KENWOOD

HI/FI STEREO COMPONENTS

SERVICE MANUAL

KT-7000

SOLID STATE AM-FM STEREO TUNER

PARTS DESCRIPTION LIST

MAIN CHASSIS (BB1JK) SECTION

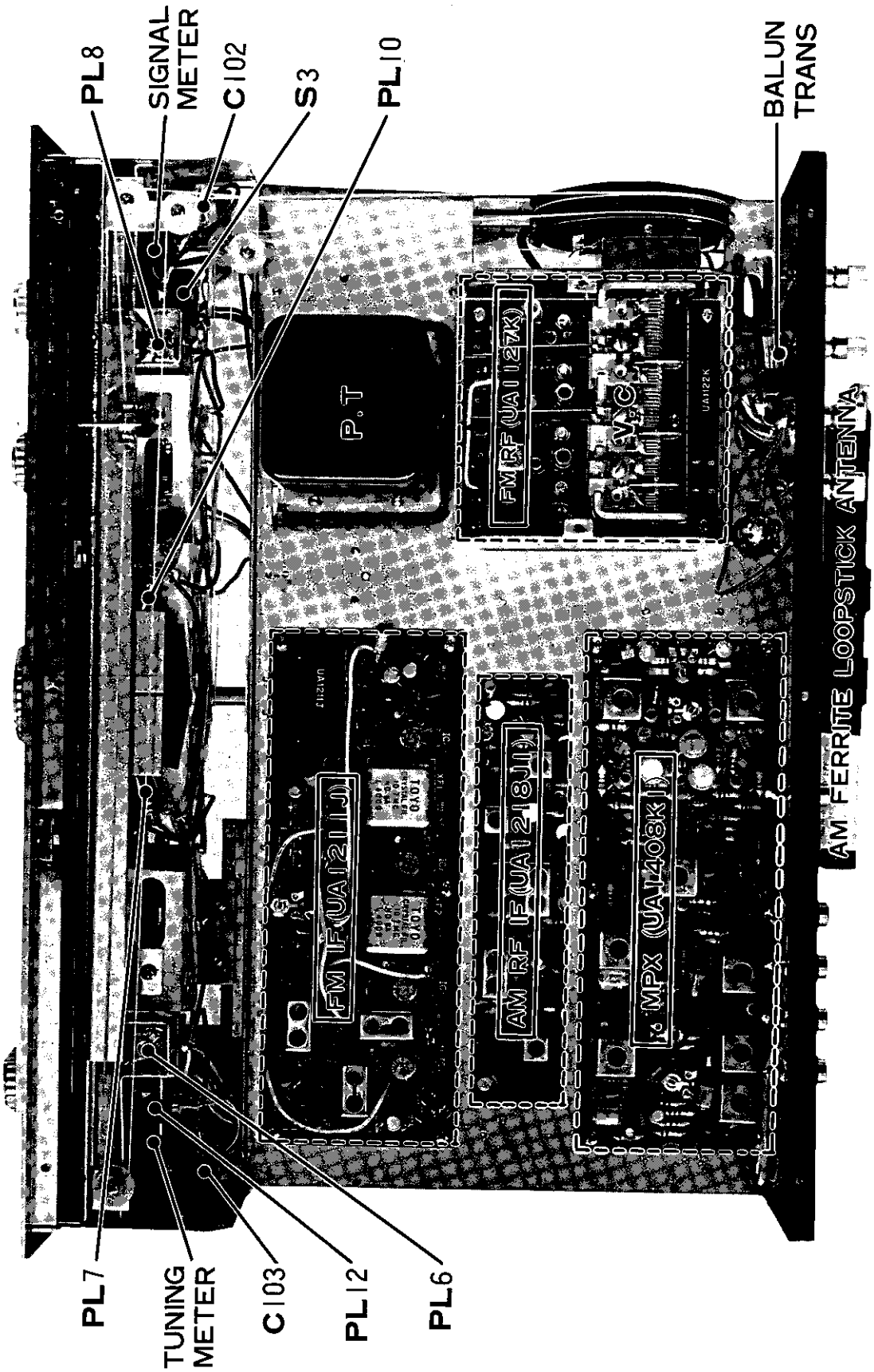
PRINTED CIRCUITS

–	RF BLOCK	(UA1127K)
–	FM IF BLOCK	(UA1211J)
–	AM RF IF BLOCK	(UA1218JI)
–	MPX BLOCK	(UA1408KI)
–	FM METER IF BLOCK	(UA1221K)

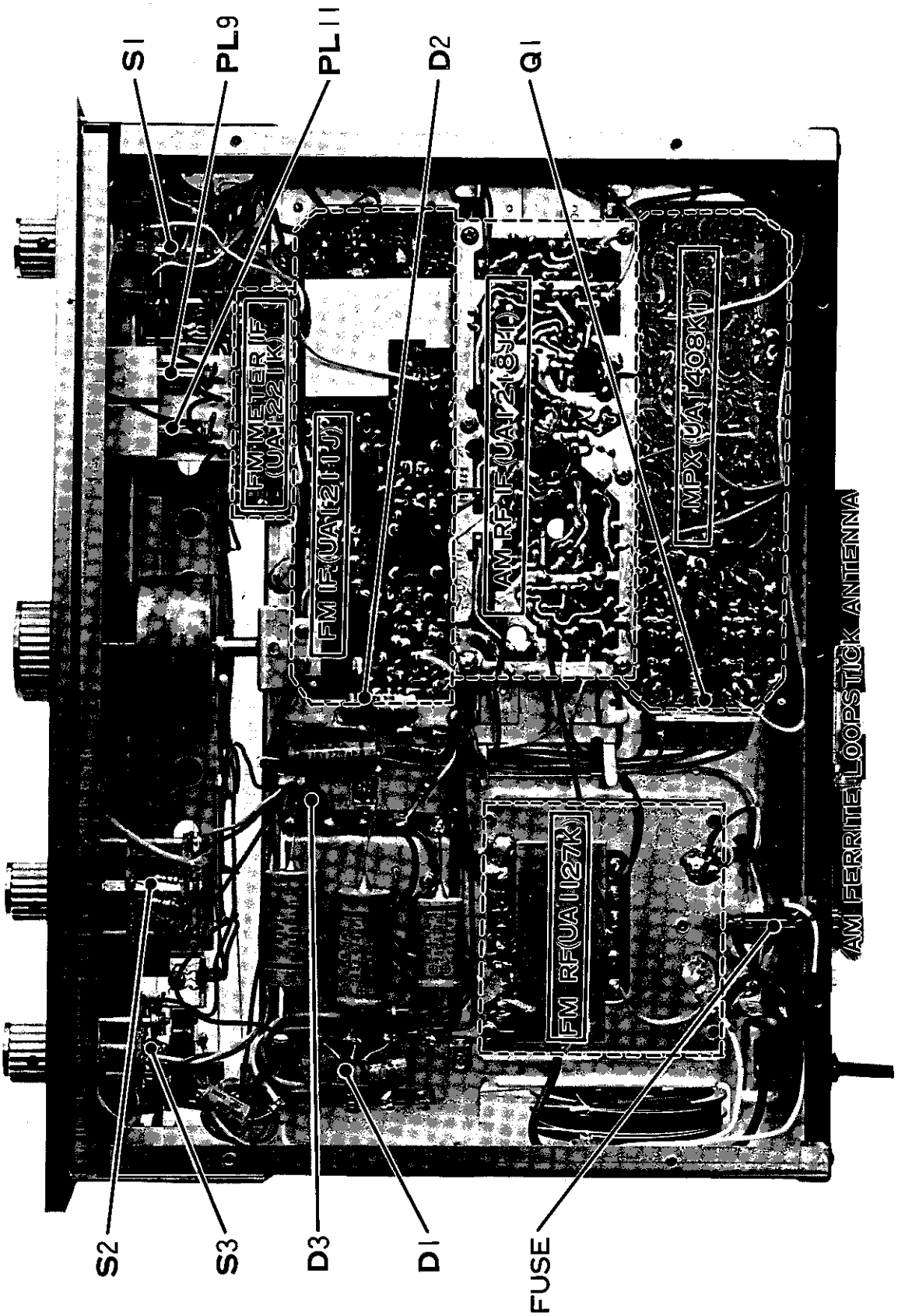
Symbol No.	Description	Part No.	Remarks
CAPACITORS			
C101	Ceramic 0.0022μF ±20%		
C102	Electrolytic Tubular 100μF 3.15WV		
C103	Electrolytic Tubular 33μF 16WV		
C301	Oil Impregnated paper 0.01μF ±20%		
C302, 303	Oil Impregnated paper 0.02μF ±20%		
C304	Electrolytic Tubular 470μF 35WV		
C305	Electroyltic Tubular 470μF 25WV		
C306	Electrolytic Tubular 100μF 16WV		
C307	Electrolytic Tubular 220μF 16WV		
C308	Electrolytic Tubular 100μF 16WV		
RESISTORS			
R101	Fixed Carbon Composition 2.2MΩ ±10% ½W		
R111	Insulated Carbon Film 6.8KΩ ±5% ¼W		
R112	Insulated Carbon Film 2.7KΩ ±5% ¼W		
R113	Insulated Carbon Film 3.9KΩ ±5% ¼W		
R114	Insulated Carbon Film 5.6KΩ ±5% ¼W		
R115	Insulated Carbon Film 7.5KΩ ±5% ¼W		
R211	Insulated Carbon Film 6.8KΩ ±5% ¼W		
R212	Insulated Carbon Film 2.7KΩ ±5% ¼W		
R213	Insulated Carbon Film 3.9KΩ ±5% ¼W		
R214	Insulated Carbon Film 5.6KΩ ±5% ¼W		
R215	Insulated Carbon Film 7.5KΩ ±5% ¼W		
R301	Fixed Carbon Composition 56Ω ±10% 1W		
R302	Fixed Carbon Composition 1KΩ ±10% ½W		
R303	Fixed Carbon Composition 120Ω ±10% ½W		
R304	Fixed Carbon Composition 4.7KΩ ±10% ½W		
TRANSISTOR/DIODES			
Q1	ST-303		
D1	IS1850		
D2	IS338-T		
D3	SD-1Y		
SWITCHES			
S1	Rotary SW Y-3.9.4 SELECTOR	S03-663	
S2	Rotary SW Y-2.2.6 LEVEL	S03-662	
S3	Rotary SW Y-1.4.3(with POWER SW) POWER	S03-267	
MISCELLANEOUS			
–	Case	A01-CB1J	
–	Escutcheon	A02-BB1J	
–	Chassis	A03-BB1J	
–	Panel Framework (AA05–BB1JK)		
–	Panel	A05-BB1JK	
–	Dial Scale	A07-BB1JK	
–	Sole Plate	A08-CB1J	
–	Back panel	A09-BB1JK	
–	Dial Board	A12-BB1J	
–	Front Glass (44 x 333 3t)	A20-BB1J	
–	Radiator	A26-31	
–	Antenna Bracket	A40-08	
–	Antenna Reinforcement Holder	A40-12	
–	Metal Fittings (for jewel) x2	A49-89	
–	Jewel (Blue) x 2	A53-604	
–	Reflector	A90-BB1J	
–	Fixed Metal (for Amp.) x 2	A3882	
–	Lead Holder	A4880	
–	Holder (for Dial Scale) (Left)	A5018	
–	Holder (for Dial Scale) (Right)	A5019	
–	Dial Cover	A5023	
–	Holder (for Meter) (Left)	A5024	
–	Holder (for Meter) (Right)	A5025	
–	Block Cover	A5028	
–	Holder (for Front Glass) x 2	A5029	
–	Name plate (Destination)	B07-133	
–	Name plate	B09-190	
–	Name plate (L A Standard)	B09-192	
–	Pulley	D04-70	
–	Flywheel	D05-52B	

