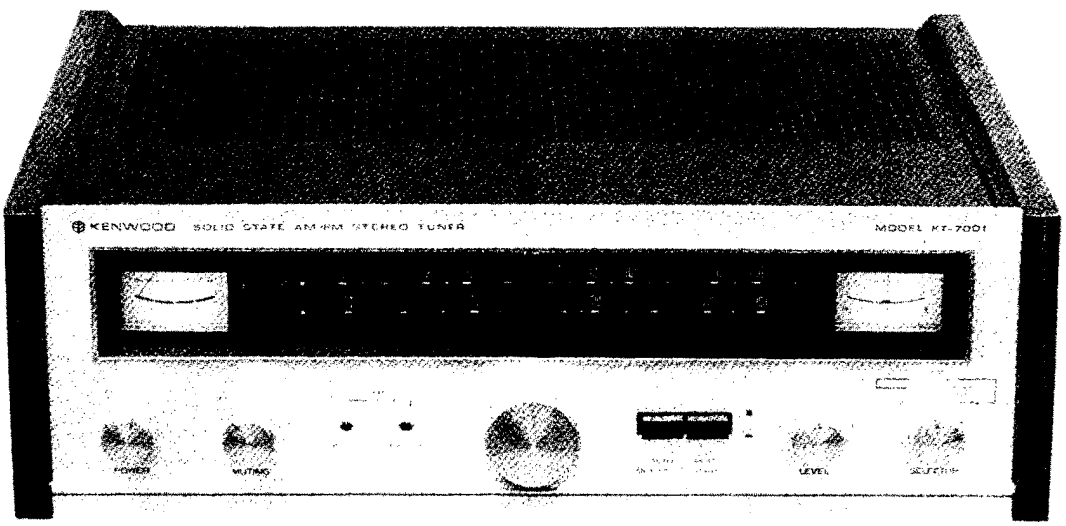
KENWOOD

HI/FI STEREO COMPONENTS

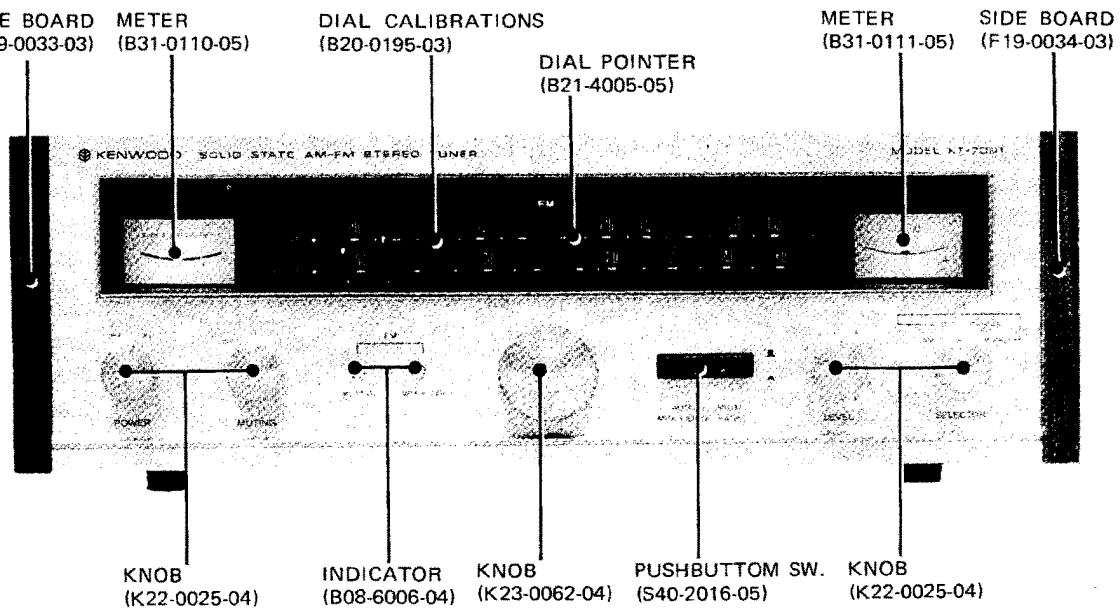
SERVICE MANUAL

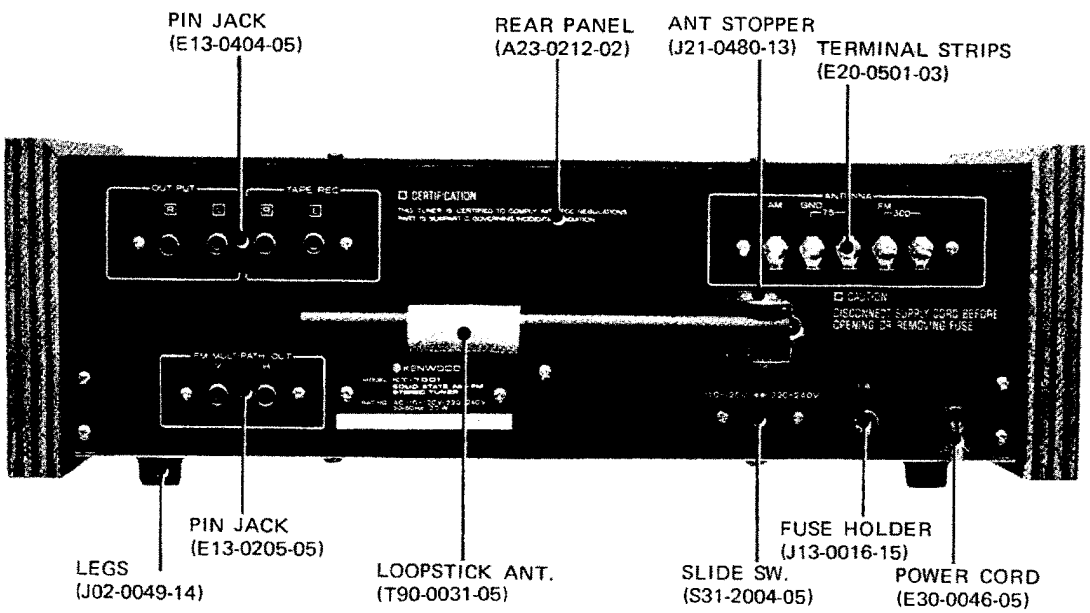
KT-7001



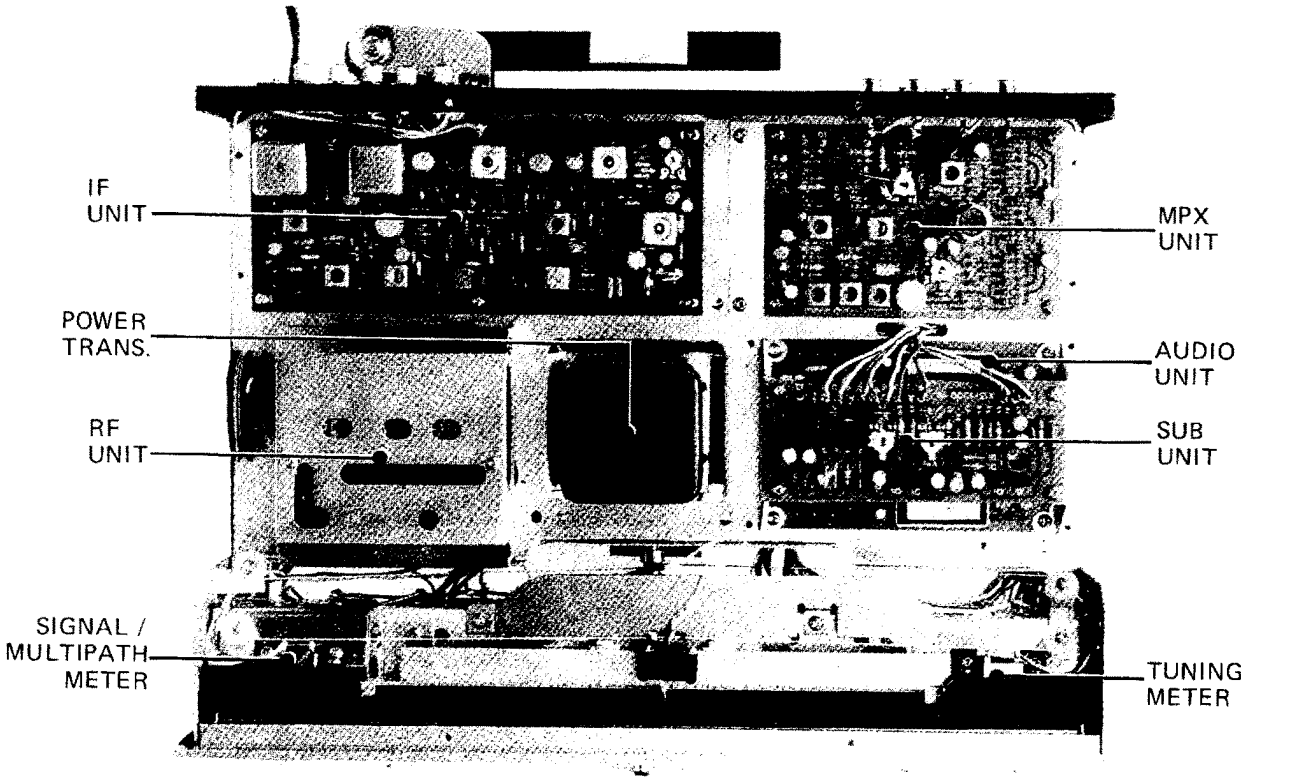
SOLID STATE AM-FM STEREO TUNER

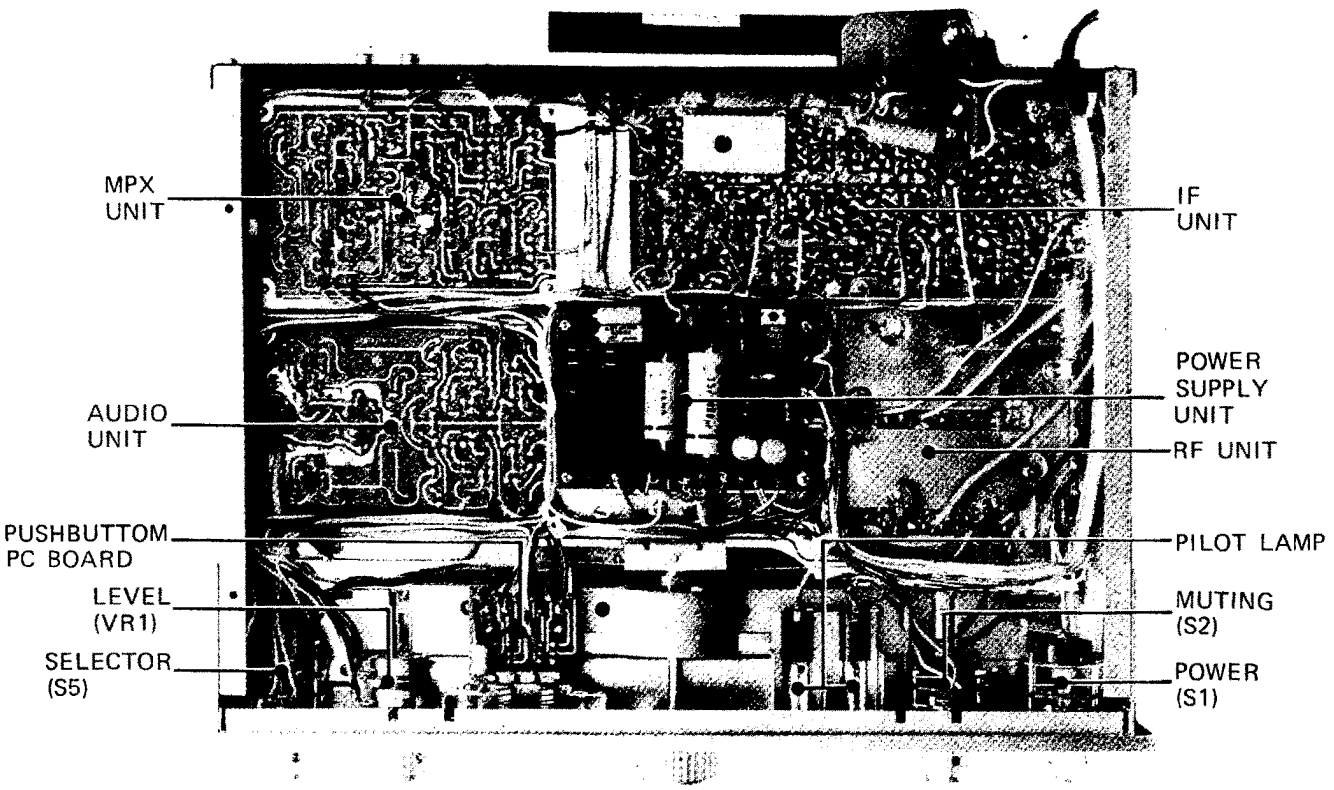
● EXTERNAL VIEW





● TOP & BOTTOM CHASSIS VIEW





● PARTS LIST

Circuit No.	Parts No.	Description				Remarks
		UNIT				
–	X00-1010-10	REGULATOR unit				
–	X01-1000-10	RF unit				
–	X02-1000-10	IF unit				
–	X13-1000-10	SUB unit				
–	X04-1000-10	MPX unit				
–	X08-1000-10	AUDIO unit				
		CAPACITOR				
C1	C90-0036-05	Oil filled	0.01μF	±20%		
C2	CE04W0F101	PC electrolytic	100μF	3.15WV		
C3	CK94YG1E403Z	Ceramic	0.04μF	+80%	−20%	
		RESISTOR				
R1	RC05GF2H225K	Carbon composition	2.2MΩ	±10%	1/2W	
R2	RC05GF2H104K	Carbon composition	100kΩ	±10%	1/2W	
R3	RC05GF2H180K	Carbon composition	18Ω	±10%	1/2W	
R4	PD14BY2E104J	Insulated carbon film	100kΩ	±5%	1/4W	
R5	PD14BY2B330J	Insulated carbon film	33Ω	±5%	1/8W	
R6	PD14BY2E103J	Insulated carbon film	10kΩ	±5%	1/4W	
R7	PD14BY2E332J	Insulated carbon film	3.3kΩ	±5%	1/4W	
		SWITCH				
S1	S05-1016-05	POWER (Rotary) F · 1 · 2 · 2				
S2	S04-1027-05	MUTING (Rotary) F · 1 · 3 · 3				
S3	S40-2016-05	MULTIPATH (Two pushbuttons)				
S4	S40-2016-05	FILTER (Two pushbuttons)				
S5	S04-3009-05	SELECTOR (Rotary) F · 3 · 9 · 4				
S6	S31-2004-05	AC VOLTAGE SELECTOR (Slide)				
		POTENTIOMETER/DIODE				
VR1	R08-4047-05	LEVEL 50kΩ (B) dual				
D1, 2		10D1				
		MISCELLANEOUS				
–	A01-0134-03	Case				
–	A10-0249-01	Chassis				
–	A20-0391-02	Panel				
–	A22-0096-12	Sub panel				
–	A23-0212-02	Rear panel				
–	A40-0065-02	Bottom plate				
–	B07-0072-05	Indicator escutcheon				
–	B08-6006-04	Indicator				
–	B10-0052-04	Front glass				
–	B19-0102-04	Filter				
–	B20-0195-03	Dial calibrations				
–	B21-4005-05	Dial pointer				
P.L.	B30-0015-15	Pilot lamp				
P.L.	B30-0029-15	Pilot lamp				
P.L.	B30-0039-05	Pilot lamp				
M	B31-0110-05	Signal meter				
M	B31-0111-05	Tuning meter				
–	B40-0483-04	Destination plate				
–	B42-0009-04	"Passed" sticker				
