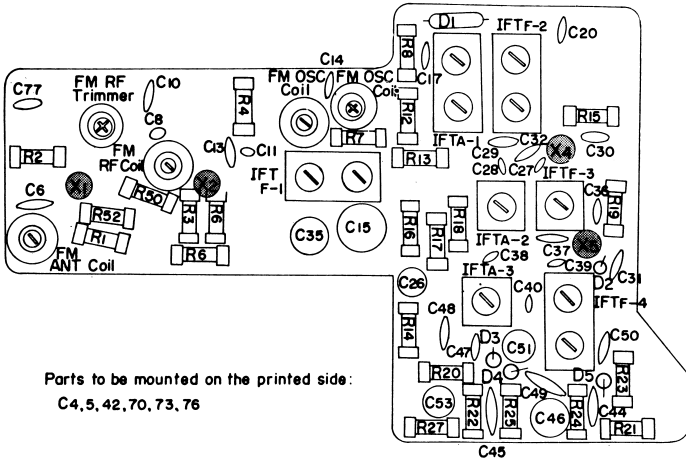


Mounting Diagram

—Parts Side—

RF-IF Section



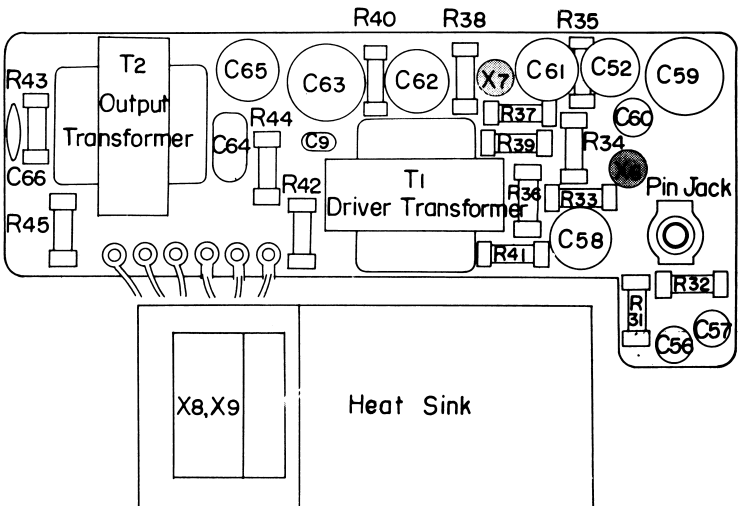
Parts to be mounted on the printed side:
C4, 5, 42, 70, 73, 76

Mounting Diagram

—Parts Side—

AF Section

AF Circuit Board

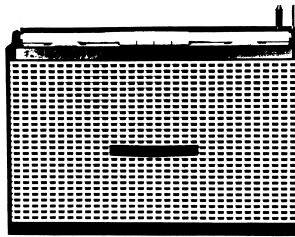


R29 is to be mounted on the printed side.

SONY MODEL TFM-951B

To Remove the Circuit Board from the Cabinet

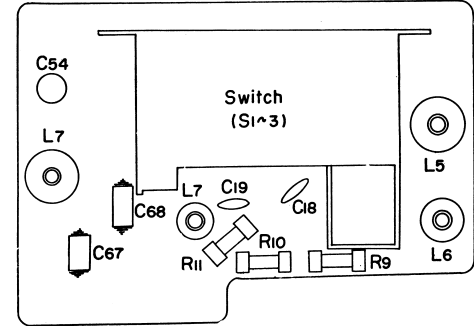
1. Set the Volume Control "OFF" and Tuning Capacitor to the maximum capacitance position.
2. Loosen two Back Cover Holding Screws.
3. Open the Back Cover.
4. Pull out the Battery Connector Plug.
5. Unscrew two Panel Holding Screws with Phillips screw driver. Be careful not to lose the nuts which is securing the Panel Holding Screws from the inside.
6. Remove the panel and pull out the pointer.
7. Remove five screws and two nuts. (1) to (7) in the Figure below.
8. Remove Twin Earphone Jack and Triple Jack by pulling straight up.
9. Unsolder the following wires :
 - a) Black wire at Car Antenna coming from the RF-IF circuit board.
 - b) White wire at Car Antenna coming from the RF-IF circuit board.
 - c) Orange wire at Telescopic Antenna coming from the RF-IF circuit board.
 - d) Orange wire at Telescopic Antenna coming from the Switch circuit board.
 - e) White wire at Ext. Antenna Coil Lug.
 - f) Two wires (a black and a white) at the Speaker terminal.
10. Lift the chassis lightly from the Cabinet holding the frames of Tuning Capacitor and Output Transformer.



