SANYO

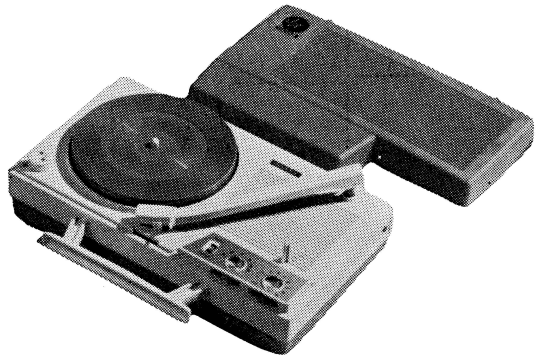
6-Transistor Portable Phono-Graph

MODEL G-1111

SERVICE MANUAL

SANYO ELECTRIC CO., LTD.

INTERNATIONAL DIVISION: SANYO ELECTRIC TRADING CO., LTD.
OSAKA, JAPAN



SPECIFICATIONS

Circuit	1-band, 6-transistor superheterodyne 2-speed, radio-phonograph
Frequency Range	BC 530-1605 KC
Intermediate Frequency	455 KC
Output power	Maximum 800 mw Undistorted 400 mw
Speaker	4" permanent dynamic speaker Voice coil impedance 8 ohms
Transistor Complements	2SA323×1 Frequency Conveter 2SA202×1 IF Amplifier 2SB186×2 AF Amplifier 2SB22×2 AF Amplifier
Diode	1S188 or 1N60×1 Detector & AGC
Power Requirement	6×1½V size "D" flashlight batteries (UM-1)
Current Drain	No signal 15 mA (Radio) 50 mA (Phono) Maximum 170 mA (Radio) 210 mA (Phono)
Sensitivity	160 μV/m for 10 mW output
Turn-table	5¾" (142 mm) dia.
Pick-up	Ceramic cartridge
Phono speed	33 1/3, 45 rpm.
Dimensions	11 3/4" Width×7 1/8" height ×3 1/2" depth (299 mm×181 mm×89 mm)
Weight	4.4 lbs. (2 Kg) approx.

ALIGNMENT PROCEDURES

IF & RF alifnment

Apply volt-meter across voice coil.

Volume control should be at maximum position.

Output of signal generator should be no higher than necessary to obtain porper output reading in order to avoid AGC function.

STEP	SIGNAL GENERATOR COUPLING	SIGNAL CENERATOR FREQUENCY	RADIO DIAL SETTING	ADJUST FOR MAX. OUTPUT
* *IF ALIGNMENT*				
1	Radiate signal through the loop antenna, which connected with signal generator output cable.	455 Kc/s	lower end	T-2 T-1
* *BROADCAST RF ALIGNMENT*				
2	Same as step 1	510 Kc	lower end	L-2
3		1605 Kc/s	Upper end	Cv-2 (OSC.)
4		Repeat step 2 and 3		
5		600 Kc/s	600 Kc/s	L-1
6		1400 Kc/s	1400 Kc/s	Cv-1 (ant.)
7				

PARTS LIST

Stock No.	Description	Q"ty
(Cabinet)		
R-A7023	Cabinet complete	
R-315167a	—Cabient	1
R-245141	—Insert nut	4
R-245211	—Insert nut	1
R-355097	—Clip of pickup	1
R-385006	—Dial cover	2
R-267022	—Decoration metal of control panel	1
R-435056	—Specaker net	1
R-265495	—Badge	1
R-115245	Chassis fix metal	1
R-115246	Chassis fix metel	1
R-115248c	Pickup lever	1
R-365046	Back plate	1
R-435063	Battery pull out ribbon	1
R-477020	Specification sheet	1
R-445058	Gum (Motor)	1
	Washer (pickup cuahion) 8.5×6.2×1t	1
R-325176	External socket fix pars	1
R-A7019	Top cover complete	
R-395055	—Top cover	1
R-265369	—Badge	1
R-A7020	Bottom cover complete	
R-397009	—Bottom cover	1
R-395057a	—Battery compartment cover	1
R-12080	—Special nut	2
R-235072a	—Battery terminal (+)	2
R-155041	—Battery termiual (−)	2
R-445049	Turn table cover	1
R-325062	Adaptor	1
	Fixing gum of battery lead	3
(Chassis)		
R-115249a	Chassis	1
R-415142b	Printed circuit' board	1
R-115250	Fix. metal	1
R-A7021	Tuning knob complete	
R-385007a	—Tunig knob	1
R-265367	—Finish metal (knob inlay)	1
R-A7022	Volume knob complete	1
R-385008a	—Volume knob	
R-265367	—Finish metal (knob inlay)	1
R-335081	Select knob	1
R-425792	Fiber washer (VC. shaft & tuning knob)	1
R-445065	Cushion	1
R-115265	Bottom cover retaining metal	2