–	B42-0161-04	Loopstick antenna sticker				
–	B42-0267-04	Caution sticker				
–	B42-0271-04	Multipath sticker				

● PARTS LIST

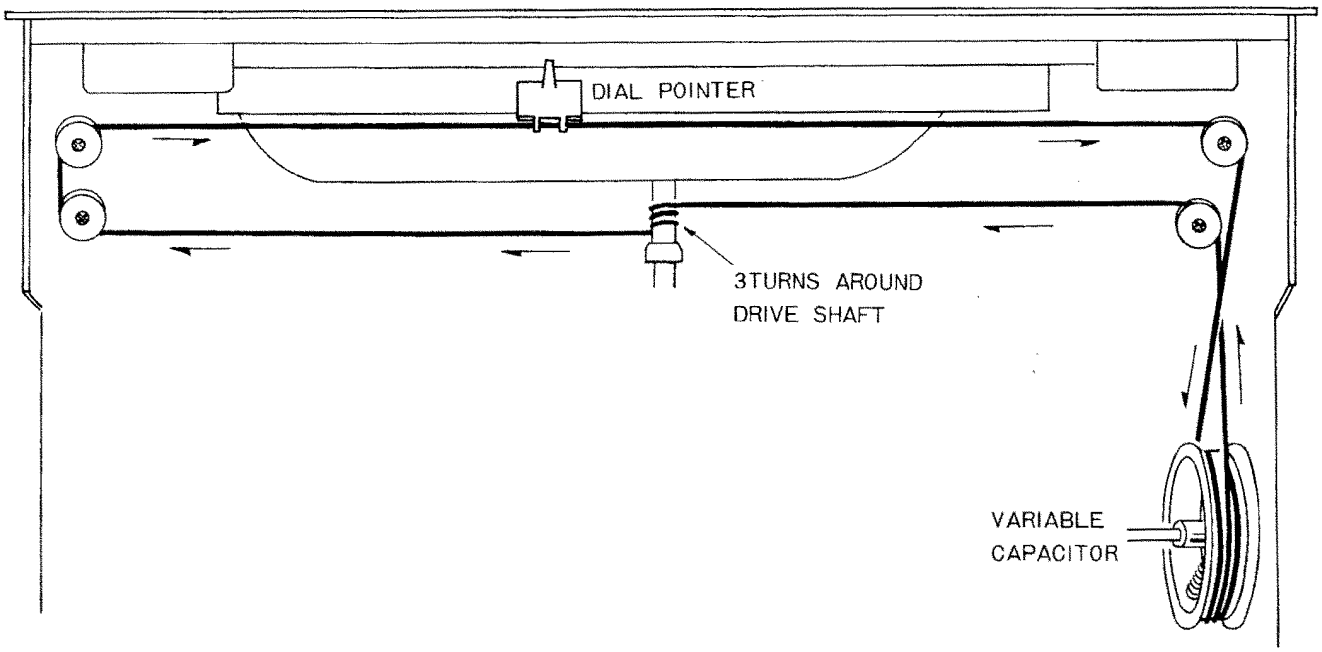
Circuit No.	Parts No.	Description		Remarks
—	B42-0272-04	Sticker		
—	B46-0002-00	Warranty card		
—	*B46-0003-00	Warranty card	(U)	
—	*B50-0614-00	Instruction manual	(K)	
—	*B50-0617-00	Instruction manual	(U)	
—	B52-0093-00	Schematic diagram		
—	*B58-0003-00	Power supply caution card	(U)	
—	*B58-0043-00	Carbon case caution card	(K)	
—	B58-0101-00	Power voltage caution card		
—	*B59-0018-00	KENWOOD service station list	(U)	
—	D01-0009-05	Flywheel		
—	D15-0037-04	Small pulley		
—	D15-0067-14	Pulley		
—	D20-0084-03	Dial shaft		
—	D23-0060-04	Shaft bearing		
—	D32-0021-04	Switch stopper		
J	E18-0205-05	2P pin jack		
J	E18-0404-05	4P pin jack		
—	E15-0038-05	Pilot lamp socket		
—	E20-0501-03	Terminal strips		
—	E30-0046-05	Power cord		
—	E30-0050-05	Audio cord		
F	F05-1023-05	Fuse (1A)		
—	F07-0011-04	Lamp cover		
—	F07-0195-04	Shield plate		
—	F19-0033-03	Left side board		
—	F19-0034-03	Right side board		
—	G01-0044-04	Dial spring		
—	H01-0606-04	Carton case (Inside)		
—	*H03-0021-04	Carton case (Outside)	(K)	
—	J02-0049-14	Legs		
—	J13-0016-15	Fuse holder		
—	J13-0023-05	Pilot lamp holder		
—	J19-0130-04	Pushbutton stopper		
—	J21-0192-04	Amp. stopper		
—	J21-0438-04	Indicator stopper		
—	J21-0480-13	Ant. stopper		
—	J21-0761-04	Dial stopper (L)		
—	J21-0762-04	Dial stopper (R)		
—	J21-0763-04	Escutcheon stopper		
—	J21-0764-04	Frontglass stopper		
—	J21-0765-04	Unit stopper		
—	J21-0766-04	Lamp stopper		
—	J21-0768-03	Meter stopper		
—	J25-0527-04	PC board		
—	K22-0025-04	Knob (Power, muting, level, selector)		
—	K23-0062-04	Knob (Tuning)		
P.T.	L03-0022-05	Power transformer		

● PARTS LIST

Circuit No.	Parts No.	Description	Remarks
–	L19-0009-05	Balun transformer	
L1	L33-0025-05	Choke coil	
–	T90-0002-05	FM indoor antenna	
–	T-90-0031-05	Loopstick antenna	

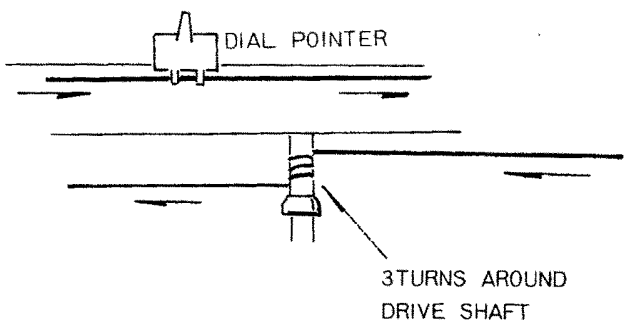
* In North America leave out the parts of (U).
In other do out the parts of (K).