Symbol No.	Description	Part No.	Remarks
–	Dial Spring x 2	D06-02	
–	Dial Strings (3 m)	D07-03	
–	Dial Shaft	D08-97	
–	Small pulley x 5	D09-14B	
–	Small Bush x 5	D10-05	
–	Metal Fittings (for Dial pointer)	D11-18	
–	Dial pointer	D12-70	
–	P L Socket x 4	E03-02F	
–	Lug	E04-040	
–	Lug x 2	E04-101	
–	Lug	E04-101C	
–	Lug x 3	E04-202	
–	Pin jack	E08-11C	
–	Pin jack	E08-14G	
–	Terminal x 4	E11-18	
–	Rubber Bush	G02-020	
–	Legs x 4	G10-02	
–	Cord Bushing	G11-19	
–	AC Cord Bushing (SR-2P-1)	G11-25	
–	Polyethylene Cover (420x140x290, 0.07t)	H02-115	
–	Corrugated Cardboard Case	H04-BB1JK	
–	Corrugated Cardboard Case (Exterior)	H04-BB1JKB	
–	Instruction Manual	H05-BB1JK	
–	Polyethylene Bag	H08-04B	
–	Corrugated Cardboard Case Corner Padding	H09-CA7KJA	
–	Corrugated Cardboard Case Corner Padding	H09-CA7KJB	
–	Schematic Diagram	H15-BB1JK	
–	Warranty Card	H26-02	
–	Instruction (for Carton Box)	H4068	
–	Patch Board (for Case)	K10-09	
–	Patch Board (for Case)	K10-10	
–	Soft tape (8x50 t10 Gray) x 3	K11-98	
–	Soft tape (8x30 t10 Gray) x 2	K11-105	
–	Soft tape (5x50 t3 Gray) x 8	K11-213	
ANT	FM Antenna	L10-04	
ANT	AM Ferrite Loopstick Antenna	L15-31	
–	Decorative Screw x4	N11-66	
–	Decorative Screw x6	N11-70	
–	Speed Nut x 2	N4001	
–	Shaft Bearing	N4101	
–	Knob POWER, LEVEL, SELECTOR 23φ	S14-268	
–	Knob TUNING 38φ	S14-516	
–	Fuse Holder	S15-13	
–	Fuse Holder x 7	S15-09	
P.L	Pilot Lamp x 7	S16-06	
P.L	Pilot Lamp	S16-19	
P.L	Pilot Lamp x 4	S16-22	
–	Fuse (Tube) 1A	S17-01	
–	Antenna Holder	S4045	
–	Slider	S4132	
P.T	Power Transformer	T01-198A	
T	BALUM Transformer	T09-33	
M	Meter SIGNAL	T11-89	
M	Meter TUNING	T11-90	
–	Insulating Sleeve (0.3m)	W06-154	
–	Vinyl Tube (Transparency) 3φ (0.6m)	W07-03Z	
–	AC Cord (with plug)	W09-15	
–	Shield Wire (Low Capacitance) (0.2m)	W11-012	
–	Coaxial Cable 1.5C-2V (0.3m)	W13-06	
–	Reticular Wire (0.15m)	W14-01	
–	Cord (Tuner & pre Amp Connecting Cord) x2	W18-03	
–	P.V.C. Insulated Wire (Black) 0.5φ (1.5m)	W32-50	
–	P.V.C. Insulated Wire (Red) 0.5φ(2.0m)	W32-52	
–	P.V.C. Insulated Wire (Yellow) 0.5φ(1.9m)	W32-54	
–	P.V.C. Insulated Wire (Blue) 0.5φ (4.1m)	W32-56	
–	P.V.C. Insulated Wire (White) 0.5φ (4.0m)	W32-59	
–	P.V.C. Insulated Wire (Red) 0.8φ (0.6m)	W32-82	
–	P.V.C. Insulated Wire (Yellow) 0.8φ (0.3m)	W32-84	
–	P.V.C. Insulated Wire (Blue) 0.8φ (0.2m)	W32-86	
–	P.V.C. Insulated Wire (White) 0.8φ(1.0m)	W32-89	
–	Single-Core Shielded Wire (Yellow) (thin) (0.8m)	W51-014C	
–	Single-Core Shielded Wire (Blue) (thin) (0.8m)	W51-016C	
–	Double-Core Shielded Wire (1.6m)	W51-020	
–	Pan Head Screw (⊕p3x6–F) x 31		
–	Pan Head Screw (⊕p3x12–F) x 4		
–	Pan Head Screw (Black) (⊕p3x6–F.K) x 8		
–	Pan Head Screw (Black) (⊕p3x8–F.K)x4		
–	Flat Head Screw (⊕S3x6–F) x 12		
–	Nut (N3–F) x 5		
–	Tapping Screw (⊕TM3x6F) x 28		
–	Tapping Screw (⊕TM3x8F) x 2		
–	Tapping Screw (⊕TM4x6F) x 6		
–	Tapping Screw (⊕TM4x10F)x4		
–	Truss (Black) (⊕T3x6xB) x 6		
–	Flat washer (W3–F) x 6		
–	Flat Washer (W4–F) x 7		

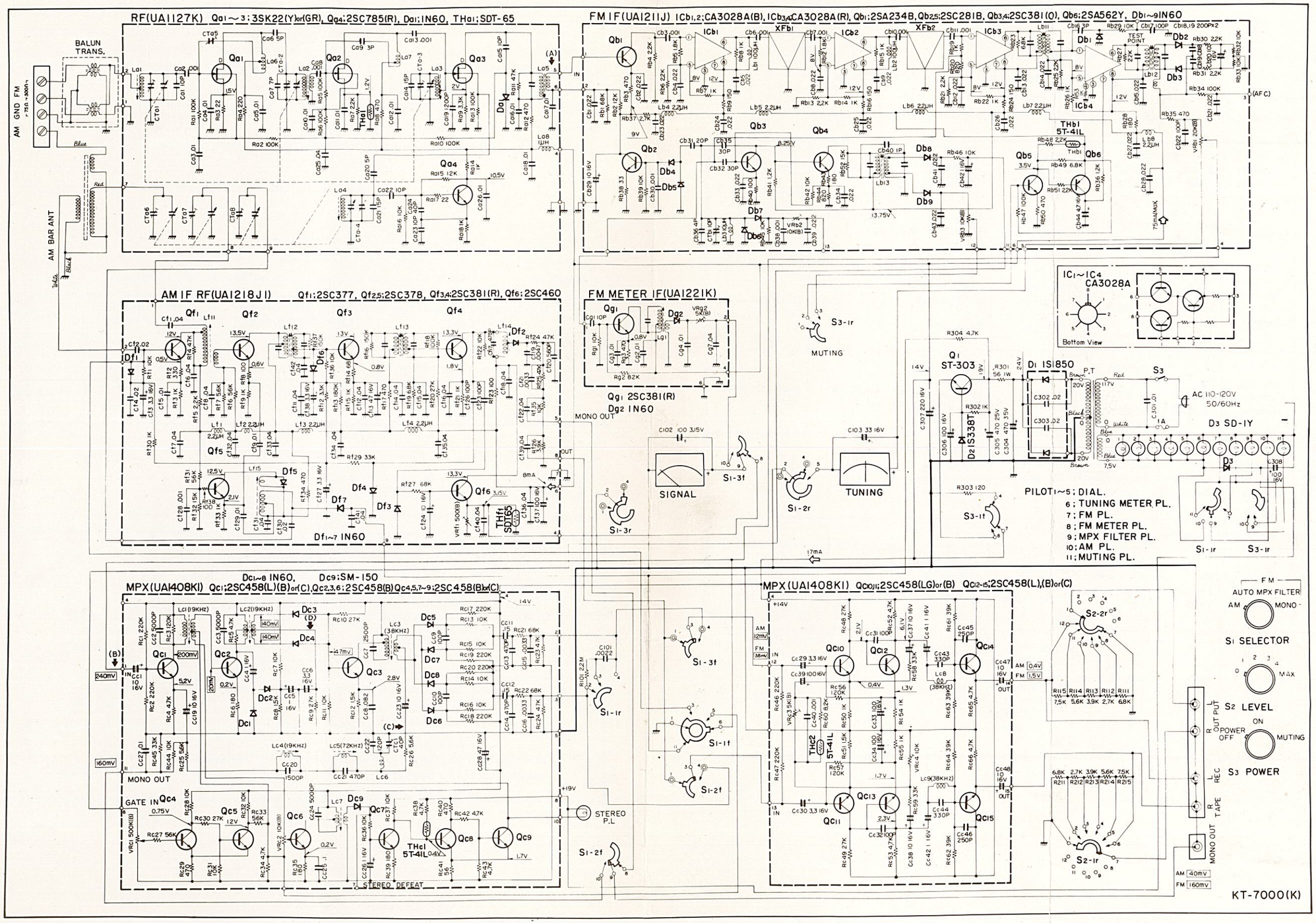
CHASSIS TOP VIEW



CHASSIS BOTTOM VIEW



SCHEMATIC DIAGRAM



FM ALIGNMENT PROCEDURE

Instruments: FM SG, AC VTVM & oscilloscope.
Warm-up: Allow 30 minutes warm-up period for receiver and equipments.
Selector sw: Always place in FM AUTO position.
Alignment tools: IF transformers require a plastic screwdriver-type alignment tool.