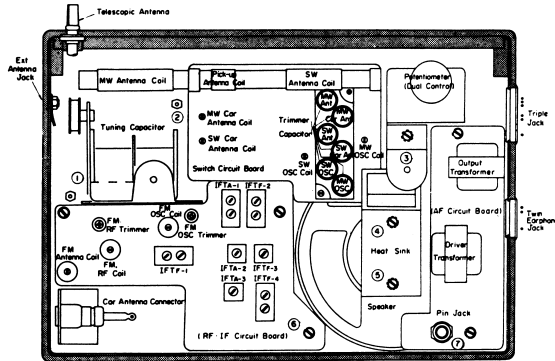
Mounting Diagram

—Parts Side—
Band Switch Section

Switch Circuit Board



Parts to be mounted on the printed side.
Tuning Capacitor, Antenna Coil, R26, R47, R48, X3, C22



Adjustment and Alignment

a) Frequency Coverage

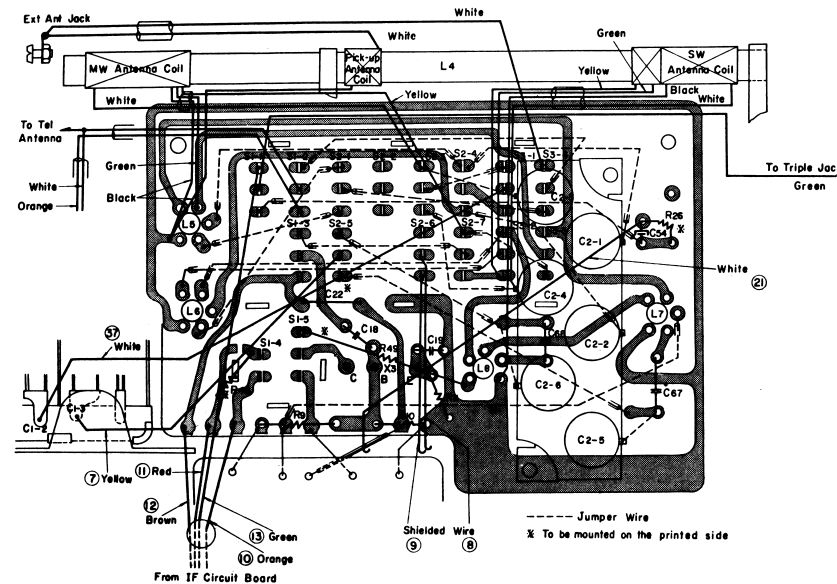
	Lower Limit	Adjust	Upper Limit	Adjust
FM	84 Mc	Core and gap of L ₉	110 Mc	C ₈₋₂
MW	520 Kc	Core of L ₇	1,640 Kc	C ₂₋₅
SW	3.8 Mc	Core of L ₈	12.6 Mc	C ₂₋₈

b) Tracking Alignment

	Checking Point	Adjust
FM	86.5 Mc	Core of L ₂
	105 Mc	C ₈₋₁
MW	620 Kc	Position of L _{4-M}
	1,400 Kc	C ₂₋₃
SW	3.9 Mc	Position of L _{4-S}
	12 Mc	C ₂₋₄

