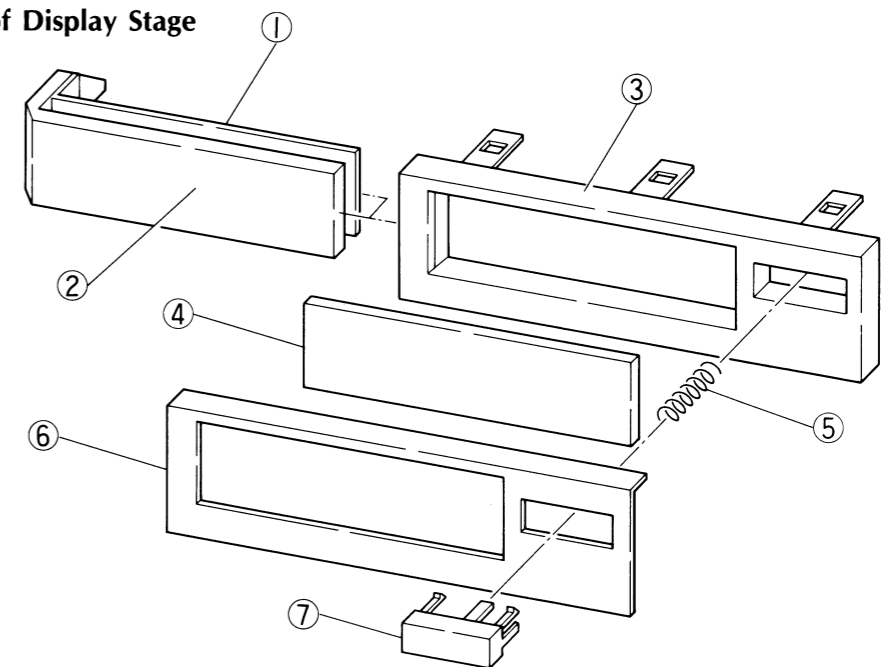
Parts List <Top View>

Parts No.	Stock No.	Description
Δ 1	15020901	Power Transformer <XX>
Δ 1	15020902	Power Transformer <UL, CSA>
Δ 1	15020905	Power Transformer <EU, BS, AS>
Δ 2	38004700	Power Supply Cord
Δ 2	38004500	Power Supply Cord <EU>
Δ 2	38004300	Power Supply Cord <BS>
Δ 2	07204200	Power Supply Cord <AS>
Δ 2	48187400	Power Supply Cord <CSA>
Δ 2	46413200	Power Supply Cord <XX>
3	39106000	Strain Relief <XX, UL>
	39104900	Strain Relief <CSA, EU, BS, AS>
4	46547200	Compu Selector Terminal
5	48185600	PU Output Cord <XX, CSA, EU, BS, AS>
	48185700	PU Output Cord
6	39104900	Strain Relief
7	13103810	Belt
8	13733800	Worm Gear (I) Ass'y
8-1		Bearing, Worm Gear
8-2		Worm Gear
8-3		Pulley (A)
8-4		Slit Plate
9	13215810	Drive Gear
10	47750200	Bush (B)
11	13280510	Spring, lead in adjustment
12	46926900	Micro SW., Arm Reset
13	47802300	Drive Wire
14	13220500	Spring, Driving
15	47750100	Bush (A)
16	48172600	Lifter Solenoid Ass'y
17	48097800	22μF 16V. E. B.
18	48170210	Tonearm Servo Motor
19	18100000	Disk Drive Motor Ass'y (with F-4892 Board)
20	47767400	Push Shaft, REPEAT <P-L55 only>