● DIAL CORD STRINGING



CORRECTION

Please correct the figure of " dial cord stringing " on page 8 in the service manual KT－7001 as shown below.



● ALIGNMENT PROCEDURE

■ FM SECTION

STEP	ALIG.	FM SSG		TUNING DIAL SETTING	VTVM or SCOPE COUPLE	ADJUST	CHECK
		COUPLING	SIGNAL				
1	IF trans.	FM antenna terminal	98MHz (overmod.)	98MHz	SCOPE to the MULTIPATH	(X01-1000-10) La8 (X02-1000-10) Lb1	Best waveform.
2	DISCRIMI-NATOR	–	–	98MHz	SCOPE to the output jack	(X02-1000-10) Lb2 Prim.	"Center position" meter indicates
3	RF	FM antenna terminal	90MHz 400Hz (Mod.) 75kHz (Dev.) 1.5～2μV	90MHz	VTVM to the output jack	(X01-1000-10) La4	Turn it to receive the SSG freq.
4	RF	FM antenna terminal	90MHz 400Hz (Mod.) 75kHz (Dev.) 1.5～2μV	90MHz	VTVM to the output jack	(X01-1000-10) La1～3	Adjust the sensitivity to be maximum
5	RF	FM antenna terminal	106MHz 400Hz (Mod.) 75kHz (Dev.) 1.5～2μV	106MHz	VTVM to the output jack	(X01-1000-10) CTa4	Turn it to receive the SSG freq.
6	RF	FM antenna terminal	106MHz 400Hz (Mod.) 75kHz (Dev.) 1.5～2μV	106MHz	VTVM to the output jack	(X01-1000-10) CTa1～3	Adjust sensitivity to be maximum
7	Repeat steps 3～6 until no further improvement is possible.						
8	RF	FM antenna terminal	90MHz 400Hz (overmod.)	90MHz	SCOPE to the MULTIPATH jack	(X01-1000-10) La1～3	Best waveform.
9	RF	FM antenna terminal	106MHz 400Hz (overmod.)	106MHz	SCOPE to the MULTIPATH jack	(X01-1000-10) CTa1～3	Best waveform.
10	TUNING METER	FM antenna terminal	90MHz 400Hz (Mod.) 75kHz (Dev.) 1mV	98MHz	DISTORTION METER to the output jack	(X02-1000-10) Lb2 sec.	Minimum deflection
11	TUNING METER	FM antenna terminal	90MHz 400Hz (Mod.) 75kHz (Dev.) 1mV	98MHz	VTVM to the output jack	(X02-1000-10) VRb2	Output to be 1.5 V
12	Set the tuning meter properly.						
13	SIGNAL METER	FM antenna terminal	98MHz (unmod.) 100μV	98MHz	VTVM to the output jack	(X02-1000-10) Lb3	Maximum deflection
14	SIGNAL METER	FM antenna terminal	98MHz (unmod.) 100μV	98MHz	–	(X02-1000-10) VRb3	"4.5" S-meter indicates
15	Set the MUTING to 1.						
16	MUTING	FM antenna terminal	98MHz (unmod.) 100μV	98MHz	VTVM to the TEST POINT (A)	(X02-1000-10) Lb4	Maximum deflection
17	MUTING	FM antenna terminal	98MHz (unmod.) 1mV	98MHz	VTVM to the TEST POINT (A)	–	Check the value of VTVM (standard level)
18	MUTING	FM antenna terminal	98MHz (unmod.) 6.3μV	98MHz	VTVM to the TEST POINT (A)	(X02-1000-10) VRb1	The value of 70% standard level
19	MUTING	FM antenna terminal	98MHz (unmod.) 6.3μV	98MHz	VTVM to the TEST POINT (A)	(X02-1000-10) VRb4	more 10 V d.c. appears at TEST POINT (B)

STEP	ALIG.	FM SSG		TUNING DIAL SETTING	VTVM or SCOPE COUPLING	ADJUST	CHECK
		COUPLING	SIGNAL				
* 20	MULTIPATH METER	FM antenna terminal	98MHz (unmod.) 1mV	98MHz	–	(X13-1000-10) VRs1	meter not swings
21	MULTIPATH METER	FM antenna terminal	98MHz (400Hz, 30%, AM) 100μV	98MHz	–	(X13-1000-10) VRs2	Minimum deflection
*	Not need to adjust STEP 20 in case of one variable resistor.						

■ SCA FILTER SECTION

STEP	AUDIO SIGNAL GENERATOR COUPLING	AUDIO SIGNAL GENERATOR FREQ.	AC VTVM & SCOPE COUPLING	ADJUST	CHECK
1	TEST POINT (C)	66kHz 300mV	TEST POINT (D)	(X04-1000-10) Lc6	Minimum deflection
2	TEST POINT (C)	72kHz 300mV	TEST POINT (D)	(X04-1000-10) Lc7	Minimum deflection

■ MPX SECTION

STEP	FM SSG			19kHz PILOT	VTVM & SCOPE COUPLING	ADJUST	CHECK
	COUPLING	MOD. FREQ.	SELECTOR				
1	TEST POINT (C)	98MHz 400Hz (Mod) 67.5kHz (Dev.) 150mV	NORMAL	ON	TEST POINT (E)	(X04-1000-10) Lc1, 2, 5	Maximum deflection
2	TEST POINT (C)	98MHz 400Hz (Mod) 67.5kHz (Dev.) 150mV	NORMAL	ON	TEST POINT (F)	(X04-1000-10) Lc3, 4	Maximum deflection
3	TEST POINT (C)	98MHz 400Hz (Mod.) 40kHz (Dev.) 84mV	NORMAL	ON	–	(X04-1000-10) VRc2	"STEREO" indicator on.
4	TEST POINT (C)	38kHz	NORMAL	–	Output jack	(X04-1000-10) Lc4	Maximum deflection
5	TEST POINT (C)	98MHz 4kHz (Mod.) 67.5kHz (Dev.) 150mV	NORMAL	–	Output jack	(X04-1000-10) VRc1	Separation properly

● ALIGNMENT PROCEDURE

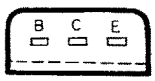
■ AM SECTION

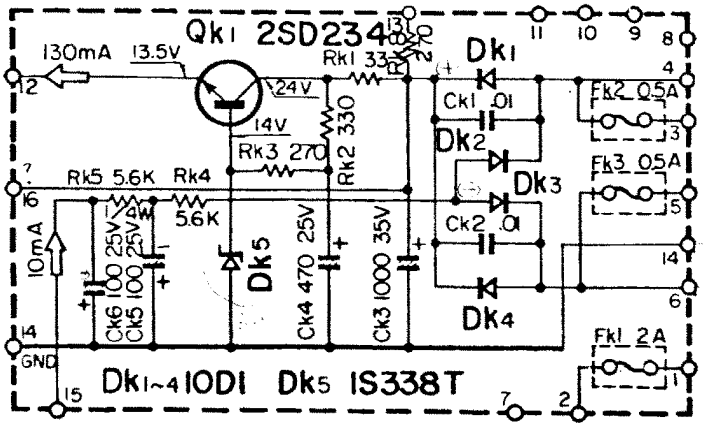
STEP	ALIG	SG/SWEEP G.		TUNING DIAL SETTING	VTVM & OSC COUPLING	ADJUST	CHECK
		COUPLING	SIGNAL				
1	IF Trans.	SWEEP to TEST POINT (G)	455kHz	Any non-interfering	TEST POINT (H)	(X02-1000-10) Lb6	Maximum amplitude and symmetry with 455kHz marker centered on response
2	RF	SG to AM antenna terminal	600kHz 400Hz (30% Mod)	600kHz	Output jack	(X02-1000-10) Lb8, Lb5 Loopstick antenna	With Lb8 corrospond to SG freq. With Loopstick antenna, Lb5 the sensitivity to be maximum.
3	RF	SG to AM antenna terminal	1,400kHz 400Hz (30% Mod)	1,400kHz	Output jack	(X01-1000-10) CTa8, 7	With CTa8 correspond to SG freq. With CTa7 the sensitivity to be maximum.
4	Repeat steps 2, 3 until no further improvement is possible.						
5	METER	SG to AM antenna terminal	1000kHz 400Hz (30% Mod)	1000kHz	—	(X02-1000-10) VRb5	"5" S-meter indicates