STEP	ALIGN	DUMMY ANTENNA	FM SSG		TUNING DIAL SETTING	OUTPUT INDICATOR	ADJUST	REMARKS
			COUPLING	INPUT SIGNAL				
1	IFT	Direct	High side to (A) Low side to Chassis	10.7 MHz (Unmod.)	Any non-interfering setting	Tuning Indicator	(UA1127K) La5	Maximum Deflection
2	DISCRIMINATOR	300 ohm Carbon Resistor	FM Antenna Terminal	98 MHz 400 Hz(Mod.) 75 kHz(Dev.) 0.5 ~ 1 mV (Input)	Tune for maximum using tuning indicator	VTVM at LEFT output jack of TAPE REC	(UA1211J) Lb12 Top & Bottom	Maximum Deflection
3	RF AMP CIRCUIT	300 ohm Carbon Resistor	FM Antenna Terminal	90 MHz 400 Hz(Mod.) 75 kHz(Dev.) 1.5μV~2μV (Input)	90 MHz	VTVM & Xtal earphone at LEFT output jack of TAPE REC	(UA1127K) La1 ~ 4	Maximum Deflection
4	RF AMP CIRCUIT	300 ohm Carbon Resistor	FM Antenna Terminal	105 MHz 400 Hz(Mod.) 75 kHz(Dev.) 1.5μV~2μV (Input)	105 MHz	VTVM & Xtal earphone at LEFT output jack of TAPE REC	(UA1127K) CTa1~4	Maximum Deflection
5	Repeat steps 3 & 4 until no further improvement is possible.							
6	OUTPUT LEVEL	300 ohm Carbon Resistor	FM Antenna Terminal	98 MHz 400 Hz(Mod.) 75 kHz(Dev.) 1 mV (Input)	Tune for maximum using tuning indicator	VTVM & Xtal earphone at LEFT output jack of TAPE REC	(UA1211J) VRb1	Set the output level to 1.5V
7	METER SETTING	300 ohm Carbon Resistor	FM Antenna Terminal	98 MHz 400 Hz(Mod.) 75 kHz(Dev.) 1 mV (Input)	Tune for maximum deflection, VTVM & Xtal earphone at LEFT output jack of TAPE REC	Tuning Indicator	(UA1221K) Lg1, VRg2	"4" indicated

ALIGNMENT PROCEDURE

ADJUSTING THE SQUELCH (MUTING)

When the POWER SWITCH is set to "FM MUTING" position with ANT input at 10μV, the audio (AF) output should be within ±1dB of the value at ANT input of 1 mV.
At ANT input of 3μV with POWER SWITCH set to "FM MUTING" position, adjust VRb3 (UA1211J) so that the audio frequency voltage is attenuated to below −40 dB.
Be sure that the set is inoperative when POWER SWITCH is at "ON" position.

FM MPX ALIGNMENT PROCEDURE

(a) SCA FILTER

Instruments: Audio SG, AC VTVM & Oscilloscope.
Selector sw: Always place in FM AUTO position.
Warm-up: Allow 30 minutes warm-up period for Receiver and equipments.

STEP	AUDIO SIGNAL GENERATOR COUPLING	AUDIO SIGNAL GENERATOR FREQUENCY	AC VTVM & OSCILLOSCOPE COUPLING	ADJUST	REMARKS
1	High side to (B) Low side to chassis	72 kHz (0.7V)	High side to (C) Low side to chassis	(UA1408K1) Lc 5	Minimum Deflection
2	High side to (B) Low side to chassis	66 kHz (0.7V)	High side to (C) Low side to chassis	(UA1408K1) CTc 1	Minimum Deflection

(b) BEACON LAMP

Instruments: MPX SG, AC VTVM & Oscilloscope.
Selector sw: Always place in FM AUTO position.
Warm-up: Allow 30 minutes warm-up period for Receiver and equipments.

STEP	FM SSG		AC VTVM & OSCILLOSCOPE CONNECTION	TUNING DIAL SETTING	ADJUST	REMARKS
	COUPLING	INPUT SIGNAL				
1	FM Antenna terminal.	98 MHz 400 Hz(Mod.)L+R 67.5 kHz (Dev.) 1mV(Ant. Input)	TAPE REC.	Maximum	VRc1 (UA1408K1) VRc2 (UA1408K1)	Stereo lamp illuminates
2	FM Antenna terminal	98 MHz 400 Hz(Mod.)L+R 67.5 kHz(Dev.) 6.5μV (Ant.Input)	TAPE REC.	Maximum	VRc1 (UA1408K1)	Stereo lamp illuminates
3	FM Antenna terminal	98 MHz 400 Hz(Mod.)L+R 37.5 kHz(Dev.) 1mV (Ant.Input)	TAPE REC.	Maximum	VRc2 (UA1408K1)	Stereo lamp illuminates

ALIGNMENT PROCEDURE

(C) MPX

Instruments: FM SG, Audio SG, AC VTVM & Oscilloscope.
Selector sw: Always place in FM AUTO position.
Warm-up: Allow 30 minutes warm-up period for Receiver and equipments.

STEP	ALIGN	FM SSG			19 kHz PILOT CARRIER SWITCH	AC VTVM & OSCILLOSCOPE CONNECTION	ADJUST	REMARKS
		COUPLING	MODULATION FREQUENCY	INPUT SELECTOR				
1	19 kHz STAGE	FM Antenna terminal	OFF	OFF	ON	High side to (D) Low side to chassis	(UA1408K1) Lc1, Lc2 Lc3	Maximum Deflection
2	38 kHz STAGE	FM Antenna terminal	400 Hz (Mod.)	L + R or REVERSE	ON	Left or Right jack of TAPE REC.	(UA1408K1) Lc3	To obtain a stable wave form at 400 Hz on Oscilloscope
3	SEPARATION CONTROL	FM Antenna terminal	98 MHz 2kHz(Mod.) 67.5 kHz (Dev.) 1mV(Input)	LEFT	ON	Right jack of TAPE REC. output	(UA1408K1) VRc3	Minimum Deflection
4	SEPARATION CONTROL	FM Antenna terminal	98 MHz 2kHz(Mod.) 67.5 kHz (Dev.) 1mV(Input)	RIGHT	ON	Left jack of TAPE REC. output	(UA1408K1) VRc3	Minimum Deflection
5	Repeat steps 3 & 4 until no further improvement is possible.							

ALIGNMENT PROCEDURE

AM ALIGNMENT PROCEDURE

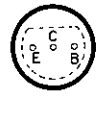
Alignment tools: IF transformers require a plastic screwdriver-type alignment tool.
Instruments: AM SG, AC VTVM & Oscilloscope.
Selector SW: Always place in AM position.
Warm-up: Allow 30 minutes warm-up period for Receiver and equipments.

STEP	ALIGN	DUMMY ANTENNA	AM SG		TUNING DIAL SETTING	OUTPUT INDICATOR	ADJUST	REMARKS
			COUPLING	FREQUENCY				
1	IFT	Direct	AM ANT Terminals	455 kHz (400 Hz 30% AM)	Any non-interfering setting	Tuning Indicator, VTVM & Oscilloscope	(UA1218J1) Lf12~14 Top & Bottom	Maximum Deflection
2	OSC		AM ANT terminals	600 kHz (400 Hz 30% AM)	600 kHz	Tuning Indicator, VTVM & Oscilloscope	(UA1218J1) Lf15	Maximum Deflection
3	OSC		AM ANT terminals	1,400kHz (400 Hz 30% AM)	1,400 kHz	Tuning Indicator, VTVM & Oscilloscope	CTa8	Maximum Deflection
4	Repeat steps 2 & 3 until no further improvement is possible							
5	RF AMP.		AM ANT terminals	600 kHz (400 Hz 30% AM)	600 kHz	Tuning Indicator, VTVM & Oscilloscope	(UA1218J1) Lf11	Maximum Deflection
6	RF AMP.		AM ANT terminals	1,400 kHz (400 Hz 30% AM)	1,400 kHz	Tuning Indicator, VTVM & Oscilloscope	CTa7	Maximum Deflection
7	ANT CIRCUIT		AM ANT terminals	600 kHz (400 Hz 30% AM)	600 kHz	Tuning Indicator, VTVM & Oscilloscope	Lf11 Ferrite Bar ANT	Maximum Deflection
8	ANT CIRCUIT		AM ANT terminals	1,400 kHz (400 Hz 30% AM)	1,400 kHz	Tuning Indicator, VTVM & Oscilloscope	CTa6, 7	Maximum Deflection
9	Repeat steps 5 ~ 8 until no further improvement is possible.							