Mounting Diagram

—Printed Side—
Band Switch Section



Part No.	Symbol	Description	Part No.	Symbol	Description	Part No.	Symbol	Description
1-501-016-11	Tel. ANT	Telescopic Antenna		X ₅	Transistor 2SA122	1-203-031-00	R ₂₃	Carbon 1KΩ ±5% RD $\frac{1}{4}$ L
1-401-150-11	L ₁	FM, Antenna Coil		X ₆	" 2SD64	-065-00	R ₂₄	" 5.6KΩ " "
1-425-039-11	L ₂	FM, RF Coil		X ₇	" 2SD64	-065-00	R ₂₅	" 5.6KΩ " "
1-405-059-20	L ₃	FM, Oscillator Coil		X ₈	" 2SB52		R ₂₆	—deleted—
1-401-127-01	L ₄	MW, SW, Ferrite Bar Antenna		X ₉	" 2SB52	1-203-064-00	R ₂₇	Carbon 4.7KΩ ±5% RD $\frac{1}{4}$ L
-128-00	L ₅	MW, Car Antenna Coil		D ₁	Diode 1T23	1-221-118-11	R ₂₈	Potentiometer (Dual Control) 5KΩ
-129-00	L ₆	SW, Car Antenna Coil		D ₂	" 1T261	1-203-155-00	R ₂₉	Carbon 5.1KΩ ±5% RD $\frac{1}{4}$ L
1-405-204-00	L ₇	MW, Oscillator Coil		D ₃	" 1T23	1-221-118-11	R ₃₀	Potentiometer (Dual Control) 5KΩ
-203-00	L ₈	SW, Oscillator Coil		D ₄	" 1T261	1-203-083-00	R ₃₁	Carbon 22KΩ ±5% RD $\frac{1}{4}$ L
1-409-017-11	L ₉	FM, IF Trap Coil		D ₅	" 1T261	-085-00	*R ₃₂	" 39KΩ " "
1-401-152-11	L ₁₃	FM, Antenna Loading Coil		Th	Thermistor CS-47	-157-00	R ₃₃	" 680Ω " "
1-403-230-11	IFT _{F-1}	FM, Double Tuned IFT				-049-00	R ₃₄	" 2.2KΩ " "
-090-11	IFT _{F-2}	"	1-203-108-00	*R ₁	Resistor Carbon 220KΩ ±5% RD $\frac{1}{4}$ L	-031-00	R ₃₅	" 1KΩ " "
-089-11	IFT _{F-3}	FM, IF Transformer	-026-00	R ₂	" 470Ω " "	-026-00	R ₃₆	" 470Ω " "
-088-11	IFT _{F-4}	FM, Double Tuned IFT for Discriminator	-024-00	R ₃	" 330Ω " "	-058-00	R ₃₇	" 3.3KΩ " "
-094-11	IFT _{A-1}	MW, SW, Double Tuned IFT	-026-00	R ₄	" 470Ω " "	-131-00	R ₃₈	" 7.5KΩ " "
-093-11	IFT _{A-2}	MW, SW, IF Transformer	-018-00	R ₅	" 220Ω " "	-018-00	R ₃₉	" 220Ω " "
-092-11	IFT _{A-3}	"	-031-00	R ₆	" 1KΩ " "	-001-00	R ₄₀	" 5.1Ω " "
1-423-043-00	T ₁	Driver Transformer	-031-00	R ₇	" 1KΩ " "	-154-00	R ₄₁	" 75Ω " "
1-427-061-00	T ₂	Output Transformer	-064-00	R ₈	" 4.7KΩ " "	-044-00	R ₄₂	" 2KΩ " "
1-502-048-04	SP	Speaker, 8Ω	-091-00	R ₉	" 36KΩ " "	-018-00	R ₄₃	" 220Ω " "
1-513-157-01	S ₁₋₃	Band Setting Switch	-069-00	R ₁₀	" 10KΩ " "	-584-00	R ₄₄	" 3Ω " "
1-221-118-11	S ₄	Power Switch (built in Potentiometer)	-049-00	R ₁₁	" 2.2KΩ " "	-584-00	R ₄₅	" 3Ω " "
1-507-034-10	J ₁	Det Out Jack	-018-00	R ₁₂	" 220Ω " "		R ₄₆	—deleted—
-034-10	J ₂	Multiplex Out Jack } Triple Jack	-145-00	*R ₁₃	" 56KΩ " "	1-203-027-00	R ₄₇	Carbon 560Ω ±5% RD $\frac{1}{4}$ L
-034-10	J ₃		-065-00	R ₁₄	" 7.5KΩ " "	-011-00	R ₄₈	" 100Ω " "
-030-10	J ₄	Earphone Jack 1 } Twin Jack	-026-00	R ₁₅	" 470Ω " "		R ₄₉	—deleted—
-030-10	J ₅		" 2 } " " "	-145-00	R ₁₆	" 47Ω " "		R ₅₀
1-528-001-00	B	Battery (Size D X 4)	-130-00	R ₁₇	" 18KΩ " "	1-203-039-00	R ₅₂	Carbon 1.5KΩ ±5% RD $\frac{1}{4}$ L
	X ₁	Transistor 2SA166	-058-00	R ₁₈	" 3.3KΩ " "	-091-00	R ₅₃	" 36KΩ " "
	X ₂	" 2SA124	-026-00	R ₁₉	" 470Ω " "			Capacitor
	X ₃	" 2SA122	-049-00	R ₂₀	" 2.2KΩ " "	1-151-125-01	C ₁₋₁₋₄	Tuning Capacitor, 4 gang
	X ₄	" 2SA122	-024-00	R ₂₁	" 330Ω " "	1-141-110-00	C ₂₋₁₋₆	Trimmer Capacitor, 6 unit
			-024-00	R ₂₂	" 330Ω " "			