SCHEMATIC DIAGRAM

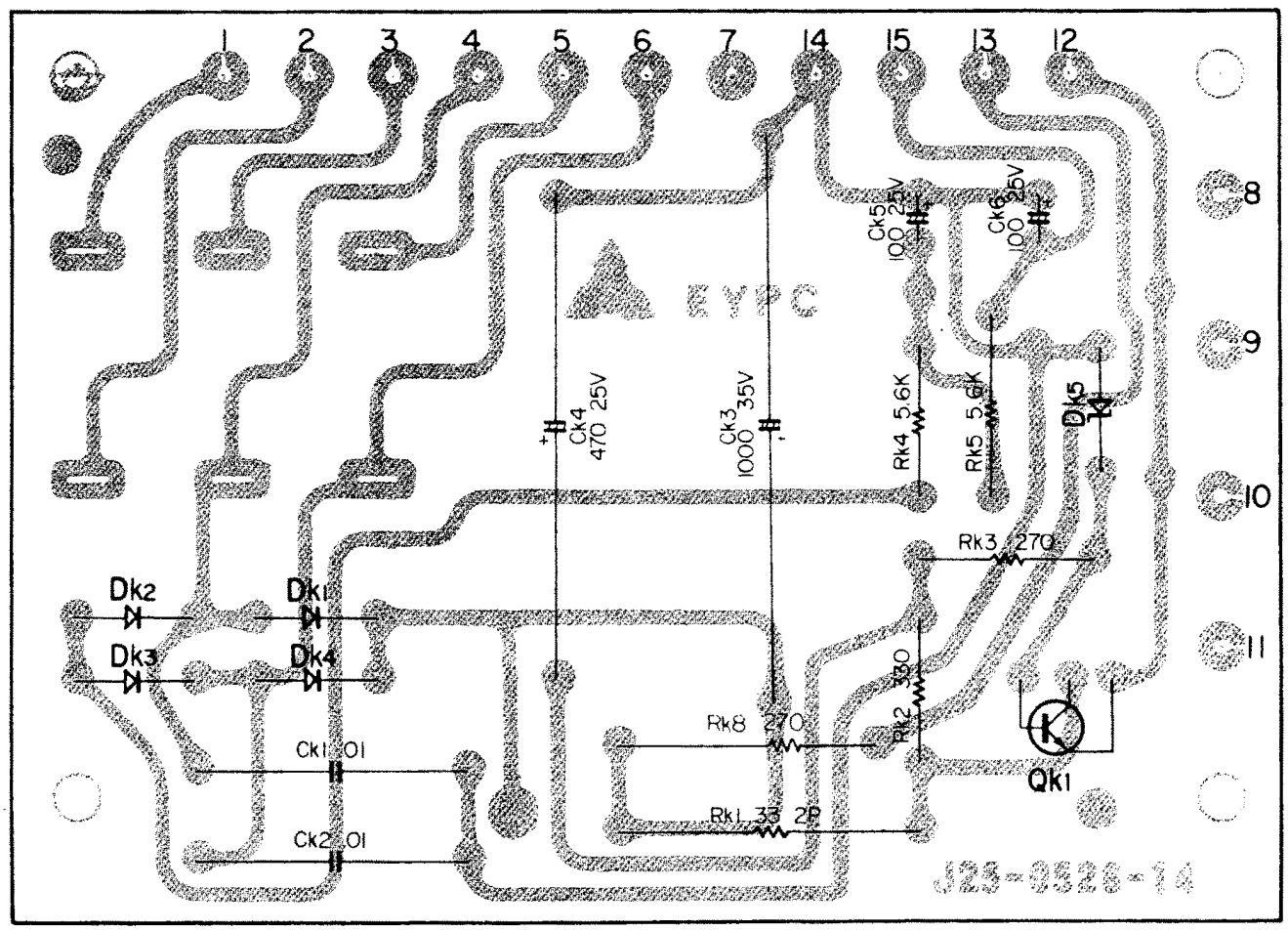
BOTTOM VIEW OF TRANSISTOR

2SD234





SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qk1: 2SD-234, Dk1~4: 10D1, Dk5: 1S338T

PARTS DESCRIPTION LIST

Circuit No.	Parts No.	Description				Remarks
		CAPACITOR				
Ck1, 2	CP02B2J103M	Oil filled	0.01μF	±20%		
Ck3	CE02W1V102	Electrolytic tubular	1000μF	35WV		
Ck4	CE02W1E471	Electrolytic tubular	470μF	25WV		
Ck5, 6	CE04W1E101	PC electrolytic	100μF	25WV		
		RESISTOR				
Rk1	RW14AG3D330K	Wire wound	33Ω	±10%	2W	
Rk2	RC05GF2H331K	Carbon composition	330Ω	±10%	1/2W	
Rk3	RC05GF2H271K	Carbon composition	270Ω	±10%	1/2W	
Rk4, 5	PD14BY2E562K	Insulated carbon film	5.6kΩ	±10%	1/4W	
Rk8	RC05GF2H101K	Carbon composition	100Ω	±10%	1/2W	
		TRANSISTOR/DIODE				
Qk1		2SD234				
Dk1 ~ 4		10D1				
Dk5		1S338T				
		PC BOARD				
–	J25-0528-04	PC Board				

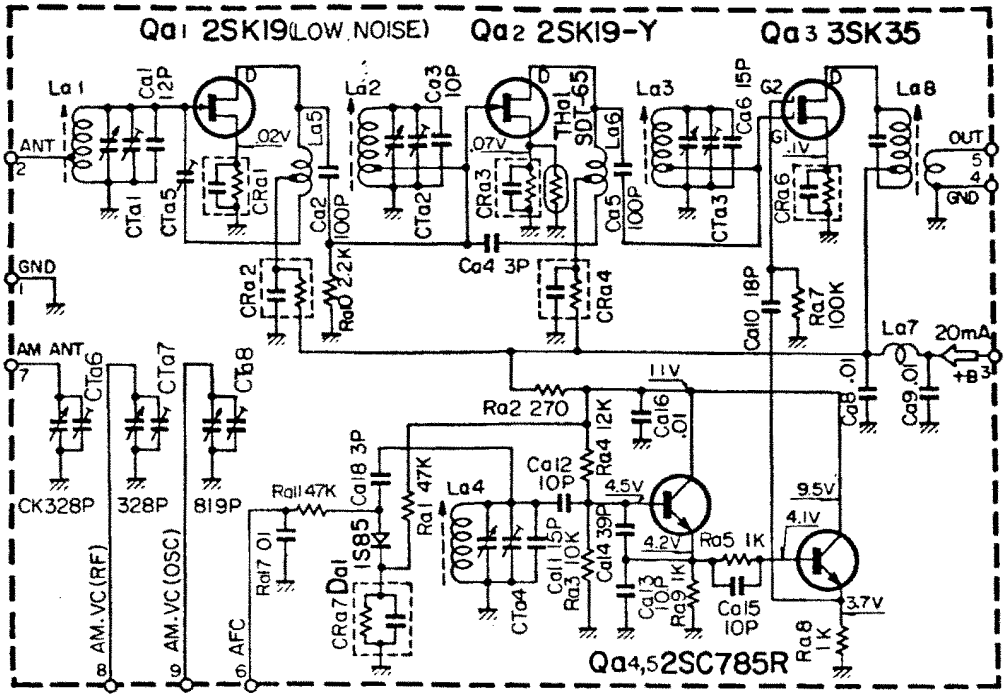
SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTOR

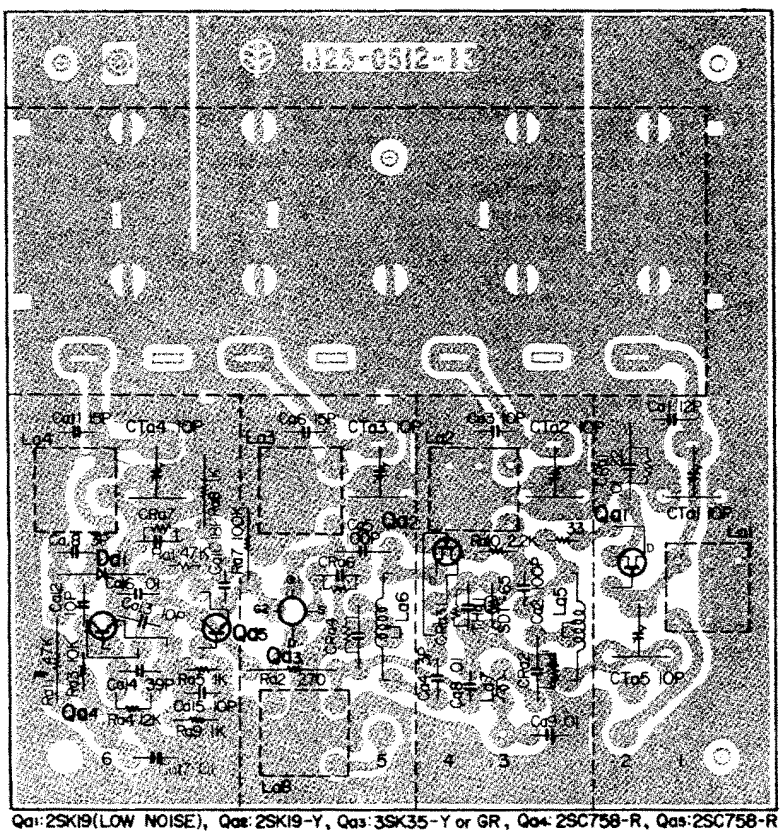
2SK19

3SK35

2SC758R



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qa1:2SK19(LOW NOISE), Qa2:2SK19-Y, Qa3:3SK35-Y or GR, Qa4:2SC758-R, Qa5:2SC758-R