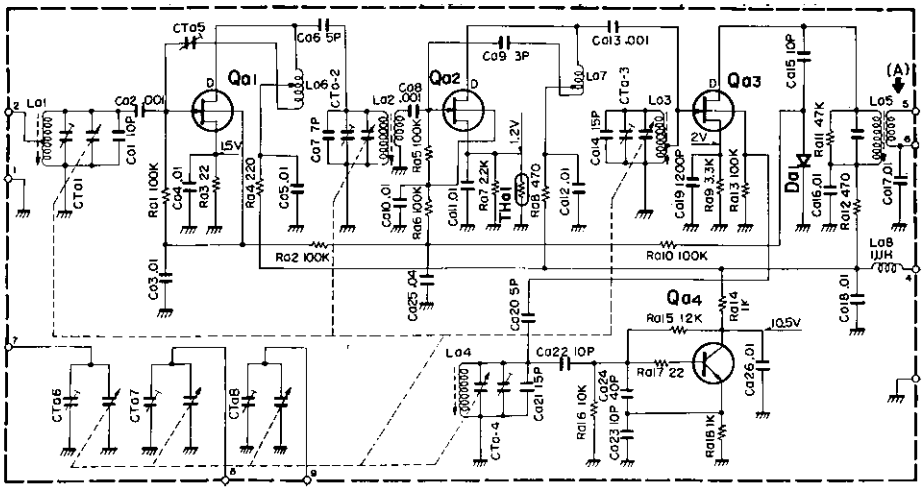
SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTOR

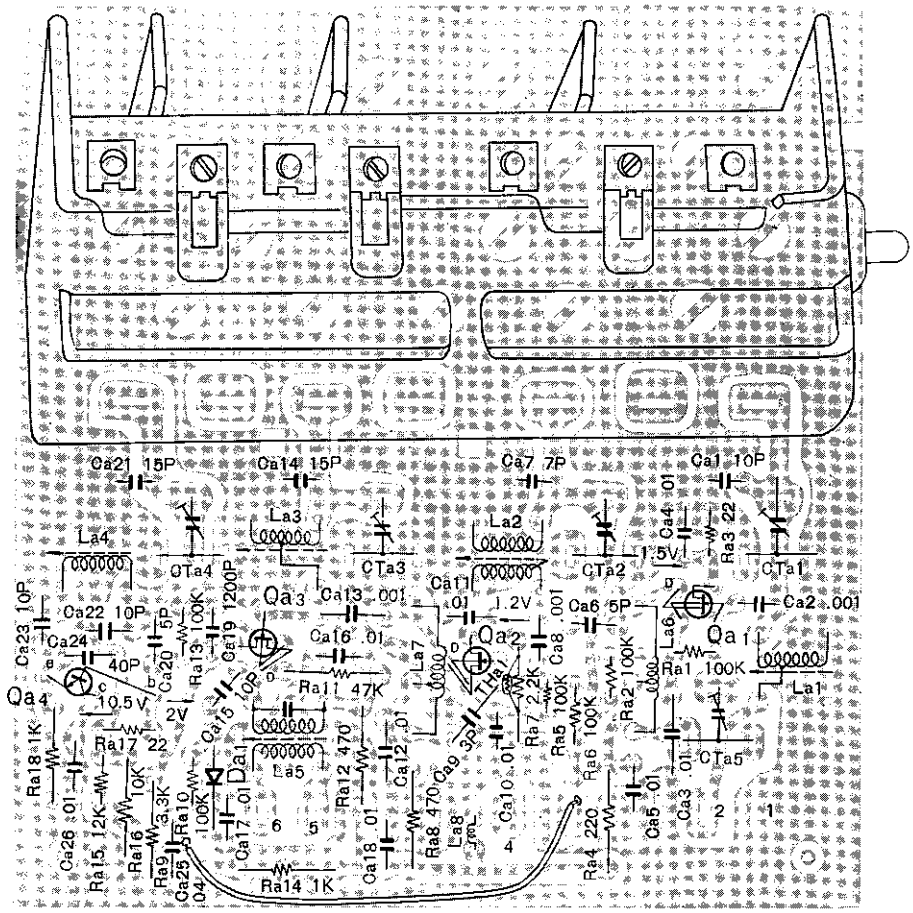
3SK22(Y)
3SK22(Y)or(GR)
3SK22(Y)(GR)or(BL)



2SC785(R)



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qa1~3 3SK22(Y) or (GR) Qa4 2SC785(R) Da1 1N60 THa1 SDT-65

PARTS DESCRIPTION LIST

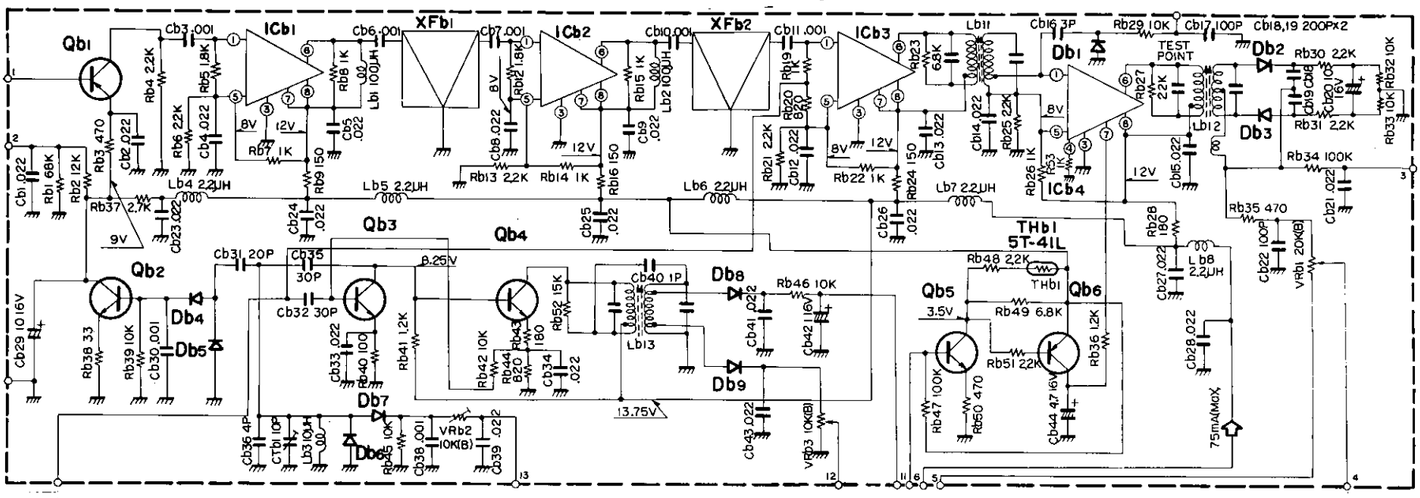
Symbol No.	Description	Part No.	Remarks
	CAPACITORS		
Ca1	Ceramic 10pF ± 0.5 pF		
Ca2	Ceramic 0.001μF ± 20%		
Ca3~5	Ceramic 0.01μF + 30%, −80%		
Ca6	Ceramic 5pF ± 0.5 pF		
Ca7	Ceramic 7pF ± 0.5 pF		
Ca8	Ceramic 0.001μF ± 20%		
Ca9	Ceramic 3pF ± 0.25 pF		
Ca10~12	Ceramic 0.01μF + 30%, −80%		
Ca13	Ceramic 0.001μF ± 20%		
Ca14	Ceramic 15pF ±5%		
Ca15	Ceramic 10pF ±1pF		
Ca16~18	Ceramic 0.01μF +30%, −80%		
Ca19	Mica 1200pF ±10%		
Ca20	Ceramic 5pF ± 0.25pF		
Ca21	Ceramic 15pF ± 5%		
Ca22, 23	Ceramic 10pF ± 0.5pF		
Ca24	Ceramic 40pF ± 5%		
Ca25	Ceramic 0.04μF + 30%, −80%		
Ca26	Ceramic 0.01μF +30%, −80%		
CTa1~4	Ceramic TRIMMER	C4036	
CTa5	Ceramic TRIMMER	C4035	
V.C	Variable Capacitor	D01-158	
	RESISTORS		
Ra1, 2	Fixed Carbon Composition 100KΩ ± 10% ¼W		
Ra3	Fixed Carbon Composition 22Ω ±10% ¼W		
Ra4	Fixed Carbon Composition 220Ω ± 10% ¼W		
Ra5, 6	Fixed Carbon Composition 100KΩ ±10% ¼W		
Ra7	Fixed Carbon Composition 2.2KΩ ± 10% ¼W		
Ra8	Fixed Carbon Composition 470Ω ± 10% ¼W		
Ra9	Fixed Carbon Composition 3.3KΩ ± 10% ¼W		
Ra10	Fixed Carbon Composition 100KΩ ± 10% ¼W		
Ra11	Fixed Carbon Composition 47KΩ ± 10% ¼W		
Ra12	Fixed Carbon Composition 470Ω ± 10% ¼W		
Ra13	Fixed Carbon Composition 100KΩ ± 10% ¼W		
Ra14	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Ra15	Fixed Carbon Composition 12KΩ ± 5% ¼W		
Ra16	Fixed Carbon Composition 10KΩ ± 5% ¼W		
Ra17	Fixed Carbon Composition 22Ω ± 10% ¼W		
Ra18	Fixed Carbon Composition 1KΩ ± 5% ¼W		
	COILS/TRANSFORMER		
La1	FM ANT Coil	L24-UA1124J-A	
La2	FM RF1 Coil	L24-UA1122KRA	
La3	FM RF2 Coil	L24-UA1122KRB	
La4	FM OSC Coil	L24-UA1122KS	
La5	FM IFT	L52-10	
La6, 7	Choke Coil	L20-010D	
La8	Ferri-inductor	FL5H-IROM	
	TRANSISTORS/DIODE/THERMISTOR		
Qa1	3SK22 (Y) or (GR) (FET) (Low Noise)		
Qa2	3SK22 (Y) (FET)		
Qa3	3SK22 (Y), (GR) or (BL) (FET)		
Qa4	2SC785 (R)		
Da1	1N60		
THa1	SDT-65		
	MISCELLANEOUS		
–	Printed Circuit Board	S23-253	
–	Front Chassis	A03-UA1124J	
–	Front Rear-Panel	A08-UA11143	
–	Front Shield Board	A13-UA1122K	
–	Gear Box	A90-UA1124J	
–	Front Cover	A91-UA1124J	
–	Terminal x 5	N4086	
–	P.V.C. Insulated Wire (White) (0.08m)	W32-59	
–	Vinyl Tube (0.01m)	W07-014	
–	Screw (⊕P3x6–F) x 5		
–	Screw (⊕P3x4–F) x 4		
–	Spring Washer (SW3–F) x 4		