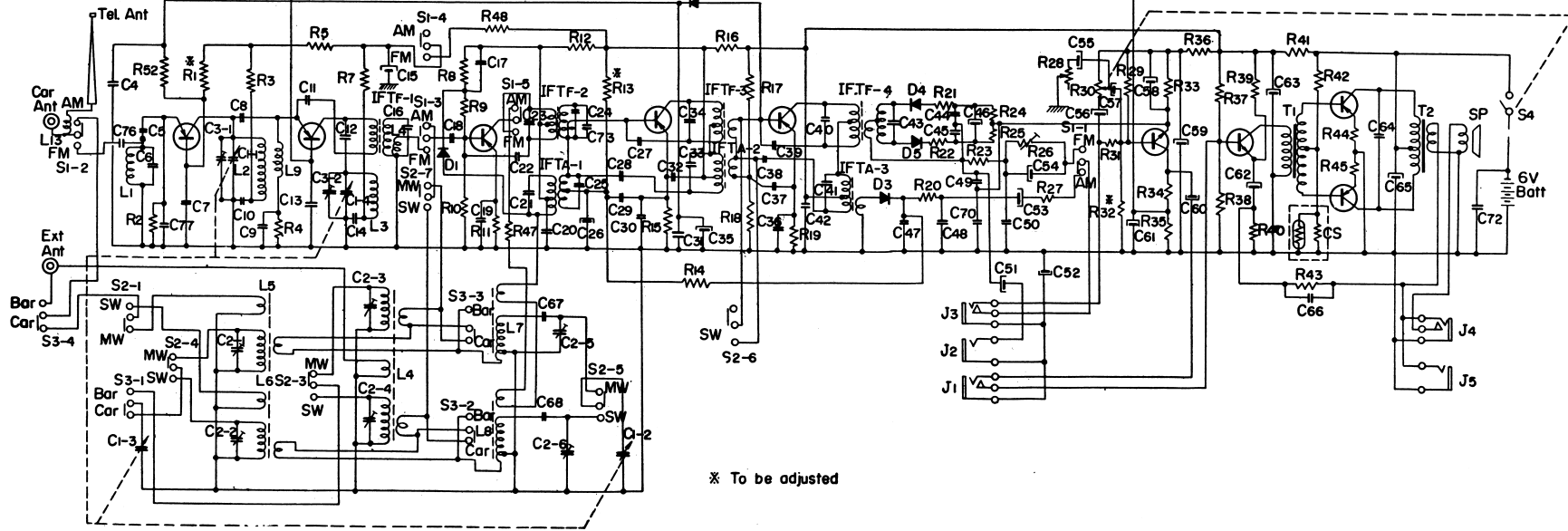
Electronic Parts List

— continued —

Part No.	Symbol	Description	Part No.	Symbol	Description	Part No.	Symbol	Description
1-141-053-00	C ₈₋₁₋₂	Cylindrical Trimmer Capacitor	1-101-045-00	C ₂₈	1pF ±0.5pF Ceramic	1-121-106-00	C ₃₃	5μF 6V Electrolytic
1-101-021-00	C ₄	0.01μF ±10% Ceramic	-021-00	C ₂₉	0.01μF ±10% "		C ₃₄	—deleted—
-115-00	C ₅	30pF ±5% "	-021-00	C ₃₀	0.01μF " "	1-121-181-11	C ₃₅	2μF 6V Electrolytic
-114-00	C ₆	15pF " "	-021-00	C ₃₁	0.01μF " "	-106-00	C ₃₆	5μF 6V "
-020-00	C ₇	0.005μF ±10% "	-021-00	C ₃₂	0.01μF " "	-115-00	C ₃₇	100μF 6V "
-047-00	C ₈	3pF ±0.5pF "		C ₃₃	200pF Built in IFT _{A-2}	-115-00	C ₃₉	100μF 6V "
1-103-090-00	C ₉	400pF ±5% Styrol		C ₃₄	50pF Built in IFT _{F-3}	-123-00	C ₃₉	200μF 6V "
1-101-020-00	C ₁₀	0.005μF ±10% Ceram.c	1-121-102-00	C ₃₅	30μF 6V Electrolytic	-106-00	C ₄₀	5μF 6V "
-049-00	C ₁₁	5pF ±0.5pF "	1-101-021-00	C ₃₆	0.01μF ±10% Ceramic	-111-00	C ₆₁	100μF 3V "
	C ₁₂	50pF Built in IFT _{F-1}	-021-00	C ₃₇	0.01μF " "	-115-00	C ₆₂	100μF 6V "
1-101-020-00	C ₁₃	0.005μF ±10% Ceramic	-046-00	C ₃₈	2pF ±0.5pF "	-161-00	C ₆₃	500μF 6V "
-020-00	C ₁₄	0.005μF " "	-046-00	C ₃₉	2pF " "	1-105-097-00	C ₆₄	0.3μF ±20% Mylar
1-121-115-10	C ₁₅	100μF 6V Electrolytic	-130-00	C ₄₀	12pF ±5% "	1-121-115-00	C ₆₅	100μF 6V Electrolytic
	C ₁₆	20pF Built in IFT _{F-1}		C ₄₁	200pF Built in IFT _{A-3}	1-101-007-00	C ₆₆	0.05μF ±10% Ceramic