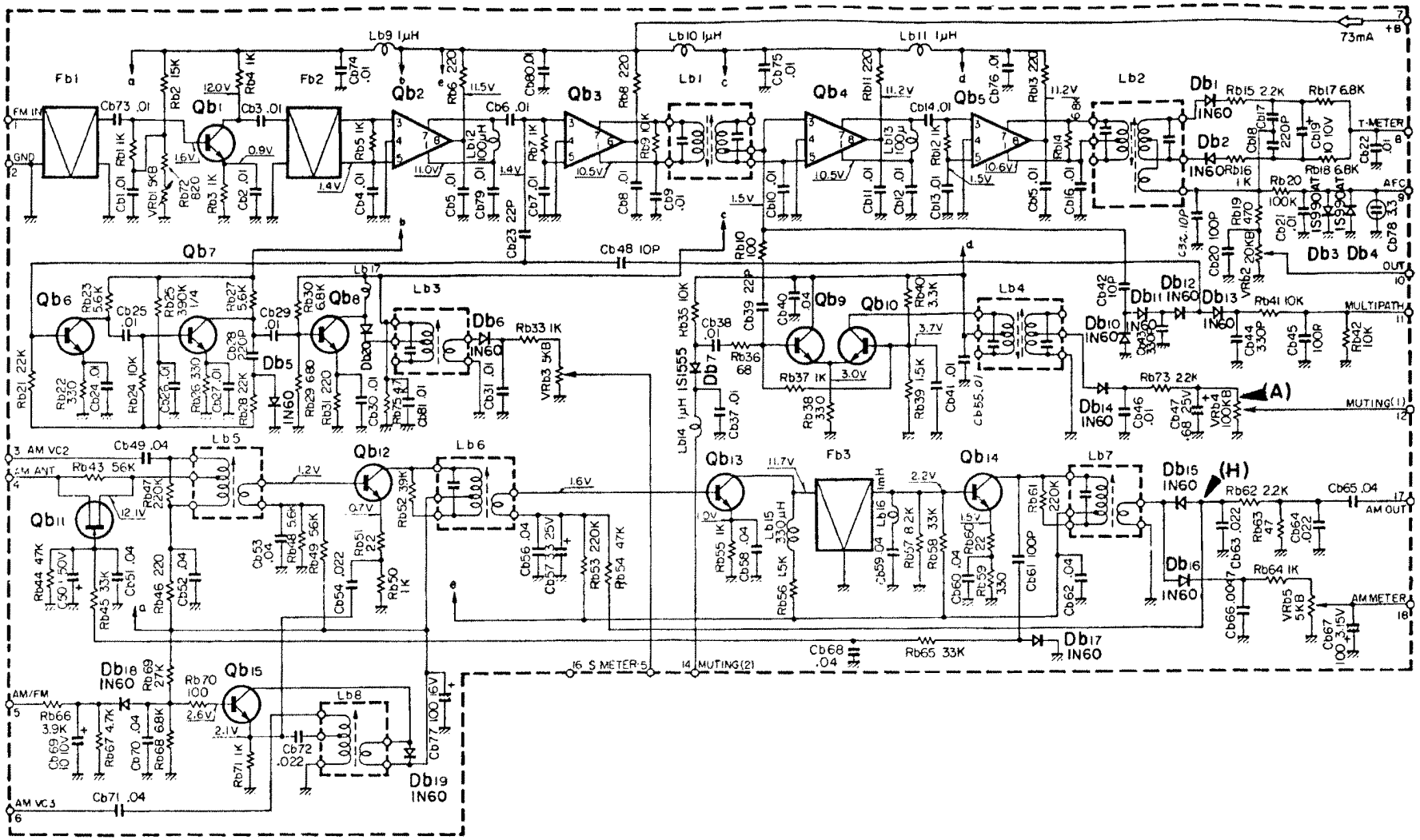
PARTS DESCRIPTION LIST

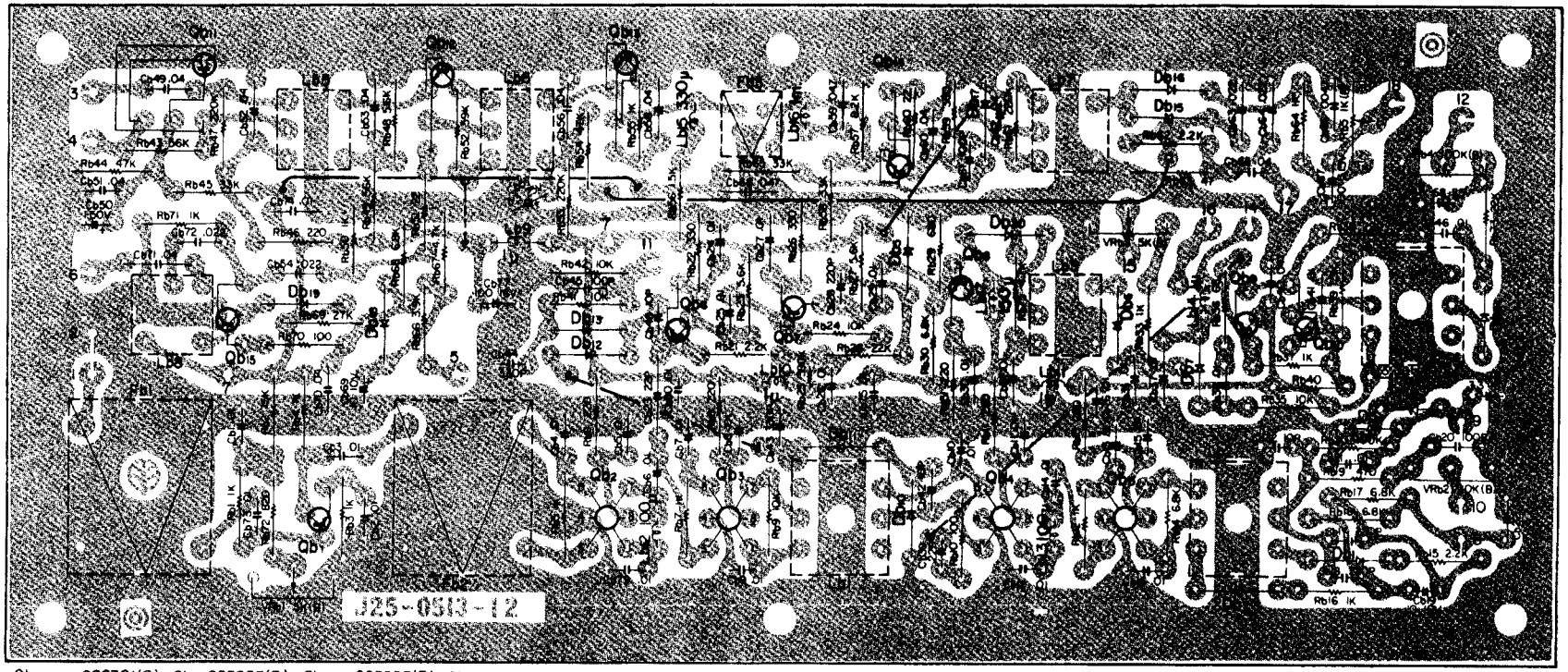
Circuit No.	Parts No.	Description				Remarks
		CAPACITOR				
Ca1	CC94SH1H120K	TC Ceramic	12pF	±10%		
Ca2	CC94SL1H101K	TC Ceramic	100pF	±10%		
Ca3	CC94SH1H100K	TC Ceramic	10pF	±10%		
Ca4	CC94SL1H030C	TC Ceramic	3pF	±0.25pF		
Ca5	CC94SL1H101K	TC Ceramic	100pF	±10%		
Ca6	CC94SH1H150K	TC Ceramic	15pF	±10%		
Ca8, 9	CK94YG1H103Z	Ceramic	0.01μF	+80%	−20%	
Ca10	CC94SG1H180K	TC Ceramic	18pF	±10%		
Ca11	CC94TH1H150J	TC Ceramic	15pF	±5%		
Ca12, 13	CC94TH1H100J	TC Ceramic	10pF	±5%		
Ca14	CC94TH1H390J	TC Ceramic	39pF	±5%		
Ca15	CC94TH1H100J	TC Ceramic	10pF	±5%		
Ca16, 17	CK94YG1H103Z	Ceramic	0.01μF	+80%	−20%	
Ca18	CC94SG1H030C	TC Ceramic	3pF	±0.25pF		
		RESISTOR				
Ra1	PD14BY2B473J	Insulated Carbon Film	47kΩ	±5%	1/8W	
Ra2	PD14BY2B271J	Insulated Carbon Film	270Ω	±5%	1/8W	
Ra3	PD14BY2B103J	Insulated Carbon Film	10kΩ	±5%	1/8W	
Ra4	PD14BY2B123J	Insulated Carbon Film	12kΩ	±5%	1/8W	
Ra5	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W	
Ra7	PD14BY2B104J	Insulated Carbon Film	100kΩ	±5%	1/8W	
Ra8, 9	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W	
Ra10	PD14BY2B222J	Insulated Carbon Film	2.2kΩ	±5%	1/8W	
Ra11	PD14BY2B473J	Insulated Carbon Film	47kΩ	±5%	1/8W	
CRa1	R90-0070-05	C-R Composite Parts	22Ω + 0.01μF			
CRa2	R90-0071-05	C-R Composite Parts	220Ω + 0.01μF			
CRa3	R90-0072-05	C-R Composite Parts	2.2kΩ + 0.01μF			
CRa4	R90-0071-05	C-R Composite Parts	220Ω + 0.01μF			
CRa6	R90-0074-05	C-R Composite Parts	270Ω + 0.01μF			
CRa7	R90-0072-05	C-R Composite Parts	2.2kΩ + 0.01μF			
		COIL				
La1	L34-0301-04	FM-ANT Coil				
La2, 3	L34-0358-05	FM-RF Coil				
La4	L34-0290-04	OSC Coil				
La5, 6	L33-0027-04	Choke Coil				
La7	L33-0086-05	Choke Coil				
La8	L30-0210-05	FM-1F Trans.				
		TRANSISTOR/DIODE/THERMISTOR				
Qa1		2SK19 (LOW NOISE)				
Qa2		2SK19 (Y)				
Qa3		3SK35 (GR) or (Y)				
Qa4, 5		2SC785 (R)				
Da1		1S85 (White)				
THa1		SDT65				
		MISCELLANEOUS				
CTa1 ~4	C05-0010-15	Ceramic Trimmer				
CTa5	C05-0009-15	Ceramic Trimmer				
VC	C01-0156-05	Variable Capacitor				
—	F07-0191-03	Shield Case				
—	J25-0512-03	PC Board				

KENWOOD

IF (X02-1000-10) SECTION

(KT-7001)



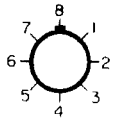


$Qb_{1,8\sim10}$: 2SC381(O), Qb_2: CS5995(R), $Qb_{3\sim5}$: CS5995(B), $Qb_{6,7,13,14}$: 2SC381(R), Qb_{11}: 3SK30(Y), $Qb_{12,15}$: 2SC378(O), $Db_{1,2,5,6,10\sim20}$: IN60, $Db_{3,4}$: IS990AT, Db_7: IS1555

BOTTOM VIEW OF TRANSISTOR

2SC 378
2SC 381

CS 5995



3SK30

Cb55	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%
Cb56	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%
	or CK94YG1E403Z		or 0.04μF	+80%	−20%
Cb57	CE04W1E3R3	PC Electrolytic	3.3μF	25WV	
Cb58 ~ 60	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%
	or CK94YG1E403Z		or 0.04μF	+80%	−20%
Cb61	CC94SL1H101K	TC ceramic	100pF	±10%	
Cb62	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%
	or CK94YG1E403Z		or 0.04μF	+80%	−20%
Cb63, 64	CQ93M1H223K	Mylar	0.022μF	±10%	
Cb65	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%
	or CK94YG1E403Z		or 0.04μF	+80%	−20%
Cb66	CK94YY1H472M	Ceramic	0.0047μF	±20%	
Cb67	CE04W0F101	PC Electrolytic	100μF	3.15WV	
Cb68	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%
	or CK94YG1E403Z		or 0.04μF	+80%	−20%
Cb69	CE04W1A100	PC Electrolytic	10μF	10WV	
Cb70, 71	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%
	or CK94YG1E403Z		or 0.04μF	+80%	−20%
Cb72	CM93M1H223K	Mylar	0.022μF	±10%	
Cb73 ~ 76	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%
Cb77	CE04W1C101	PC Electrolytic	100μF	16WV	
Cb78	CE04W1C3R3NP	Non-Pole Electrolytic	3.3μF	16WV	
Cb79 ~ 81	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%