4-2. Top View



4-3. Exploded View of Display Stage <P-L55>



Parts List <P-L55>

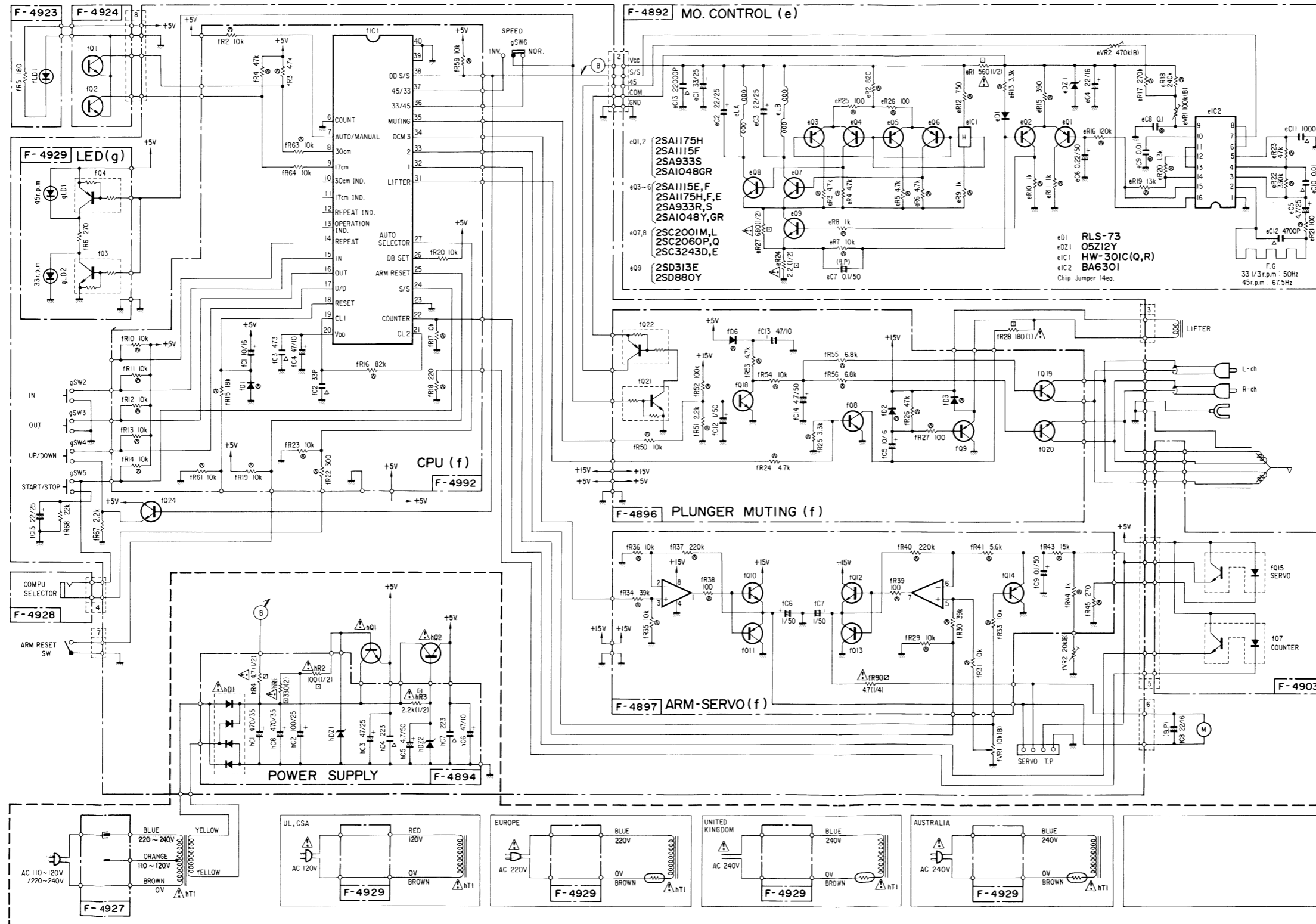
Parts No.	Stock No.	Description
1	47782700	Display Mask Plate
2	47766400	Edge Light Plate
3	47782900	Display Housing
4	47782400	Smoked Plate
5	47816800	Spring
6	47783000	Dress Plate
7	47766800	Push knob, REPEAT

Parts List <P-L45>

Parts No.	Stock No.	Description
3	47782900	Display Housing
6	47877200	Dress Plate
	07737800	Indicator, red

5. SCHEMATIC BLOCK DIAGRAM 5-1. Model P-L45

• Design and specifications subject to change without notice for improvement.
 • La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
 • Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



SYMBOL

- △ Ceramic
- △T Ceramic (Temperature Compensation)
- △F Ceramic (Feed Through)
- Low-Leak Electrolytic
- (B,P) Bi-Polar Electrolytic
- (B,P) Low-Leak Bi-Polar Electrolytic
- (Ta) Tantalum Electrolytic
- Film
- (M) Mylar
- (PC) Polycarbonate
- (PP) Polypropylene
- Metalized Paper
- Polystyrene
- △ Gimick
- △ Mic
- O.C Oil
- Fusing Resistor
- Non-Inflammable Resistor
- Metal-Film Resistor
- Cement Resistor
- Non-Inductive Cement Resistor

is Safety Part.
 Use only replacement parts recommended by the manufacturer.