1-101-021-00	C ₁₇	0.01μF ±10% Ceramic	1-101-007-00	C ₄₂	0.05μF ±10% Ceramic	1-103-041-12	C ₆₇	330pF ±5% Styrol
-020-00	C ₁₈	0.005μF " "		C ₄₃	80pF Built in IFT _{F-4}	-037-12	C ₆₈	2000pF " "
-104-00	C ₁₉	0.002μF ±20% Mylar	1-101-030-00	C ₄₄	200pF ±5% Ceramic		C ₆₉	—deleted—
-021-00	C ₂₀	0.01μF ±10% Ceramic	-030-00	C ₄₅	200pF " "	1-101-021-00	C ₇₀	0.01μF ±10% Ceramic
	C ₂₁	200pF Built in IFT _{A-1}	1-121-102-00	C ₄₆	30μF 6V Electrolytic		C ₇₁	—deleted—
1-101-046-00	C ₂₂	2pF ±0.5pF Ceramic	1-101-021-00	C ₄₇	0.01μF ±10% Ceramic	1-101-020-00	C ₇₂	0.005μF ±10% Ceramic
	C ₂₃	50pF Built in IFT _{F-2}	-022-00	C ₄₈	0.02μF " "	-049-00	C ₇₃	5pF ±0.5pF "
	C ₂₄	20pF Built in IFT _{F-2}	-021-00	C ₄₉	0.01μF " "		C ₇₄	—deleted—
	C ₂₅	200pF Built in IFT _{A-1}	-022-00	C ₅₀	0.02μF " "		C ₇₅	—deleted—
1-121-104-00	C ₂₆	10μF 6V Electrolytic	1-121-104-00	C ₅₁	10μF 6V Electrolytic	1-101-094-00	C ₇₆	7pF ±0.5pF Ceramic
1-101-045-00	C ₂₇	1pF ±0.5pF Ceramic	-115-00	C ₅₂	100μF 6V "	-049-00	C ₇₇	5pF ±5% "

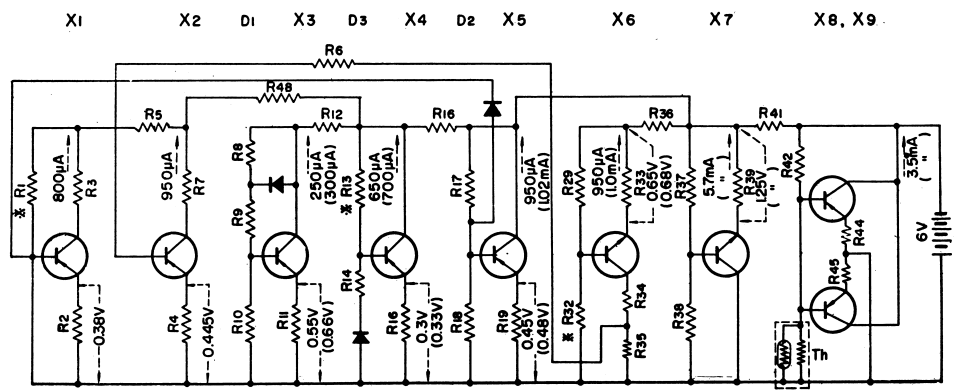
* To be adjusted

X1 FM RF Amp 2SA166
X2 FM Conv 2SA124
X3 FM 1st IF Amp AM Conv 2SA122
X4 FM 2nd IF Amp AM 1st IF Amp 2SA122
X5 FM 3rd IF Amp AM 2nd IF Amp 2SA122
X6 1st AF Amp 2SD64
X7 2nd AF Amp 2SD64
X8, X9 Power Amp 2SB52 x 2



* To be adjusted

Voltage and Current Distribution Chart at Zero Signal



(Note) Values in the parentheses are for AM.