Symbol No.	Stock No.	Description	Q"ty
(Electric)			
	R-S6576	Speaker	1
	R-S85146	—Antenna coil assemblv	1
	R-W2572	—Antenna coil	1
	R-355074	—Antenna holder	2
Cv-1, 2	R-C1517	Variable capacitor	1
	R-C0030	Trimmer	1
	R-W8545	OSC. coil	1
T-1	R-W5T564	IF- trans-	1
T-2	R-W5T043 > or	IF. trans.	1
T-2	R-W5T536	IF. trans.	1
T-3	R-W6568	Input trans.	1
	R-116530	Variable resistor	1
	R-S6583a	Pickup assembly	1
	R-S6580	—Pickup arm	1
	R-S6581	—Cartridge (ceramic)	1
	R-S5608a	—Motor assembly "Fujiya"	1
	R-S5624	—Motor unit	1
	R-S5612	—Turn table	1
	R-265460	—Motor cover	1
	R-115268	—Motor band	1
	R-445058	—Motor lead shield gum	1
		—Pan head screw (3×12)	1
		—Spring washer (M3)	1
		—Hexagon nut (M3)	1

Symbol No.	Stock No.	Description	Q"ty
(Electsic)			
	R-S5626	—Motor assembly "Matushita"	1
	R-S5624	—Motor unit	1
	R-S5625	—Turn table	1
C-9, 10, 14	R-C9091	Electrolytic capacitor (10v/120μ)	3
C-7	R-C9098	〃 〃 (6v/5μ)	1
C-3, 8	R-C9080	〃 〃 (30v/30μ)	2
C-13	R-C9508 > or	〃 〃 (12v/50μ)	1
C-13	R-C9511	〃 〃 (12v/50μ)	1
	R-S4550	Rest switch	1
	R-S4303	Slide switch	1
	R-S2530	Ext power socket	1
	R-12011	Lug	1
	R-235010	Lug board	1
Tr-1	2SA323	Transistor	1
Tr-2	2SA202	〃	1
Tr-3, 4	2SB186	〃	2
Tr-5, 6	2SB22	〃	2
	1S188 or 1N60	Diode	1
	SDT-09	Thermister	2

Symbol No.	Description			Q"ty
(Resistor & Capacitor)				
Resjstors Carbon filmer or carbon composition fixd resistors				
R10	180 K ohms	±10%	1/4W	1
R8	330 K ohms	〃	〃	1
R5	100 K ohms	〃	〃	1
R2	82 K ohms	〃	〃	1
R20	56 K ohms	〃	〃	1
R6, 11	10 K ohms	〃	〃	2
R22	8.2 K ohms	〃	〃	1
R1	6.8 K ohms	〃	〃	1
R15 ,17	1.5 K ohms	〃	〃	2
R3	1.8 K ohms	〃	〃	1
R9, 23	1 K ohms	±20	〃	2
R12	680 ohms	±10%	1/4W	1
R7	560 ohms	〃	〃	1
R4	470 ohms	〃	〃	1
R14, 16	150 ohms	〃	〃	2
R13	100 Ohms	±20%	〃	1
R18, 19	2.2 ohms	±10%	〃	2
Capacitors	Mylar fixed capacitor			
C11	.003 μF	±20%	50V	1
C1, 2	.004 μF	〃	〃	2
C6	.02 μF	〃	〃	1
Ceramic fixed capacitor				
C4	10 μF	±10%	50V	1
C5	.04 μF	+80 −20%	〃	1