KENWOOD

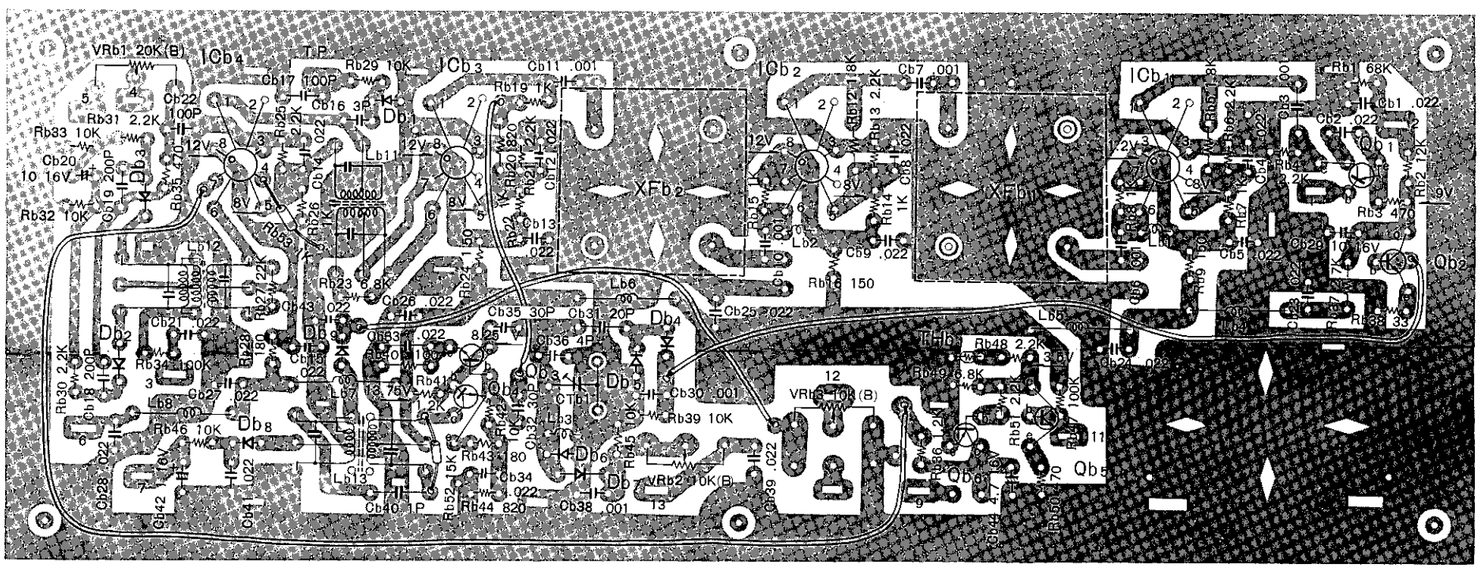
FM IF (UA1211J) SECTION

(KT-7000)

SCHEMATIC DIAGRAM



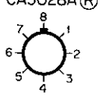
SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



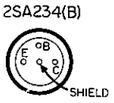
ICb1,2 CA3028A(B), ICb3,4 CA3028A(R), Qb1 2SA234B, Qb2,5 2SC281B, Qb3,4 2SC381(O), Qb6 2SA562Y, Db1~9 1N60, THb1 5T-41L

BOTTOM VIEW OF TRANSISTOR

CA3028A(B)
CA3028A(R)

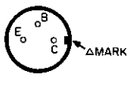


2SA234(B)



2SC381(O)
2SA562(Y)

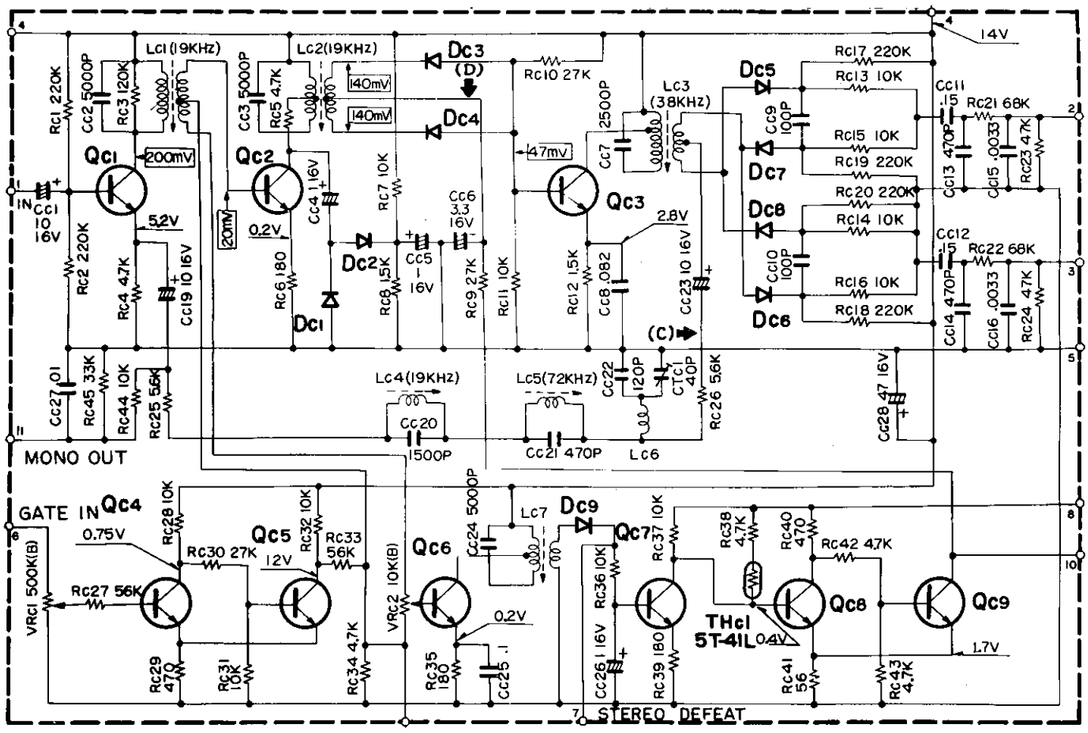
2SC281(B)