RESISTOR

Rb1	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W
Rb2	PD14BY2B153J	Insulated Carbon Film	15kΩ	±5%	1/8W
Rb3 ~ 5	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W
Rb6	PD14BY2B221J	Insulated Carbon Film	220Ω	±5%	1/8W
Rb7	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W
Rb8	PD14BY2B221J	Insulated Carbon Film	220Ω	±5%	1/8W
Rb9	PD14BY2B103J	Insulated Carbon Film	10kΩ	±5%	1/8W
Rb10	PD14BY2B101J	Insulated Carbon Film	100Ω	±5%	1/8W
Rb11	PD14BY2B221J	Insulated Carbon Film	220Ω	±5%	1/8W
Rb12	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W
Rb13	PD14BY2B221J	Insulated Carbon Film	220Ω	±5%	1/8W
Rb14	PD14BY2B682J	Insulated Carbon Film	6.8kΩ	±5%	1/8W
Rb15	PD14BY2B222J	Insulated Carbon Film	2.2kΩ	±5%	1/8W
Rb16	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W
Rb17, 18	PD14BY2B682J	Insulated Carbon Film	6.8kΩ	±5%	1/8W
Rb19	PD14BY2B471J	Insulated Carbon Film	470Ω	±5%	1/8W
Rb20	PD14BY2B104J	Insulated Carbon Film	100kΩ	±5%	1/8W
Rb21	PD14BY2B222J	Insulated Carbon Film	2.2kΩ	±5%	1/8W
Rb22	PD14BY2B331J	Insulated Carbon Film	330Ω	±5%	1/8W
Rb23	PD14BY2B562J	Insulated Carbon Film	5.6kΩ	±5%	1/8W
Rb24	PD14BY2B103J	Insulated Carbon Film	10kΩ	±5%	1/8W
Rb25	PD14CY2E394J	Insulated Carbon Film	390kΩ	±5%	1/4W
Rb26	PD14BY2B331J	Insulated Carbon Film	330Ω	±5%	1/8W
Rb27	PD14BY2B562J	Insulated Carbon Film	5.6kΩ	±5%	1/8W
Rb28	PD14BY2B223J	Insulated Carbon Film	22kΩ	±5%	1/8W
Rb29	PD14BY2B681J	Insulated Carbon Film	680Ω	±5%	1/8W
Rb30	PD14BY2B682J	Insulated Carbon Film	6.8kΩ	±5%	1/8W
Rb31	PD14BY2B221J	Insulated Carbon Film	220Ω	±5%	1/8W
Rb33	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W
Rb35	PD14BY2B103J	Insulated Carbon Film	10kΩ	±5%	1/8W
Rb66	PD14BY2B392J	Insulated Carbon Film	3.9kΩ	±5%	1/8W
Rb67	PD14BY2B472J	Insulated Carbon Film	4.7kΩ	±5%	1/8W
Rb68	PD14BY2B682J	Insulated Carbon Film	6.8kΩ	±5%	1/8W
Rb69	PD14BY2B273J	Insulated Carbon Film	27kΩ	±5%	1/8W
Rb70	PD14BY2B101J	Insulated Carbon Film	100Ω	±5%	1/8W
Rb71	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W
Rb72	PD14BY2B821J	Insulated Carbon Film	820Ω	±5%	1/8W
Rb73	PD14BY2B223J	Insulated Carbon Film	22kΩ	±5%	1/8W
Rb75	PD14BY2B472J	Insulated Carbon Film	4.7kΩ	±5%	1/8W

TRANSISTOR/DIODE

Qb1		2SC381 (O)
Qb2		CS5995 (R)
Qb3 ~ 5		CS5995 (B)
Qb6, 7		2SC381 (R)
Qb8 ~ 10		2SC381 (O)
Qb11		2SK30 (Y)
Qb12		2SC378 (O)
Qb13, 14		2SC381 (R)
Qb15		2SC378 (O)
Db1, 2		1N60
Db3, 4		1S990AT
Db5, 6		1N60
Db7		1S1555
Db10 ~ 20		1N60

COIL/POTENTIOMETER

Lb1	L30-0205-05	FM-IFT	
Lb2	L30-0207-05	DESCRI	
Lb3	L30-0148-05	FM-IFT	
Lb4	L30-0206-15	FM-IFT	
Lb5	L31-0210-05	AM-RF	
Lb6	L30-0018-05	AM-IFT	
Lb7	L30-0019-05	AM-IFT	
Lb8	L32-0090-05	AM-OSC	
Lb9 ~ 11	L33-0128-05	Choke Coil	
	or L33-0086-05		
Lb12, 13	L33-0096-05	Choke Coil	
Lb14	L33-0128-05	Choke Coil	
	or L33-0086-05		
Lb15	L33-0100-05	Choke Coil	
Lb16	L33-0103-05	Choke Coil	
Lb17	L33-0098-05	Choke Coil	
VRb1	R12-2008-05	PC Trimmer Potentiometer	5kΩ (B)
VRb2	R12-3016-05	PC Trimmer Potentiometer	20kΩ (B)
VRb3	R12-2008-05	PC Trimmer Potentiometer	5kΩ (B)
VRb4	R12-5016-05	PC Trimmer Potentiometer	100kΩ (B)
VRb5	R12-2008-05	PC Trimmer Potentiometer	5kΩ (B)

FILTER/PC BOARD

Fb1, 2	L71-0009-05	X'tal Filter
Fb3	L72-0005-15	Ceramic Filter
–	J25-0513-12	PC Board

Circuit No.	Part No.	Description				Remarks
CAPACITOR						
Cb1 ~ 16	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%	
Cb17, 18	CC94SL1H221K	TC ceramic	220pF	±10%		
Cb19	CE04W1A100	PC Electrolytic	10μF	10WV		
Cb20	CC94SL1H101K	TC ceramic	100pF	±10%		
Cb21, 22	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%	
Cb23	CC94SL1H220J	TC ceramic	22pF	±5%		
Cb24 ~ 27	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%	
Cb28	CC94SL1H221K	TC ceramic	220pF	±10%		
Cb29 ~ 31	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%	
Cb32	CC94SL1H100D	TC ceramic	10pF	±0.5pF		
Cb37, 38	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%	
Cb39	CC94SL1H220J	TC ceramic	22pF	±5%		
Cb40	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%	
	orCK94YG1E403Z		or 0.04μF	+80%	−20%	
Cb41	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%	
Cb42	CC94SL1H100D	TC ceramic	10pF	±0.5pF		
Cb43, 44	CC94SL1H331K	TC ceramic	330pF	±10%		
Cb45	CC94SL1H101K	TC ceramic	100pF	±10%		
Cb46	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%	
Cb47	CA06E1ER68X	Solid Aluminum	0.68μF	25WV		
Cb48	CC94SL1H100D	TC ceramic	10pF	±0.5pF		
Cb49	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%	
	orCK94YG1E403Z		or 0.04μF	+80%	−20%	
Cb50	CE04W1H010	PC Electrolytic	1μF	50WV		
Cb51 ~ 53	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%	
	orCK94YG1E403Z		or 0.04μF	+80%	−20%	
Cb54	CQ93M1H223K	Mylar	0.022μF	±10%		
Cb55	CK94YG1E103Z	Ceramic	0.01μF	+80%	−20%	
Cb56	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%	
	orCK94YG1E403Z		or 0.04μF	+80%	−20%	
Cb57	CE04W1E3R3	PC Electrolytic	3.3μF	25WV		
Cb58 ~ 60	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%	
	orCK94YG1E403Z		or 0.04μF	+80%	−20%	
Cb61	CC94SL1H101K	TC ceramic	100pF	±10%		
Cb62	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%	
	orCK94YG1E403Z		or 0.04μF	+80%	−20%	
Cb63, 64	CQ93M1H223K	Mylar	0.022μF	±10%		
Cb65	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%	
	orCK94YG1E403Z		or 0.04μF	+80%	−20%	
Cb66	CK94YY1H472M	Ceramic	0.0047μF	±20%		
Cb67	CE04W0F101	PC Electrolytic	100μF	3.15WV		
Cb68	CK94YG1E473Z	Ceramic	0.047μF	+80%	−20%	
	orCK94YG1E403Z		or 0.04μF	+80%	−20%	

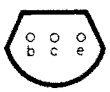
Circuit No.	Part No.	Description				Remarks
Rb36	PD14BY2B680J	Insulated Carbon Film	68Ω	±5%	1/8W	
Rb37	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W	
Rb38	PD14BY2B331J	Insulated Carbon Film	330Ω	±5%	1/8W	
Rb39	PD14BY2B152J	Insulated Carbon Film	1.5kΩ	±5%	1/8W	
Rb40	PD14BY2B332J	Insulated Carbon Film	3.3kΩ	±5%	1/8W	
Rb41, 42	PD14BY2B103J	Insulated Carbon Film	10kΩ	±5%	1/8W	
Rb43	PD14BY2B563J	Insulated Carbon Film	56kΩ	±5%	1/8W	
Rb44	PD14BY2B473J	Insulated Carbon Film	47kΩ	±5%	1/8W	
Rb45	PD14BY2B333J	Insulated Carbon Film	33kΩ	±5%	1/8W	
Rb46	PD14BY2B221J	Insulated Carbon Film	220Ω	±5%	1/8W	
Rb47	PD14BY2B224J	Insulated Carbon Film	220kΩ	±5%	1/8W	
Rb48	PD14BY2B562J	Insulated Carbon Film	5.6kΩ	±5%	1/8W	
Rb49	PD14BY2B563J	Insulated Carbon Film	56kΩ	±5%	1/8W	
Rb50	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W	
Rb51	PD14BY2B220J	Insulated Carbon Film	22Ω	±5%	1/8W	
Rb52	PD14BY2B393J	Insulated Carbon Film	39kΩ	±5%	1/8W	
Rb53	PD14BY2B224J	Insulated Carbon Film	220kΩ	±5%	1/8W	
Rb54	PD14BY2B473J	Insulated Carbon Film	47kΩ	±5%	1/8W	
Rb55	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W	
Rb56	PD14BY2B152J	Insulated Carbon Film	1.5kΩ	±5%	1/8W	
Rb57	PD14BY2B822J	Insulated Carbon Film	8.2kΩ	±5%	1/8W	
Rb58	PD14BY2B333J	Insulated Carbon Film	33kΩ	±5%	1/8W	
Rb59	PD14BY2B331J	Insulated Carbon Film	330Ω	±5%	1/8W	
Rb60	PD14BY2B220J	Insulated Carbon Film	22Ω	±5%	1/8W	
Rb61	PD14BY2B224J	Insulated Carbon Film	220kΩ	±5%	1/8W	
Rb62	PD14BY2B222J	Insulated Carbon Film	2.2kΩ	±5%	1/8W	
Rb63	PD14BY2B470J	Insulated Carbon Film	47Ω	±5%	1/8W	
Rb64	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W	
Rb65	PD14BY2B333J	Insulated Carbon Film	33kΩ	±5%	1/8W	
Rb66	PD14BY2B392J	Insulated Carbon Film	3.9kΩ	±5%	1/8W	
Rb67	PD14BY2B472J	Insulated Carbon Film	4.7kΩ	±5%	1/8W	
Rb68	PD14BY2B682J	Insulated Carbon Film	6.8kΩ	±5%	1/8W	
Rb69	PD14BY2B273J	Insulated Carbon Film	27kΩ	±5%	1/8W	
Rb70	PD14BY2B101J	Insulated Carbon Film	100Ω	±5%	1/8W	
Rb71	PD14BY2B102J	Insulated Carbon Film	1kΩ	±5%	1/8W	
Rb72	PD14BY2B821J	Insulated Carbon Film	820Ω	±5%	1/8W	
Rb73	PD14BY2B223J	Insulated Carbon Film	22kΩ	±5%	1/8W	
Rb75	PD14BY2B472J	Insulated Carbon Film	4.7kΩ	±5%	1/8W	
TRANSISTOR/DIODE						
Qb1		2SC381 (O)				
Qb2		CS5995 (R)				
Qb3 ~ 5		CS5995 (B)				
Qb6, 7		2SC381 (R)				