Description			Q"ty
(Screw, Nut & Washer)			
Cval countersunk head screw	(3×12)	Bottom cover - Cabinet	2
Pan head screw	(3×10)	Motor - Cabinet	2
〃	(3×6)	Speaker - Cabinet	4
〃	(3×6)	M0tor - Cabinet	1
〃	(3×8)	P.C. board - Cabinet	2
〃	(3×6)	P.C. board - Fix metal	2
〃	(3×4)	VC. - Chassis	2
〃	(3×4)	Fix metal - Chassis	1
Round head screw	(2.6×6)	Lever - Pickup	1
〃	(2.6×6)	Knob - VC.	1
〃	(2×4)	Slide switch - Fix metal	2
〃	(2×10)	Lever - Pickup	1
Ran head tapping screw	(3×6)	Fix metal - Cabinet	1
〃	(3×8)	Chassis - Cabinet	3
〃	(3×6)	Rest switch - Cabinet	1
Spring washer	(M3)	Speaker - Cabinet	4
〃	(M3)	Motor - Cabinet	3
〃	(M2.6)	Lever - Pickup	1
〃	(M3)	VC. - Chassis	2
〃	(M3)	P.C. board - Chassis	2
〃	(M3)	P.C. board - Fix metal	2
〃	(M3)	Fix metal - Chassis	1
〃	(M2.6)	Knob - VC.	1
〃	(M2)	Knob - VR.	1
Bolt nut Washer	(M3)	Speaker - Cabinet	4
〃	(M3)	Motor - Cabinet	2
〃	(M3)	Antenna holder, P.C. board - Chassis	2
Hexagon nut	(M3)	Motor - Cabinet	2
〃	(M2)	Lever - Pickup	1
Special screw	(2×6)	Knob - VR.	1

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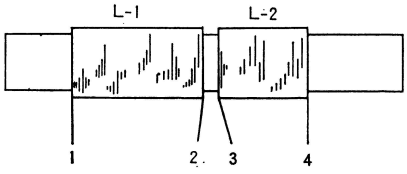
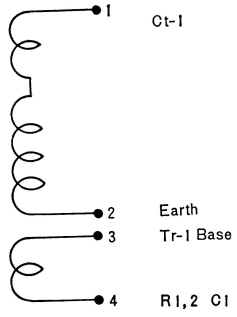
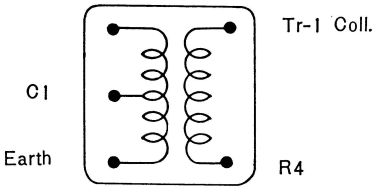
MAIN PARTS CONNECTION

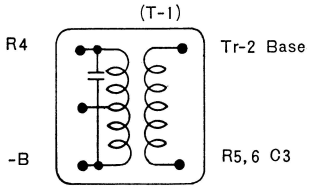




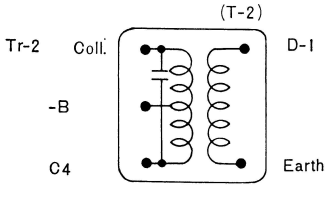
L-3 osc coil



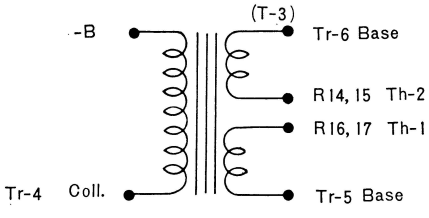
IF Trans (T-1)