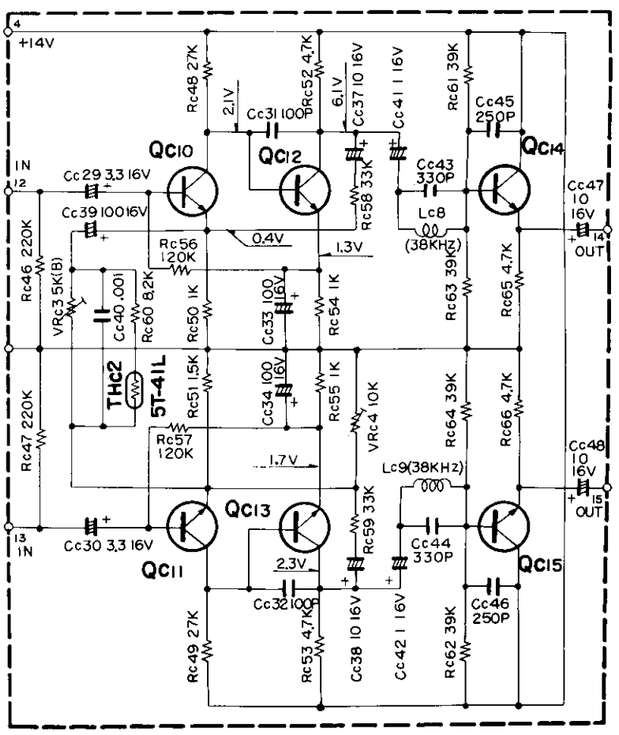


PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Remarks
	CAPACITORS		
Cb1, 2	Ceramic 0.022μF + 80%, −20%		
Cb3	Ceramic 0.001μF ± 10%		
Cb4, 5	Ceramic 0.022μF +80%, −20%		
Cb6, 7	Ceramic 0.001μF ±10%		
Cb8, 9	Ceramic 0.022μF +80%, −20%		
Cb10, 11	Ceramic 0.001μF ±10%		
Cb12~15	Ceramic 0.022μF +80%, −20%		
Cb16	Ceramic 3pF ± 0.25pF		
Cb17	Ceramic 100pF ± 5%		
Cb18, 19	Ceramic 200pF ± 5%		
Cb20	Electrolytic Tubular 10μF 16WV		
Cb21	Ceramic 0.022μF +80%, −20%		
Cb22	Ceramic 100pF ± 5%		
Cb23~28	Ceramic 0.022μF +80%, −20%		
Cb29	Electrolytic Tubular 10μF 16WV		
Cb30	Ceramic 0.001μF ± 10%		
Cb31	Ceramic 20pF ± 5%		
Cb32	Ceramic 30pF ± 5%		
Cb33, 34	Ceramic 0.022μF +80%, −20%		
Cb35	Ceramic 30pF ± 5%		
Cb36	Ceramic 4pF ± 0.25pF		
Cb38	Ceramic 0.001μF ± 10%		
Cb39	Ceramic 0.022μF +80%, −20%		
Cb40	Ceramic 1pF ± 0.25 pF		
Cb41	Ceramic 0.022μF +80%, −20%		
Cb42	Electrolytic Tubular 1μF 16WV		
Cb43	Ceramic 0.022μF +80%, −20%		
Cb44	Electrolytic Tubular 4.7μF 16WV		
CTb1	Ceramic TRIMMER 10pF	C4036	
	RESISTORS		
Rb1	Fixed Carbon Composition 68KΩ ± 10% ¼W		
Rb2	Fixed Carbon Composition 12KΩ ± 10% ¼W		
Rb3	Fixed Carbon Composition 470Ω ± 10% ¼W		
Rb4	Fixed Carbon Composition 2.2KΩ ± 10% ¼W		
Rb5	Fixed Carbon Composition 1.8KΩ ± 10% ¼W		
Rb6	Fixed Carbon Composition 2.2KΩ ± 10% ¼W		
Rb7, 8	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Rb9	Fixed Carbon Composition 150Ω ± 10% ¼W		
Rb12	Fixed Carbon Composition 1.8KΩ ± 10% ¼W		
Rb13	Fixed Carbon Composition 2.2KΩ ± 10% ¼W		
Rb14, 15	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Rb16	Fixed Carbon Composition 150Ω ± 10% ¼W		
Rb19	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Rb20	Fixed Carbon Composition 820Ω ± 10% ¼W		
Rb21	Fixed Carbon Composition 2.2KΩ ± 10% ¼W		
Rb22	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Rb23	Fixed Carbon Composition 6.8KΩ ± 10% ¼W		
Rb24	Fixed Carbon Composition 150Ω ± 10% ¼W		
Rb25	Fixed Carbon Composition 2.2KΩ ± 10% ¼W		
Rb26	Fixed Carbon Composition 1KΩ ±10% ¼W		
Rb27	Fixed Carbon Composition 22KΩ ± 10% ¼W		
Rb28	Fixed Carbon Composition 180Ω ± 10% ¼W		
Rb29	Fixed Carbon Composition 10KΩ ± 10% ¼W		
Rb30, 31	Fixed Carbon Composition 2.2KΩ ± 10% ¼W		
Rb32, 33	Fixed Carbon Composition 10KΩ ± 10% ¼W		
Rb34	Fixed Carbon Composition 100KΩ ± 10% ¼W		
Rb35	Fixed Carbon Composition 470Ω ± 10% ¼W		
Rb36	Fixed Carbon Composition 1.2KΩ ± 10% ¼W		
Rb37	Fixed Carbon Composition 2.7KΩ ± 10% ¼W		
Rb38	Fixed Carbon Composition 33Ω ± 10% ¼W		
Rb39	Fixed Carbon Composition 10KΩ ± 10% ¼W		
Rb40	Fixed Carbon Composition 100Ω ± 10% ¼W		
Rb41	Fixed Carbon Composition 1.2KΩ ± 10% ¼W		
Rb42	Fixed Carbon Composition 10KΩ ± 10% ¼W		
Rb43	Fixed Carbon Composition 180Ω ± 10% ¼W		
Rb44	Fixed Carbon Composition 820Ω ± 10% ¼W		
Rb45, 46	Fixed Carbon Composition 10KΩ ± 10% ¼W		
Rb47	Fixed Carbon Composition 100KΩ ± 10% ¼W		
Rb48	Fixed Carbon Composition 2.2KΩ ± 10% ¼W		
Rb49	Fixed Carbon Composition 6.8KΩ ± 10% ¼W		
Rb50	Fixed Carbon Composition 470Ω ± 10% ¼W		
Rb51	Fixed Carbon Composition 2.2KΩ ± 10% ¼W		
Rb52	Fixed Carbon Composition 15KΩ ± 10% ¼W		
Rb53	Fixed Carbon Composition 1KΩ ± 10% ¼W		
	POTENTIOMETERS		
VRb1	20KΩ (B)	R10-75	
VRb2	10KΩ (B)	R10-63	
VRb3	10KΩ (B)	R10-54	
	COILS/TRANSFORMERS		
Lb1, 2	Ferri-inductor 100μH		
Lb3	Ferri-inductor 10μH		
Lb4~8	Choke Coil 2.2μH		
Lb11	10.7MHz Double-tuned Coil	L20-2.20	
Lb12	10.7MHz Discriminator	L02-90	
Lb13	10.7MHz Double-tuned Coil	L02-91	
		L02-82	
	IC'S/TRANSISTORS/DIODES/THERMISTOR		
ICb1, 2	CA 3028A (B)		
ICb3, 4	CA 3028A (R)		
Qb1	2SA234B		
Qb2	2SC281B		
Qb3, 4	2SC381 (O)		
Qb5	2SC281B		
Qb6	2SA562 (Y)		
Db1~9	IN60		
THb1	5T-41L		
	CRYSTAL FILTERS		
XFb1, 2	Crystal Filter	L4009	
	MISCELLANEOUS		
–	Printed Circuit Board	S23-210	
–	Shield Cover	A13-UA1211JB	
–	Terminal	N4085	
–	Vinyl Tube 1φ (0.2m)	W07-014	
–	P.V.C. Insulated Wire 0.5φ (0.5m)	W32-59	

SCHEMATIC DIAGRAM

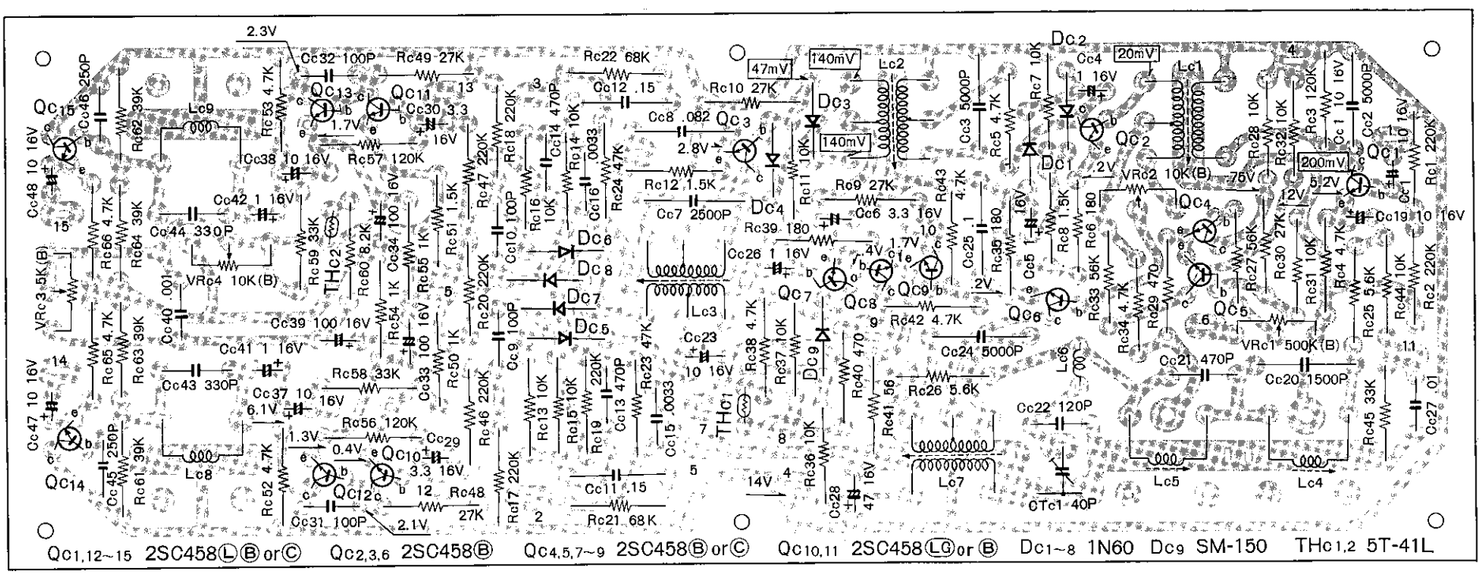




BOTTOM VIEW OF TRANSISTOR

2SC458(B)
2SC458(B)or(C)
2SC458(L)(B)or(C)
2SC458(LG)or(B)

SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



PARTS DESCRIPTION LIST

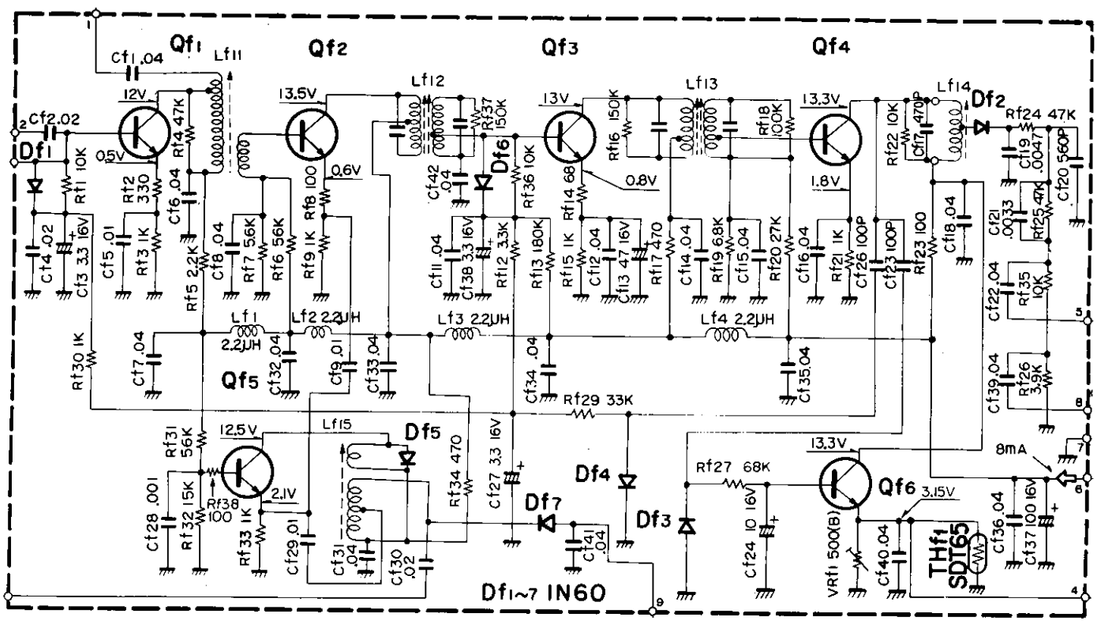
Symbol No.	Description	Part No.	Remarks
	CAPACITORS		
Cc1	Electrolytic Tubular 10μF 16WV		
Cc2, 3	Polystyrene Film 5000pF ± 5%		
Cc4, 5	Electrolytic Tubular 1μF 16WV		
Cc6	Electrolytic Tubular 3.3μF 16WV		
Cc7	Polystyrene Film 2500pF ± 5%		
Cc8	Mylar 0.082μF ± 10%		
Cc9, 10	Polystyrene Film 100pF ± 5%		
Cc11, 12	Mylar 0.15μF ±10%		
Cc13, 14	Ceramic 470pF ± 10%		
Cc15, 16	Mylar 0.0033μF ± 5%		
Cc19	Electrolytic Tubular 10μF 16WV		
Cc20	Polystyrene Film 1500pF ± 5%		
Cc21	Polystyrene Film 470pF ± 5%		
Cc22	Polystyrene Film 120pF ± 5%		
Cc23	Electrolytic Tubular 10μF 16WV		
Cc24	Polystyrene Film 5000pF ± 5%		
Cc25	Mylar 0.1μF ± 10%		
Cc26	Electrolytic Tubular 1μF 16WV		
Cc27	Mylar 0.01μF ± 5%		
Cc28	Electrolytic Tubular 47μF 16WV		
Cc29, 30	Electrolytic Tubular 3.3μF 16WV		
Cc31, 32	Ceramic 100pF ± 10%		
Cc33, 34	Electrolytic Tubular 100μF 16WV		
Cc37, 38	Electrolytic Tubular 10μF 16WV		
Cc39	Electrolytic Tubular 100μF 16WV		
Cc40	Mylar 0.001μF ± 10%		
Cc41, 42	Electrolytic Tubular 1μF 16WV		
Cc43, 44	Polystyrene Film 330pF ± 5%		
Cc45, 46	Ceramic 250pF ± 10%		
Cc47, 48	Electrolytic Tubular 10μF 16WV		
CTc1	Ceramic Trimmer 40pF	C4047	
	RESISTORS		
Rc1, 2	Insulated Carbon Film 220KΩ ± 10% ¼W		
Rc3	Insulated Carbon Film 120KΩ ± 10% ¼W		
Rc4, 5	Insulated Carbon Film 4.7KΩ ± 10% ¼W		
Rc6	Insulated Carbon Film 180Ω ± 10% ¼W		
Rc7	Insulated Carbon Film 10KΩ ± 10% ¼W		
Rc8	Insulated Carbon Film 1.5KΩ ± 10% ¼W		
Rc9, 10	Insulated Carbon Film 27KΩ ± 10% ¼W		
Rc11	Insulated Carbon Film 10KΩ ± 10% ¼W		
Rc12	Insulated Carbon Film 1.5KΩ ± 10% ¼W		
Rc13~16	Insulated Carbon Film 10KΩ ± 5% ¼W		
Rc17~20	Insulated Carbon Film 220KΩ ± 5% ¼W		
Rc21,22	Insulated Carbon Film 68KΩ ± 5% ¼W		
Rc23, 24	Insulated Carbon Film 47KΩ ± 5% ¼W		
Rc25, 26	Insulated Carbon Film 5.6KΩ ± 10% ¼W		
Rc27	Insulated Carbon Film 56KΩ ± 10% ¼W		
Rc28	Insulated Carbon Film 10KΩ ± 10% ¼W		
Rc29	Insulated Carbon Film 470Ω ± 10% ¼W		
Rc30	Insulated Carbon Film 27KΩ ± 10% ¼W		
Rc31, 32	Insulated Carbon Film 10KΩ ± 10% ¼W		
Rc33	Insulated Carbon Film 56KΩ ± 10% ¼W		
Rc34	Insulated Carbon Film 4.7KΩ ± 10% ¼W		
Rc35	Insulated Carbon Film 180Ω ± 10% ¼W		
Rc36, 37	Insulated Carbon Film 10KΩ ± 10% ¼W		
Rc38	Insulated Carbon Film 4.7KΩ ± 10% ¼W		
Rc39	Insulated Carbon Film 180Ω ± 10% ¼W		
Rc40	Insulated Carbon Film 470Ω ± 10% ¼W		
Rc41	Insulated Carbon Film 56Ω ± 10% ¼W		
Rc42, 43	Insulated Carbon Film 4.7KΩ ± 10% ¼W		
Rc44	Insulated Carbon Film 10KΩ ± 5% ¼W		
Rc45	Insulated Carbon Film 33KΩ ± 5% ¼W		
Rc46, 47	Insulated Carbon Film 220KΩ ± 10% ¼W		
Rc48, 49	Insulated Carbon Film 27KΩ ± 10% ¼W		
Rc50	Insulated Carbon Film 1KΩ ± 5% ¼W		
Rc51	Insulated Carbon Film 1.5KΩ ± 10% ¼W		
Rc52, 53	Insulated Carbon Film 4.7KΩ ± 10% ¼W		
Rc54, 55	Insulated Carbon Film 1KΩ ± 10% ¼W		
Rc56, 57	Insulated Carbon Film 120KΩ ± 10% ¼W		
Rc58, 59	Insulated Carbon Film 33KΩ ± 5% ¼W		
Rc60	Insulated Carbon Film 8.2KΩ ± 10% ¼W		
Rc61~64	Insulated Carbon Film 39KΩ ± 10% ¼W		
Rc65, 66	Insulated Carbon Film 4.7KΩ ± 10% ¼W		
	COILS		
Lc1, 2	19kHz Tune Coil	L17-45	
Lc3	38kHz Tune Coil	L17-48	
Lc4	19kHz, 38kHz Trap Coil	L17-47	
Lc5	72kHz Trap Coil	L17-44	
Lc6	Choke Coil (FL11H-393J)		
Lc7	19kHz Tune Coil	L17-46	
Lc8, 9	19kHz, 38kHz Trap Coil	L17-47	
	POTENTIOMETERS		
VRc1	500KΩ (B)	R10-105	
VRc2	10KΩ (B)	R10-54	
VRc3	5KΩ (B)	R10-53	
VRc4	10KΩ (B)	R10-54	
	TRANSISTORS/DIODES/THERMISTOR		
Qc1	2SC458 (L) (B) or (C)		
Qc2, 3	2SC458 (B)		
Qc4, 5	2SC458 (B) or (C)		
Qc6	2SC458 (B)		
Qc7 ~ 9	2SC458 (B) or (C)		
Qc10, 11	2SC458 (LG) or (B)		
Qc12 ~ 15	2SC458 (L) (B) or (C)		
Dc1 ~ 8	1N60		
Dc9	SM–150		
THc1, 2	5T-41L		
	MISCELLANEOUS		
–	Printed Circuit Board	S23–222	
–	Terminal x 18	N4085	
–	Vinyl Tube 1φ (0.15 m)	W07-014	

KENWOOD

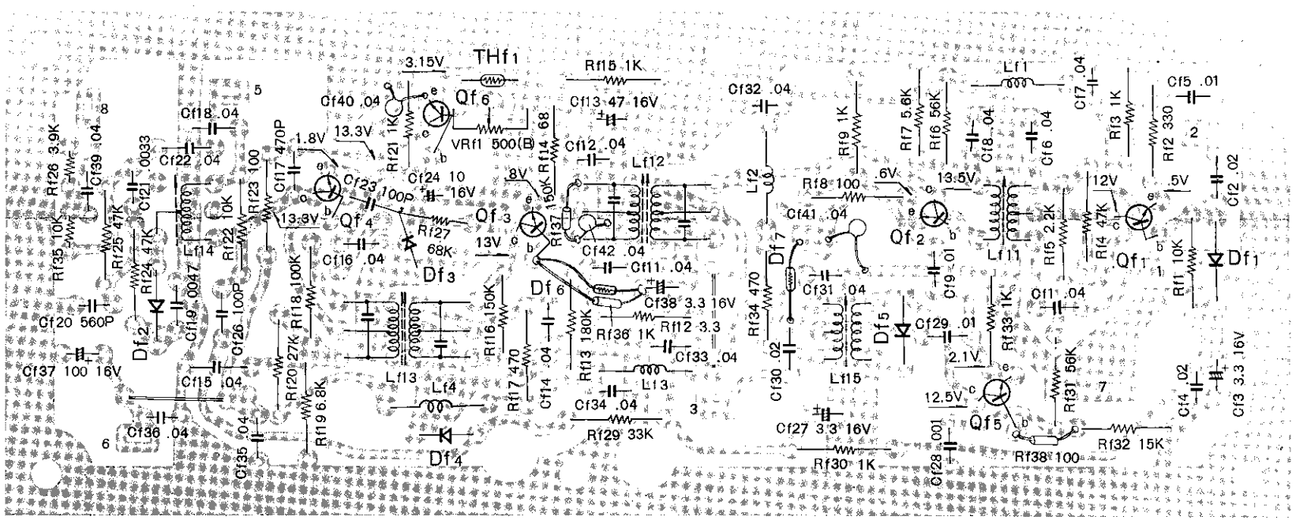
AM IF RF (UA1218JI) SECTION

(KT-7000)

SCHEMATIC DIAGRAM



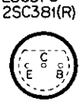
SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qf1 2SC377, Qf2,5 2SC378, Qf3,4 2SC381(R), Qf6 2SC460, Df1~7 1N60, THf1 SDT-65

BOTTOM VIEW OF TRANSISTOR

2SC377
2SC378
2SC381(R)