RESISTORS
 Are in ohms, 1/4 Watts, ±5% Tolerance Unless Otherwise Noted. K, M, MQ

CAPACITORS
 Are in μF, Unless Otherwise Noted. P-pF

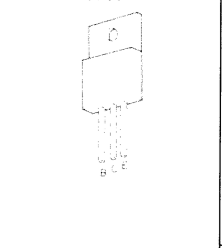
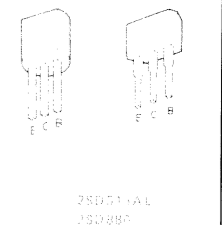
TOLERANCE
 J ± 5%, G ± 2%, F ± 1%

Each D.C. Voltage shows the nominal value in volts at input signal during recording

Each D.C. Voltage measured by the instruments described below shows the nominal value in volts at 33 1/3 r.p.m.
 Measuring Instruments
 Volt Meter D.C. 20kΩ/V, A.C. 1kΩ/V
 Oscilloscope 5MHz

Electrolytic Capacitor:
 Capacitance (μF) / Volt (V)

2SA104R
2SA1115
2SA934
2SA957
2SA1283
2SC2001
2SC2060
2SC2060
2SC2878
2SC3243
2SD1111
2SC2458
2SC2603
DTC114YS
2SA933S
2SA1175
2SC1740S
2SC2785
2SC3327



hD1 RB152
 hD21 05Z16-X, 05Z15-Z
 hD22 05Z5.6Y, 05Z5.6-X

hO1,2 2SD313AL (E,F)
 2SD880 (Y,GR)

hO1-3,6 RLS-73 Chip
 hO1,2 JPD7507C-114
 hO1,2 BA728, NJM2904D
 hO1,2 GL-520
 hO1,2 TPS605
 hO3,21 DTC114YS
 hO4,22 DTA114YS
 hO7 GP-1S04
 hO8 2SC2603 (E,F,G)

hO9,11,13 2SA934 (P,Q,R)
 2SA1283 (D,E)
 2SA952 (M,L)

hO10,12 2SC2060 (P,Q,R)
 2SC3243 (D,E)
 2SC2001 (M,L)

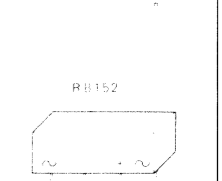
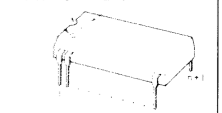
hO14 2SA1115 (E,F)
 2SA1048 (Y,GR)
 2SA933S (R,S)

hO15 ON1128
 hO18,24 2SC2603 (E,F,G)
 2SC2458 (Y,GR)
 2SC1740S (R,S)

hO19,20 2SC2878 (A,B)
 2SC3327 (A,B)
 2SD1468S (R,S)