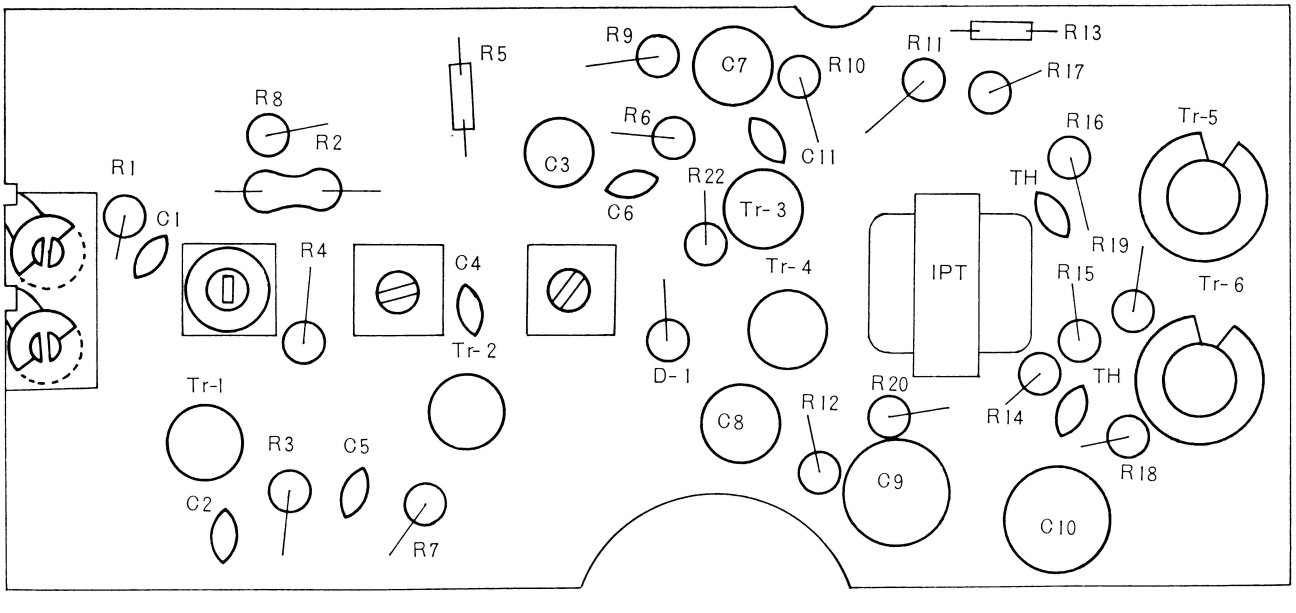
IF Trans (T-2)