2SC460

KENWOOD

AM IF RF (UA1218JI) SECTION

PARTS DESCRIPTION LIST

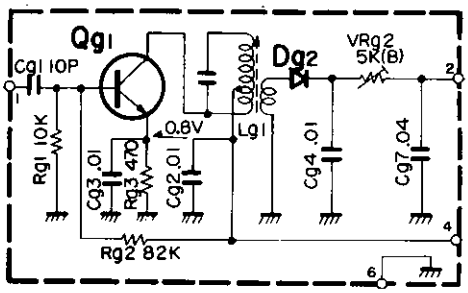
Symbol No.	Description	Part No.	Remarks
	CAPACITORS		
Cf1	Ceramic 0.04μF +80%, −20%		
Cf2	Ceramic 0.02μF +80%, −20%		
Cf3	Electrolytic Tubular 3.3μF 16WV		
Cf4	Ceramic 0.02μF +80%, −20%		
Cf5	Ceramic 0.01μF ± 20%		
Cf6~8	Ceramic 0.04μF +80%, −20%		
Cf9	Ceramic 0.01μF ±20%		
Cf11, 12	Ceramic 0.04μF +80%, −20%		
Cf13	Electrolytic Tubular 47μF 16WV		
Cf14~16	Ceramic 0.04μF +80%, −20%		
Cf17	Polystyrene Film 470pF ±5%		
Cf18	Ceramic 0.04μF +80%, −20%		
Cf19	Ceramic 0.0047μF ±20%		
Cf20	Ceramic 560pF ±10%		
Cf21	Ceramic 0.0033μF ±20%		
Cf22	Ceramic 0.04μF +80%, −20%		
Cf23	Ceramic 100pF ±10%		
Cf24	Electrolytic Tubular 10μF 16WV		
Cf26	Ceramic 100pF ±10%		
Cf27	Electrolytic Tubular 3.3μF 16WV		
Cf28	Ceramic 0.001μF ±10%		
Cf29	Ceramic 0.01μF ±20%		
Cf30	Ceramic 0.02μF +80%, −20%		
Cf31~36	Ceramic 0.04μF +80%, −20%		
Cf37	Electrolytic Tubular 100μF 16WV		
Cf38	Electrolytic Tubular 3.3μF 16WV		
Cf39~42	Ceramic 0.04μF +80%, −20%		
	RESISTORS		
Rf1	Fixed Carbon Composition 10KΩ ± 10% ¼W		
Rf2	Fixed Carbon Composition 330Ω ± 10% ¼W		
Rf3	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Rf4	Fixed Carbon Composition 47KΩ ± 10% ¼W		
Rf5	Fixed Carbon Composition 2.2KΩ ± 10% ¼W		
Rf6	Fixed Carbon Composition 56KΩ ± 10% ¼W		
Rf7	Fixed Carbon Composition 5.6KΩ ± 10% ¼W		
Rf8	Fixed Carbon Composition 100Ω ± 10% ¼W		
Rf9	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Rf12	Fixed Carbon Composition 3.3KΩ ± 10% ¼W		
Rf13	Fixed Carbon Composition 180KΩ ± 10% ¼W		
Rf14	Fixed Carbon Composition 68Ω ± 10% ¼W		
Rf15	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Rf16	Fixed Carbon Composition 150KΩ ± 10% ¼W		
Rf17	Fixed Carbon Composition 470Ω ± 10% ¼W		
Rf18	Fixed Carbon Composition 100KΩ ± 10% ¼W		
Rf19	Fixed Carbon Composition 6.8KΩ ± 10% ¼W		
Rf20	Fixed Carbon Composition 27KΩ ± 10% ¼W		
Rf21	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Rf22	Fixed Carbon Composition 10KΩ ± 10% ¼W		
Rf23	Fixed Carbon Composition 100Ω ± 10% ¼W		
Rf24, 25	Fixed Carbon Composition 47KΩ ± 10% ¼W		
Rf26	Fixed Carbon Composition 3.9KΩ ± 5% ¼W		
Rf27	Fixed Carbon Composition 68KΩ ± 10% ¼W		
Rf29	Fixed Carbon Composition 33KΩ ± 10% ¼W		
Rf30	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Rf31	Fixed Carbon Composition 56KΩ ± 10% ¼W		
Rf32	Fixed Carbon Composition 15KΩ ± 10% ¼W		
Rf33	Fixed Carbon Composition 1KΩ ± 10% ¼W		
Rf34	Fixed Carbon Composition 470Ω ± 10% ¼W		
Rf35	Fixed Carbon Composition 10KΩ ± 5% ¼W		
Rf36	Fixed Carbon Composition 10KΩ ± 10% ¼W		
Rf37	Fixed Carbon Composition 150KΩ ± 10% ¼W		
Rf38	Fixed Carbon Composition 100Ω ± 10% ¼W		
	POTENTIOMETER		
VRf1	500 Ω (B)	R10-69	
	COILS/TRANSFORMERS		
Lf1~4	Choke Coil	L20-220	
Lf11	RF Coil	L12-54	
Lf12	IFT	L01-77	
Lf13	IFT	L01-78	
Lf14	IFT	L01-71	
Lf15	OSC Coil	L11-70	
	TRANSISTORS/DIODES/THERMISTOR		
Qf1	2SC377		
Qf2	2SC378		
Qf3, 4	2SC381 (R)		
Qf5	2SC378		
Qf6	2SC460 B or C		
Df1~7	1N60		
THf1	SDT−65		
	MISCELLANEOUS		
−	Printed Circuit Board	S23-258	
−	Reinforcement Metal (for Block) x 2	A5020	
−	Terminal x 8	N4085	
−	Wire (White) (0.22m)	W32-59	
−	Lug (E04-101C)		

KENWOOD

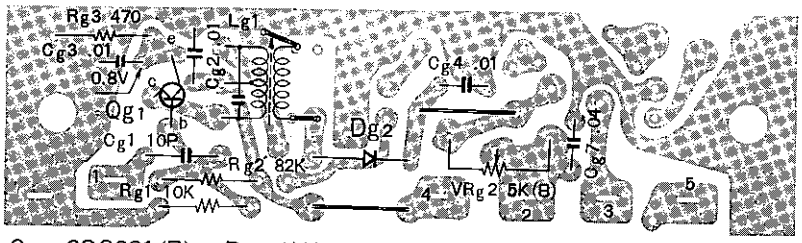
FM METER IF (UA1221K) SECTION

(KT-7000)

SCHEMATIC DIAGRAM



SEALED CIRCUIT ASSEMBLES-PHANTOM VIEWS



Qg_1 2SC381(R) Dg_2 1N60

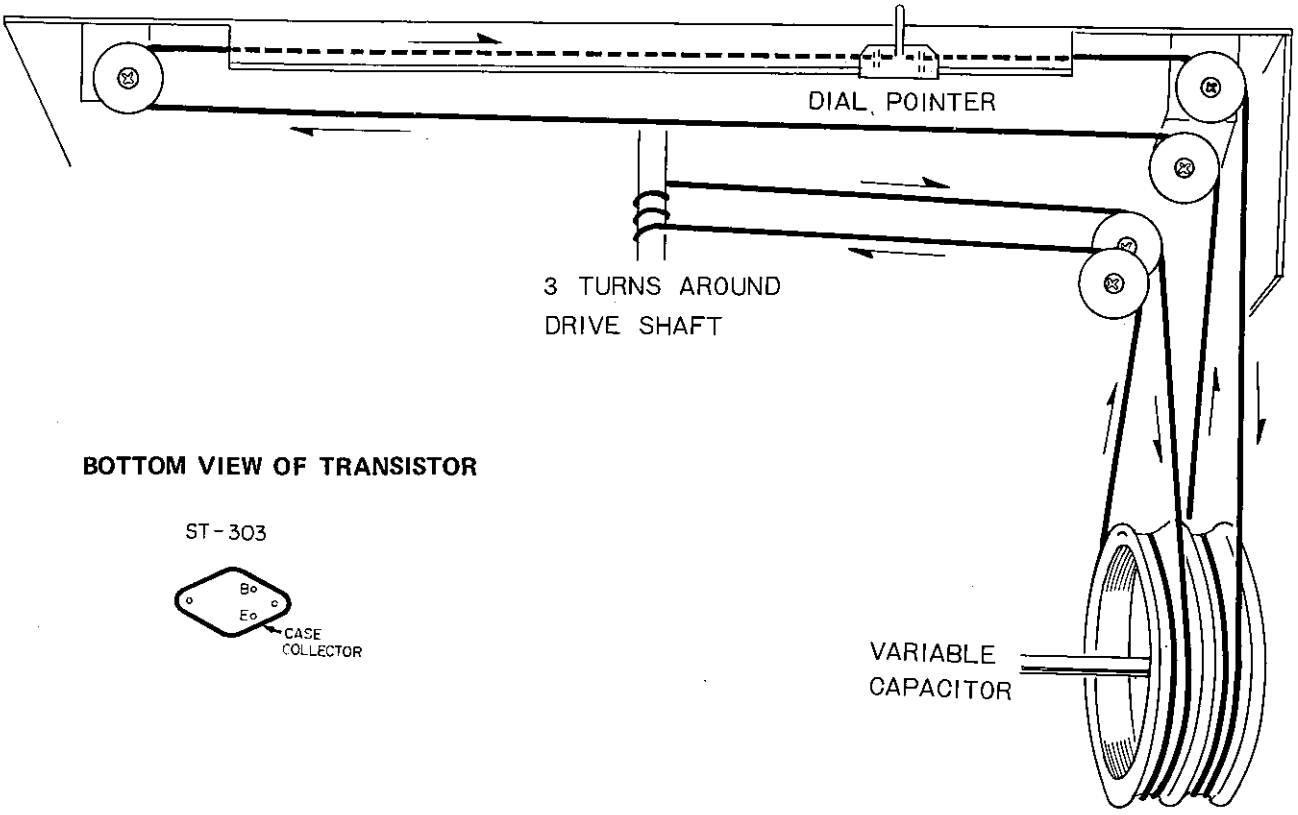
BOTTOM VIEW OF TRANSISTOR

2SC381(R)

PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Remarks
	CAPACITORS		
Cg1	Ceramic 10pF ± 10%		
Cg2~4	Ceramic 0.01μF + 80%, −20%		
Cg7	Ceramic 0.04μF +80%, −20%		
	RESISTORS		
Rg1	Fixed Carbon Composition 10KΩ ± 10% ¼W		
Rg2	Fixed Carbon Composition 82KΩ ± 10% ¼W		
Rg3	Fixed Carbon Composition 470Ω ± 10% ¼W		
	POTENTIOMETER		
VRg2	5KΩ (B)	R10−70	
	TRANSISTOR/DIODE		
Qg1	2SC381 (R)		
Dg2	1N60		
	TRANSFORMER		
Lg1	FM IFT	L02-103	
	MISCELLANEOUS		
–	Printed Circuit Board	S23-207	
–	Terminal x4	N4086	
–	Vinyl Tube 1φ (0.1m)	W07−014	

DIAL CORD STRINGING



BOTTOM VIEW OF TRANSISTOR

ST-303

KENWOOD ELECTRONICS, INC.

- 3700 SOUTH BROADWAY PLACE, LOS ANGELES, CALIFORNIA 90007
- 69-41 CALAMUS AVENUE, WOODSIDE, N.Y. 11377

CANADIAN EXCLUSIVE DISTRIBUTOR

PERFECT MANUFACTURING & SUPPLIES CORP. LTD.

- 4980 BUCHAN ST. MONTREAL P.Q, CANADA
- 14 BANIGAN DRIVE THORNCLIFFE PARK TORONTO CANADA