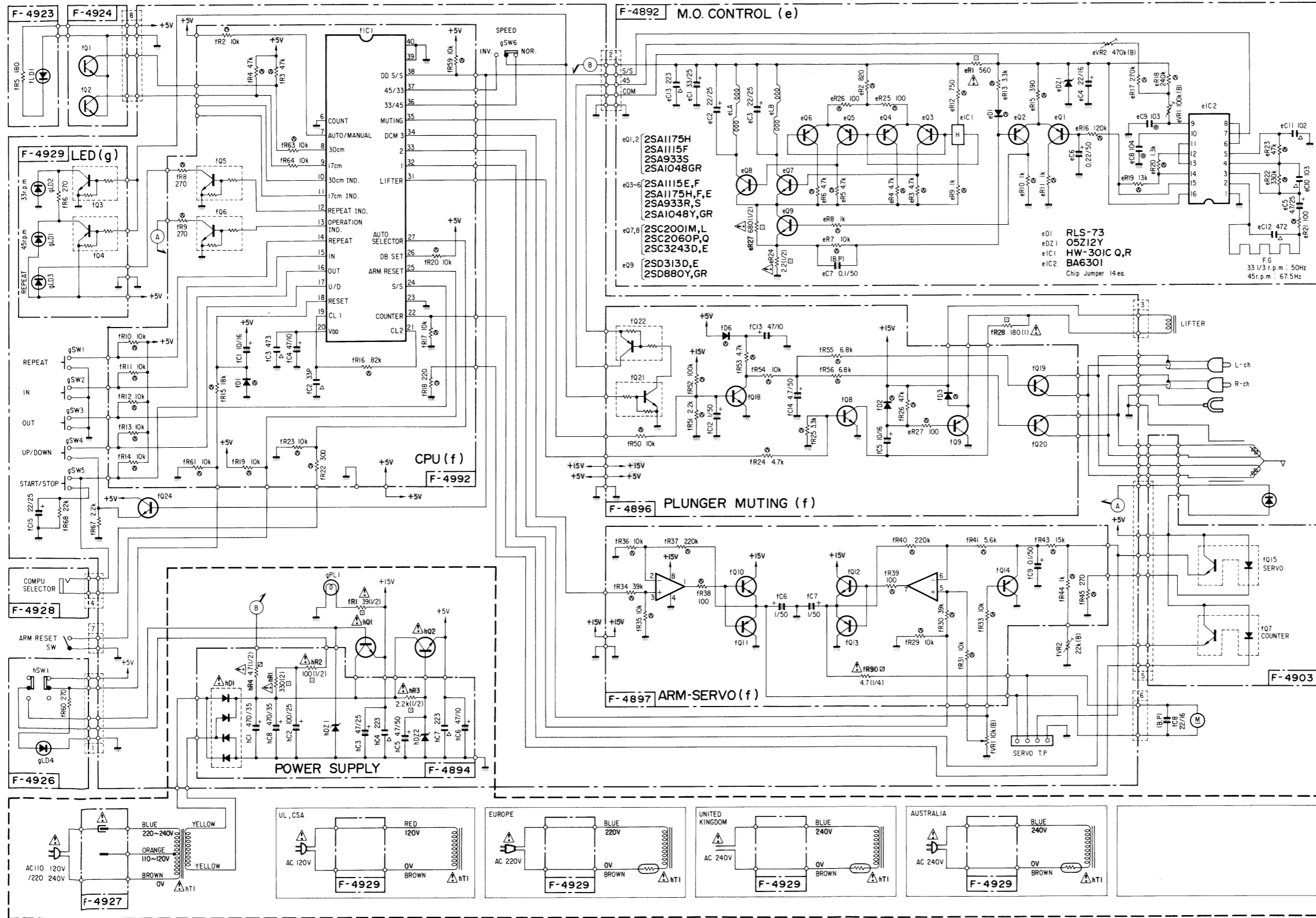
gLD1,2 TLR123
 SEL210
 Chip Jumper 14ea.

RB152
JPD7507C
BA728
NJM2904D
GL-520
TPS605
DTC114YS
DTA114YS
GP-1S04
TC40138P
MSM40818RS
TC40818P



5-2. Model P-L55

• Design and specifications subject to change without notice for improvement.
 • La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
 • Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



SYMBOL

- △ Ceramic
- △T Ceramic (Temperature Compensation)
- △F Ceramic (Feed Through)
- Low-Leak Electrolytic
- (BP) Bi-Polar Electrolytic
- (B.P) Low-Leak Bi-Polar Electrolytic
- (Ta) Tantalum Electrolytic
- Film
- (m) Mylar
- (PC) Polycarbonate
- (P.P) Polypropylene
- ⊙ Metallized Paper
- ⊙ Polystyrene
- ⊙ Gimmic
- ▲ Mic
- C Oil
- Fusing Resistor
- Non-Inflammable Resistor
- Metal Film Resistor
- Cement Resistor
- Non-Inductive Cement Resistor

Use Safety Part.
 Use only replacement parts recommended by the manufacturer.