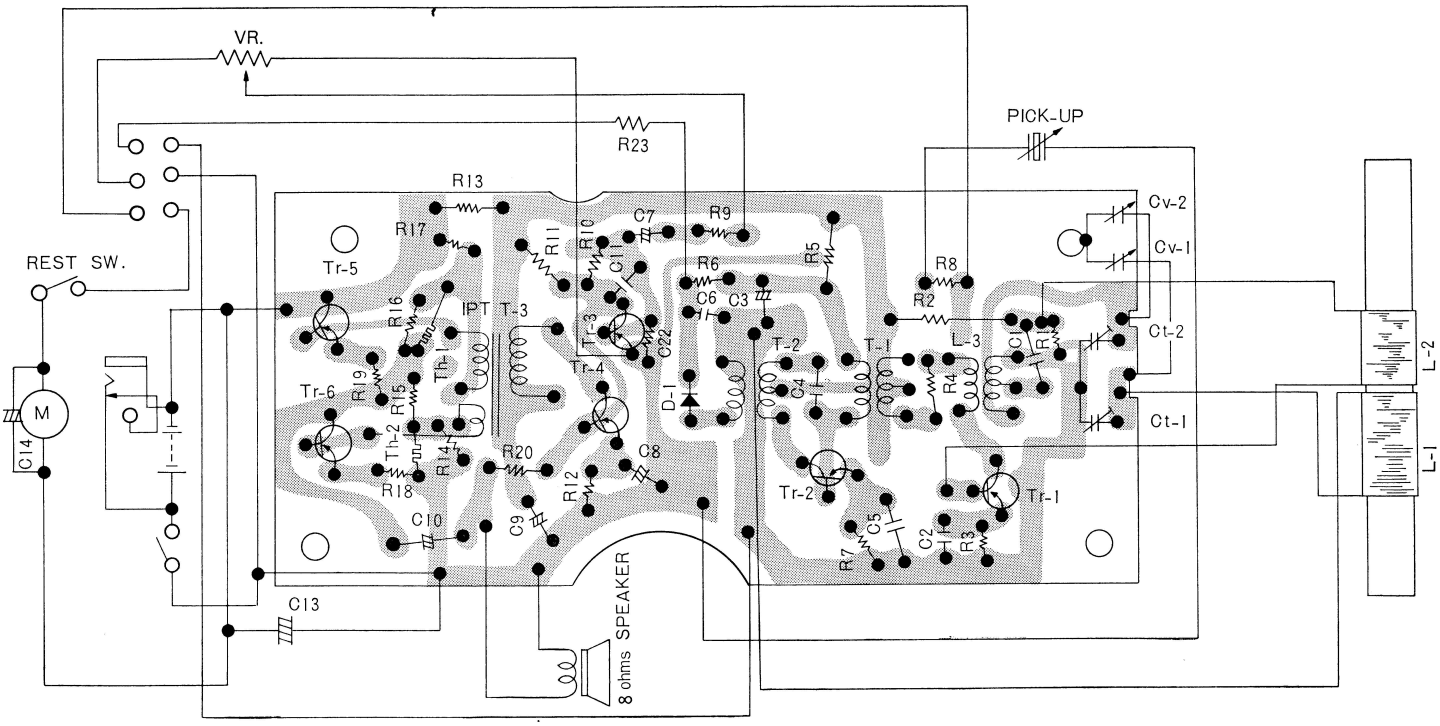
Input trans



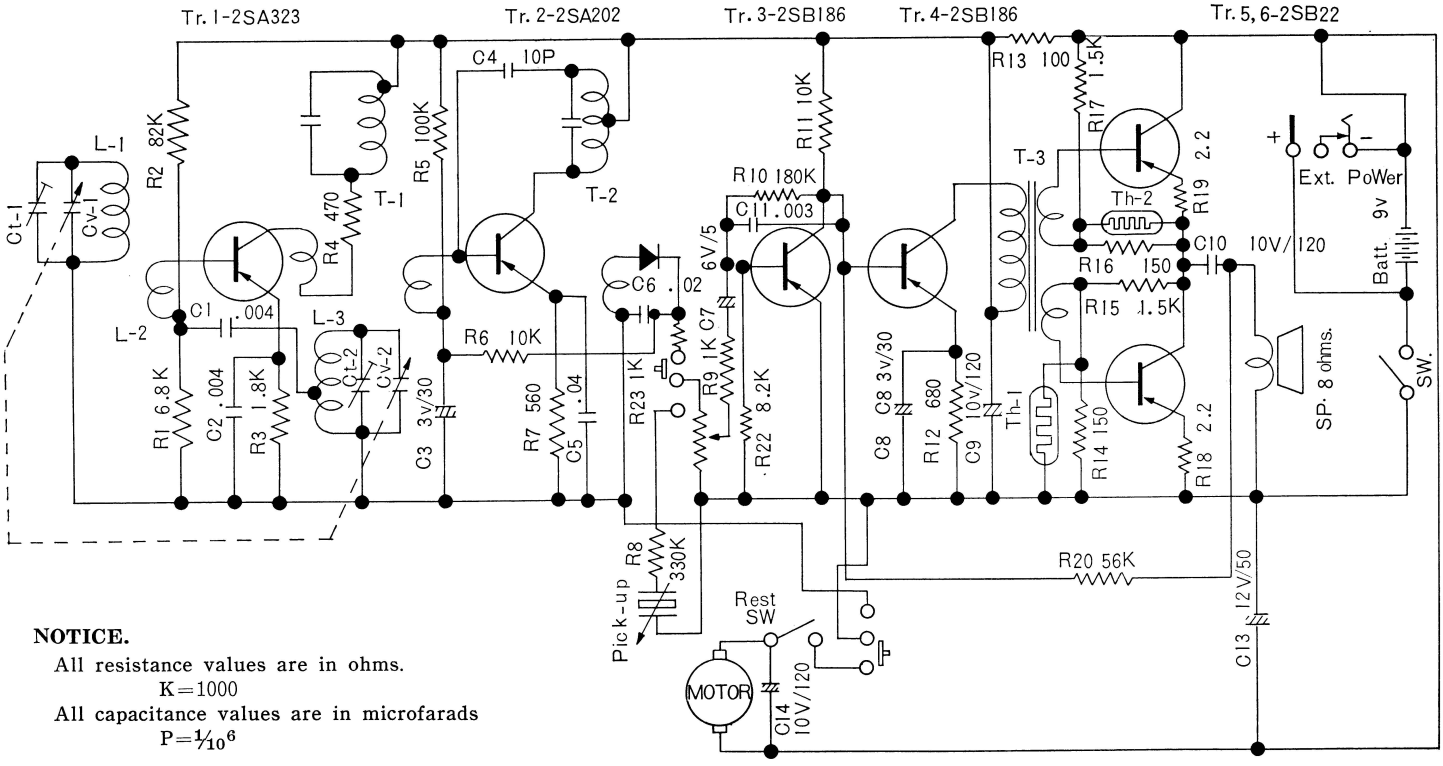
PARTS LOCATION



INNER-PARTS CONNECTION



CIRCUIT DIAGRAM



NOTICE.

All resistance values are in ohms.
K=1000
All capacitance values are in microfarads
P=$1/10^6$