SCHEMATIC DIAGRAM

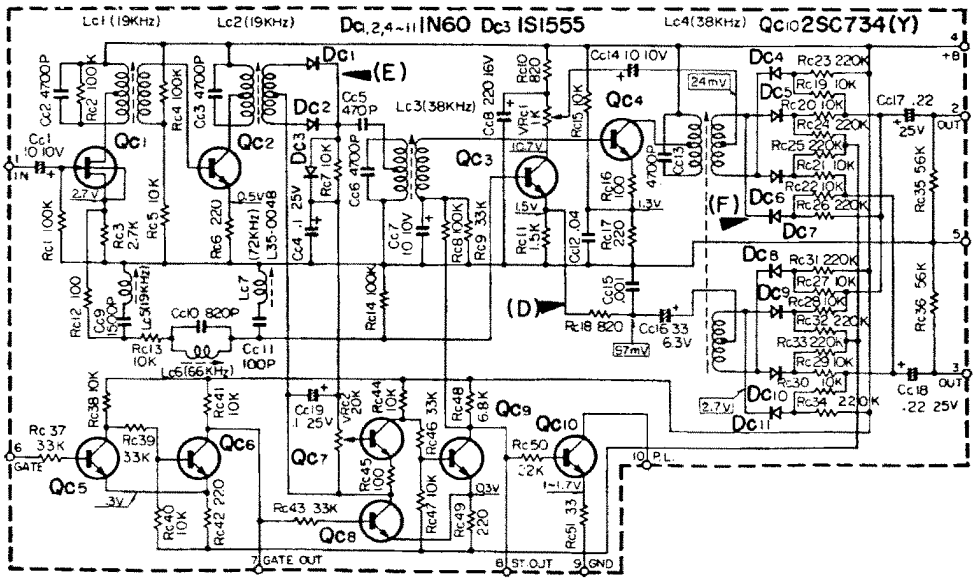
BOTTOM VIEW OF TRANSSITOR

3SK30

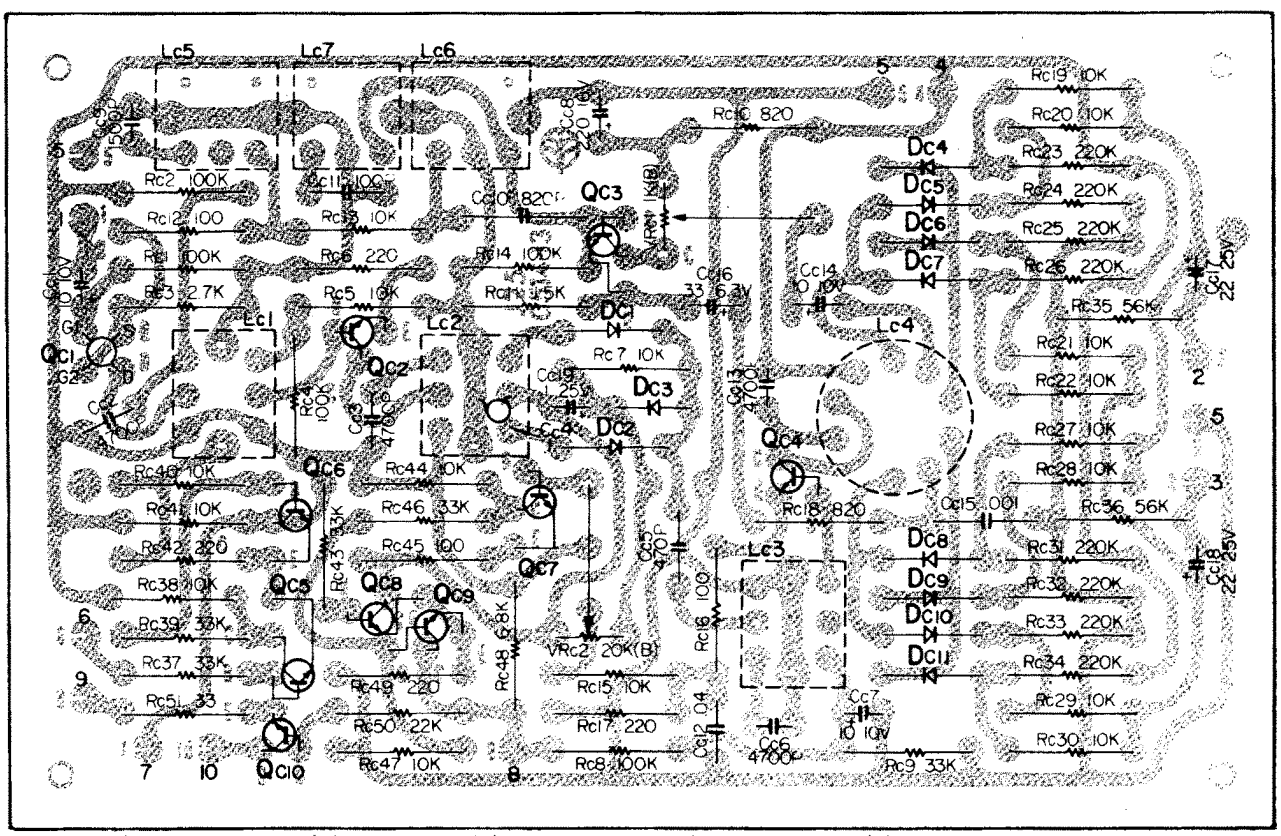
2SC870
2SC711



2SC734



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qc1: 3SK30(C), Qc2,4: 2SC870(F), Qc3: 2SC871(F), Qc5,6,7,8,9: 2SC711(F), Qc10: 2SC734(Y), Dc1,2,4~11: IN60, Dc3: 1S1555

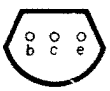
PARTS DESCRIPTION LIST

Circuit No.	Parts No.	Description			Remarks
CAPACITOR					
Cc1	CE04W1A100	PC Electrolytic	10μF	10WV	
Cc2, 3	CQ09S1H472J (X)	Polystyrene	0.0047μF	±5%	
Cc4	CA06E1ER10X	Solid Aluminum	0.1μF	25WV	
Cc5	CQ08S2B471J	Polystyrene	470pF	±5%	
Cc6	CQ09S1H472J (X)	Polystyrene	0.0047μF	±5%	
Cc7	CE04W1A100	PC Electrolytic	10μF	10WV	
Cc8	CE04W1C221	PC Electrolytic	220μF	16WV	
Cc9	CQ09S1H152J (X)	Polystyrene	0.0015μF	±5%	
Cc10	CQ08S2B821J	Polystyrene	820pF	±5%	
Cc11	CQ08S2B101J	Polystyrene	100pF	±5%	
Cc12	CK94YG1H403Z	Ceramic	0.04μF	±80%	−20%
Cc13	CQ09S1H472J (X)	Polystyrene	0.0047μF	±5%	
Cc14	CE04W1A100	PC Electrolytic	10μF	10WV	
Cc15	CQ93M1H102J	Mylar	0.001μF	±5%	
Cc16	CE04W0J330	PC Electrolytic	33μF	6.3WV	
Cc17, 18	CA06E1ER22X	Solid Aluminum	0.22μF	25WV	
Cc19	CA06E1ER10X	Solid Aluminum	0.1μF	25WV	
RESISTOR					
Rc1, 2	PD14BY2E104J	Insulated Carbon Film	100kΩ	±5%	1/4W
Rc3	PD14BY2E272J	Insulated Carbon Film	2.7kΩ	±5%	1/4W
Rc4	PD14BY2E104J	Insulated Carbon Film	100kΩ	±5%	1/4W
Rc5	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W
Rc6	PD14BY2E221J	Insulated Carbon Film	220Ω	±5%	1/4W
Rc7	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W
Rc8	PD14BY2E104J	Insulated Carbon Film	100kΩ	±5%	1/4W
Rc9	PD14BY2E333J	Insulated Carbon Film	33kΩ	±5%	1/4W
Rc10	PD14BY2E821J	Insulated Carbon Film	820Ω	±5%	1/4W
Rc11	PD14BY2E152J	Insulated Carbon Film	1.5kΩ	±5%	1/4W
Rc12	PD14BY2E101J	Insulated Carbon Film	100Ω	±5%	1/4W
Rc13	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W
Rc14	PD14BY2E104J	Insulated Carbon Film	100kΩ	±5%	1/4W
Rc15	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W
Rc16	PD14BY2E101J	Insulated Carbon Film	100Ω	±5%	1/4W
Rc17	PD14BY2E221J	Insulated Carbon Film	220Ω	±5%	1/4W
Rc18	PD14BY2E821J	Insulated Carbon Film	820Ω	±5%	1/4W
Rc19 ~ 22	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W
Rc23 ~ 26	PD14BY2E224J	Insulated Carbon Film	220kΩ	±5%	1/4W
Rc27 ~ 30	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W
Rc31 ~ 34	PD14BY2E224J	Insulated Carbon Film	220kΩ	±5%	1/4W
Rc35, 36	PD14BY2E563J	Insulated Carbon Film	56kΩ	±5%	1/4W
Rc37	PD14BY2E333J	Insulated Carbon Film	33kΩ	±5%	1/4W
Rc38	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W
Rc39	PD14BY2E333J	Insulated Carbon Film	33kΩ	±5%	1/4W
Rc40, 41	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W
Rc42	PD14BY2E221J	Insulated Carbon Film	220Ω	±5%	1/4W
Rc43	PD14BY2E333J	Insulated Carbon Film	33kΩ	±5%	1/4W
Rc44	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W
Rc45	PD14BY2E101J	Insulated Carbon Film	100Ω	±5%	1/4W
Rc46	PD14BY2E333J	Insulated Carbon Film	33kΩ	±5%	1/4W
Rc47	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W
Rc48	PD14BY2E682J	Insulated Carbon Film	6.8kΩ	±5%	1/4W
Rc49	PD14BY2E221J	Insulated Carbon Film	220Ω	±5%	1/4W
Rc50	PD14BY2E223J	Insulated Carbon Film	22kΩ	±5%	1/4W
Rc51	PD14BY2E330J	Insulated Carbon Film	33Ω	±5%	1/4W
TRANSISTOR/DIODE					
Qc1		3SK30 (C)			
Qc2		2SC870 (F)			
Qc3		2SC871 (F)			
Qc4		2SC870 (F)			
Qc5 ~ 9		2SC711 (F)			
Qc10		2SC734 (Y)			
Dc1, 2		1N60			
Dc3		1S1555			
Dc4 ~ 11		1N60			
POTENTIOMETER/COIL					
VRc1	R12-1021-05	PC Trimmer Potentiometer	1kΩ (B)		
VRc2	R12-3028-05	PC Trimmer Potentiometer	20kΩ (B)		
Lc1	L35-0043-05	MPX Coil			
Lc2	L35-0044-05	MPX Coil			
Lc3	L35-0045-05	MPX Coil			
Lc4	L35-0046-05	MPX Coil			
Lc5	L35-0048-05	MPX Coil			
Lc6	L35-0047-05	MPX Coil			
Lc7	L35-0048-05	MPX Coil			
PC BOARD					
–	J25-0514-13	PC Board			