RESISTORS
 Are in ohms, 1/4 Watts, ±5% Tolerance Unless Otherwise Noted. k: kΩ, M: MΩ

CAPACITORS
 Are in μF, Unless Otherwise Noted. P: pF

TOLERANCE
 J: ±5%, G: ±2%, F: ±1%

Each D.C. Voltage shows the nominal value in volts at input signal during recording

Each D.C. Voltage measured by the instruments described below shows the nominal value in volts at 33 1/3 r.p.m.

Measuring instruments:
 Volt Meter D.C. 20kΩ/V, A.C. 1kΩ/V
 Oscilloscope 5MHz

Electrolytic Capacitor:
 Capacitance (μF) / Volt (V)

Component List:

- 2SA1048
- 2SA1115
- 2SA1115F
- 2SA1175
- 2SA1283
- DTC114YS
- 2SC2001
- 2SA933S
- 2SC2060
- 2SA1175
- 2SC2878
- 2SC1740S
- 2SC3243
- 2SC2785
- 2SD1111
- 2SC3327

Other Components:

- BA6301
- μPD7507C
- BA728
- NJM2904D
- BU4013B
- M8840138M
- T.C40138P
- M5M4081BRS
- T.C4081BP
- RB152
- ON1128
- 2SC2603 (E,F,G)
- 2SC2458 (Y,GR)
- 2SC1740S (R,S)
- 2SC2878 (A,B)
- 2SC3327 (A,B)
- 2SD1468S (R,S)
- TLR123
- SEL2210

1

2

3

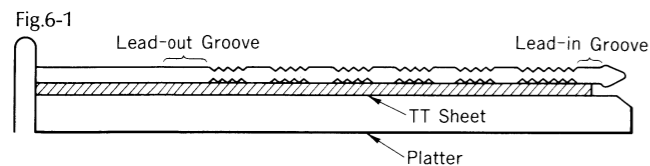
4

5

6. ADJUSTMENT

6-1. Lead-in operation adjustment

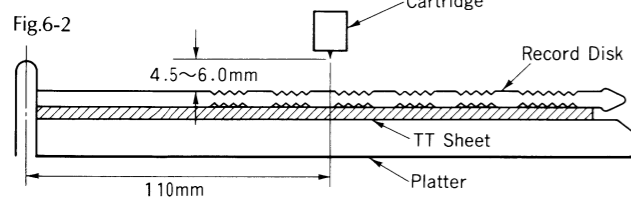
- 1) Press the START button with a 30cm record disk with a narrow lead-in groove to do the lead-in operation, and adjust the lead-in adjusting cam (See Fig. 6-3) so that the stylus tip may come down to the center of the lead-in groove.
- 2) Perform the lead-out operation and check that the stylus tip lifting position is at the lead-out groove.
- 3) Perform the lead-in operation with a 17cm record disk with a narrow lead-in groove and check that the stylus tip comes down in the lead-in groove.



6-2. Tonearm height adjustment

* Before adjustment, remove the player case cover.

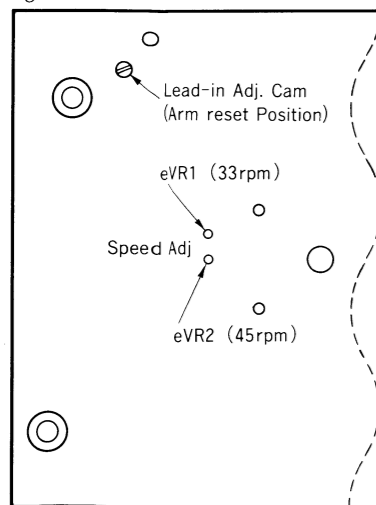
- 1) Move the tonearm by manual operation so that the stylus tip is set to the position approx. 110mm from the center of the platter.
- 2) Adjust the tonearm height adjusting screw (Refer to the Top View on page 8) so that the distance between the record disk and the stylus tip is 4.5~6.0mm.



6-3. Speed adjustment (Refer to Fig. 6-3.)

- 1) Set the speed to 33 rpm and adjust the eVR1 on the DD motor control board using a small screwdriver so that the 33 rpm strobo pattern is seen to stop.
- 2) Set the speed to 45 rpm and adjust the eVR2 on the DD motor control board using a small screwdriver so that the 45 rpm strobo pattern is seen to stop.

Fig.6-3 <Bottom View>



6-4. Arm servo adjustment

* Before adjustment, remove the cabinet.

- 1) Connect a DC voltmeter between point (A) and GND (Refer to Fig. 6-5.).
- 2) Move the tonearm by manual operation and stop the stylus tip at a position approx. 110 mm from the center of the platter.
- 3) Move the tonearm rightward by hand until its stop position, and adjust fVR2 (Fig. 6-5) so that the reading of the DC voltmeter is $3.0 \pm 0.2V$.
- 4) Turn fVR1 (Fig. 6-5) fully counterclockwise.
- 5) Remove the connector leads (B) from the connector (Refer to Fig. 6-5).
- 6) Place a spacer (approx. 4 mm in height) under the arm lifter. (Fig. 6-4)
- 7) Press the START/STOP key to rotate the platter.
- 8) Press the UP/DOWN key to lower the tonearm and then gradually turn fVR1 clockwise and stop turning it when the tonearm starts moving inward.
- 9) Actually play a 30 cm record disk and check that the stylus does not move when the UP/DOWN key is pressed at the position approx. 110 mm from the center of the platter to move the arm lifter up and down several times. Turn fVR1 a little clockwise when the stylus moves outward while the lifter is lifting.

Fig.6-4

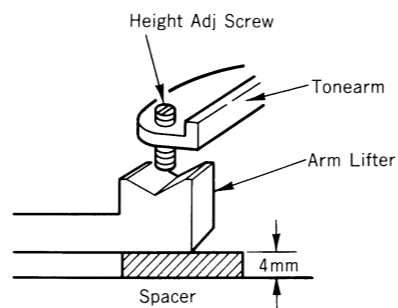
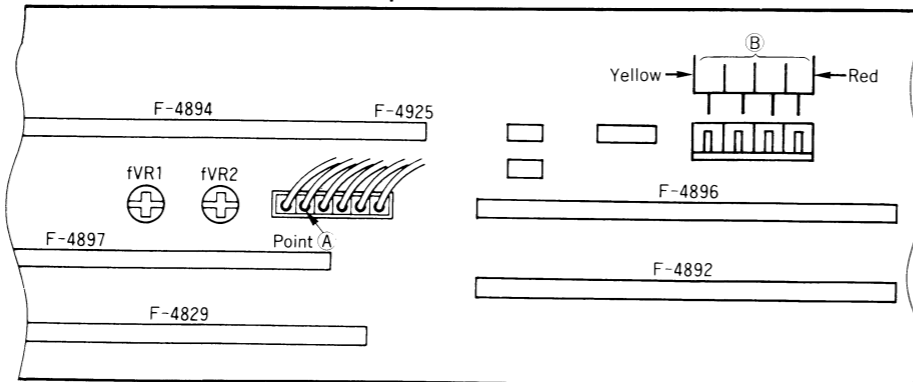
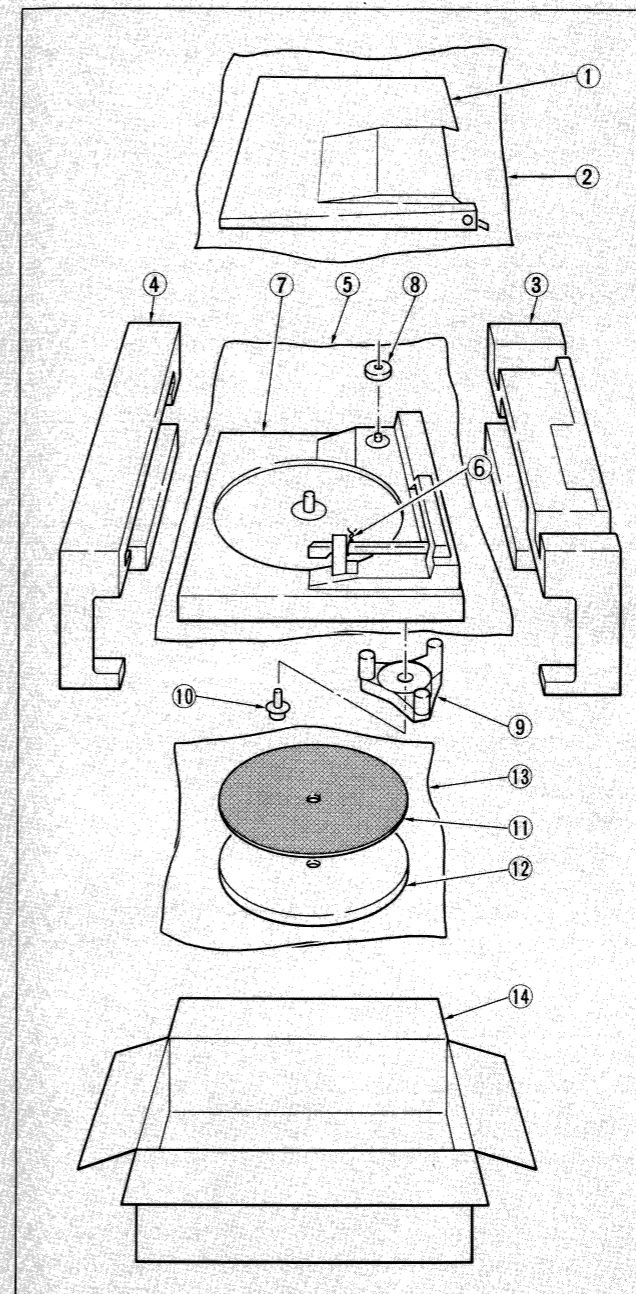


Fig.6-5 <Top View>



7. PACKING LIST



Parts No.	Stock No.	Description
1	47767500	Dust Cover Ass'y <P-L45>
	47877700	Dust Cover Ass'y <P-L55>
1-1	48179600	Hinge Cap (Silver Model)
	13187400	Hinge Cap (Black Model)
1-2	48179700	Side Hinge (L)
	48179800	Side Hinge (R)
2		Polyethylene Bag <P-L45>
3	47817100	Inner Packing, rear
4	47816900	Inner Packing, front
5	91122710	Polyethylene Bag
6		Binder
7		Turntable Unit
8	13012300	45 rpm Adaptor
9	47800100	Protector
10	00449700	Screw, M4 x 12 Pan Head SEMS
11	13146700	Turntable Sheet <XX,CSA,EU,BS,AS>
	13146800	Turntable Sheet
12	13143810	Turntable Platter
13		Polyethylene Bag
14 <P-L45>		
	47878500	Carton Case (Silver Model with Dust Cover)
	47878600	Carton Case (Black Model with Dust Cover)
	47878700	Carton Case (Silver Model without Dust Cover)
	47878800	Carton Case (Black Model without Dust Cover)
<P-L55>		
	47792100	Carton Case (Silver Model with Dust Cover)
	47792200	Carton Case (Black Model with Dust Cover)
	47792300	Carton Case (Silver Model without Dust Cover)
	47792400	Carton Case (Black Model without Dust Cover)

Note: There are two types of units in P-L45/L55.

- 1) The unit with a Dust Cover Ass'y.
 - 2) The unit without a Dust Cover Ass'y.
- (M) mark is indicated on Carton Case

8. ACCESSORY LIST

Parts No.	Stock No.	Description
	46267300	2 pin Mini Plug Cord
	13012300	45 rpm Adaptor
	46967600	Operating Instruction (P-L45/L55)



SANSUI ELECTRIC CO., LTD.:
SANSUI ELECTRONICS CORPORATION:
SANSUI ELECTRONICS (U.K.) LTD.:
SANSUI ELECTRONICS G.M.B.H.:

14-1, Izumi 2-chome, Suginami-ku, Tokyo 168 Japan
PHONE: (03) 324-8891/TELEX: 232-2076 (International Division)
1250 Valley Brook Ave. Lyndhurst, N.J. 07071 U.S.A.
17150 South Margay Ave. Carson, California 90746 U.S.A.
3036 Koapaka Street, Honolulu, Hawaii 96819 U.S.A.
Unit 10A, Lyon Industrial Estate, Rockware Avenue, Geonford, Midx UB6, OAA, England
Pau Ehrich Strasse 8, 6074 Rödermark 2, West Germany