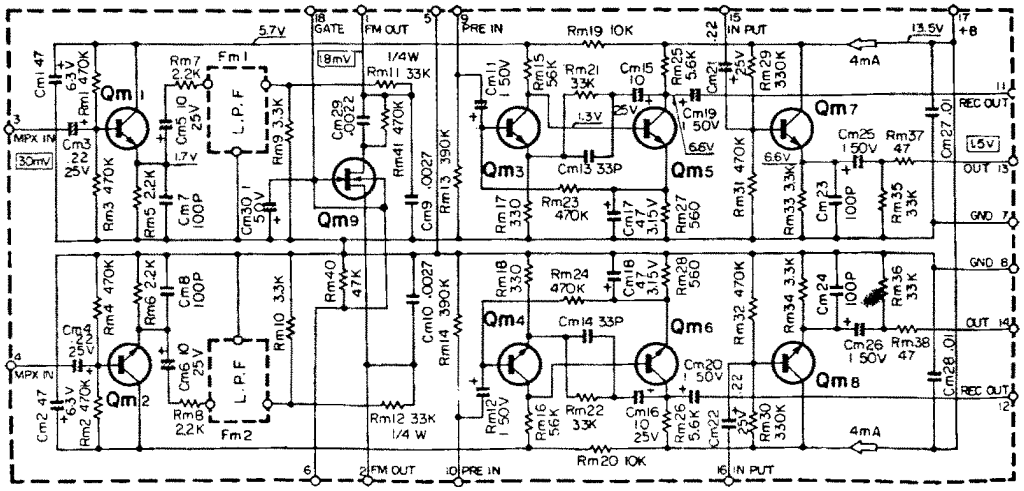
SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTOR

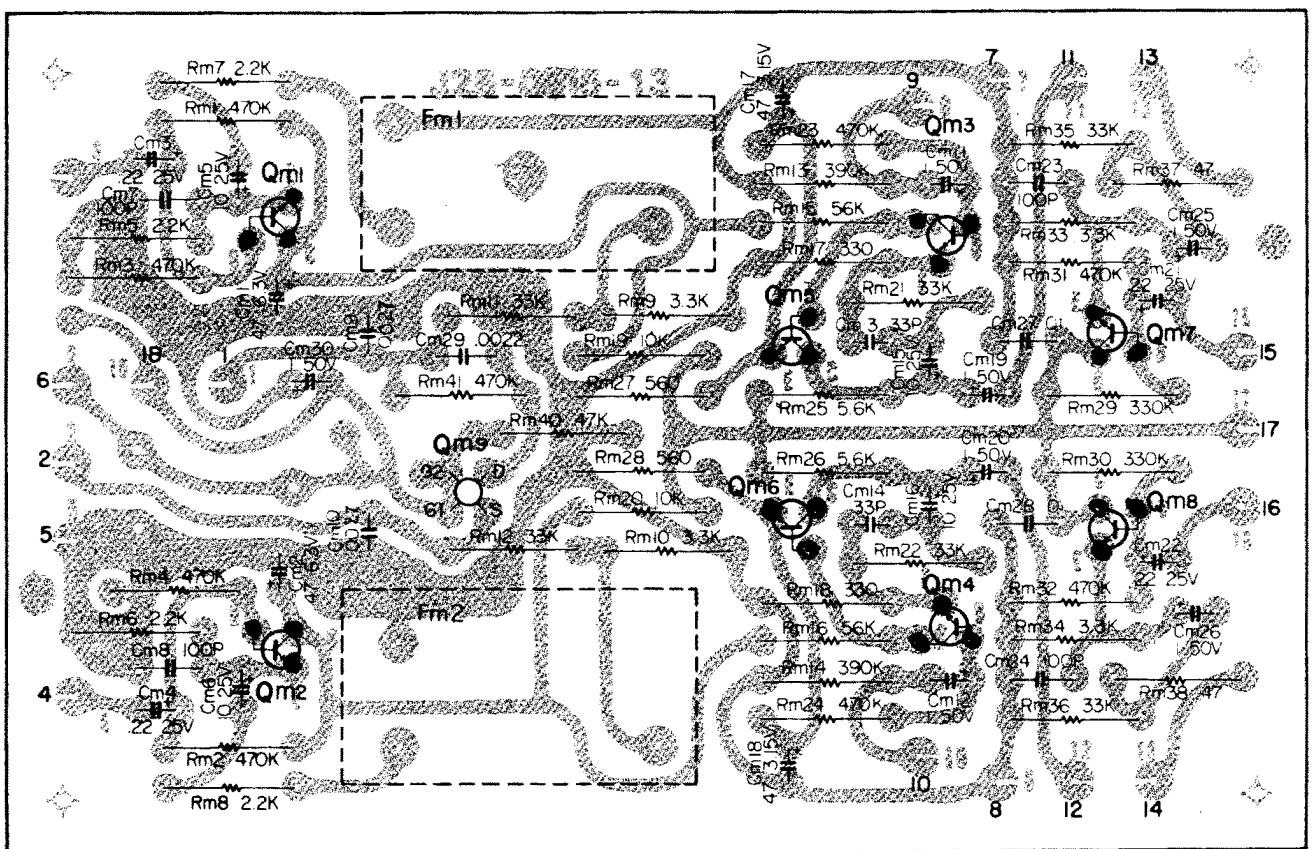
2SC871



3SK30



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qm1,2,3,4: 2SC871E, Qm5,6,7,8: 2SC871EorF, Qm9: 3SK30(A)

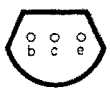
PARTS DESCRIPTION LIST

Circuit No.	Parts No.	Description				Remarks
CAPACITOR						
Cm1, 2	CE04W0J470	PC Electrolytic	47μF	6.3WV		
Cm3, 4	CA06E1ER22M (X)	Solid Aluminum	0.22μF	25WV		
Cm5, 6	CE04W1E100	PC Electrolytic	10μF	25WV		
Cm7, 8	CC94SL1H101K	TC Ceramic	100pF	±10%		
Cm9, 10	C90-0087-05	Polystyrene	0.0027μF	±3%		
Cm11, 12	CE04W1H010	PC Electrolytic	1μF	50WV		
Cm13, 14	CC94SL1H330K	TC Ceramic	33pF	±10%		
Cm15, 16	CE04W1E100	PC Electrolytic	10μF	25WV		
Cm17, 18	CE04W0F470	PC Electrolytic	47μF	3.15WV		
Cm19, 20	CE04W1H010	PC Electrolytic	1μF	50WV		
Cm21, 22	CA06E1ER22M (X)	Solid Aluminum	0.22μF	25WV		
Cm23, 24	CC94SL1H101K	TC Ceramic	100pF	±10%		
Cm25, 26	CE04W1H010	PC Electrolytic	1μF	50WV		
Cm27, 28	CK94YG1H103Z	Ceramic	0.01μF	+80%	−20%	
Cm29	CQ93M1H222K	Mylar	0.0022μF	±10%		
Cm30	CE04W1H010	PC Electrolytic	1μF	50WV		
RESISTOR						
Rm1 ~ 4	PD14BY2E474J	Insulated Carbon Film	470kΩ	±5%	1/4W	
Rm5 ~ 8	PD14BY2E222J	Insulated Carbon Film	2.2kΩ	±5%	1/4W	
Rm9, 10	PD14BY2E332J	Insulated Carbon Film	3.3kΩ	±5%	1/4W	
Rm11, 12	PD14BY2E333F	Insulated Carbon Film	3.3kΩ	±1%	1/4W	
Rm13, 14	PD14BY2E394J	Insulated Carbon Film	390kΩ	±5%	1/4W	
Rm15, 16	PD14BY2E563J	Insulated Carbon Film	56kΩ	±5%	1/4W	
Rm17, 18	PD14BY2E331J	Insulated Carbon Film	330Ω	±5%	1/4W	
Rm19, 20	PD14BY2E103J	Insulated Carbon Film	10kΩ	±5%	1/4W	
Rm21, 22	PD14BY2E333J	Insulated Carbon Film	33kΩ	±5%	1/4W	
Rm23, 24	PD14BY2E474J	Insulated Carbon Film	470kΩ	±5%	1/4W	
Rm25, 26	PD14BY2E562J	Insulated Carbon Film	5.6kΩ	±5%	1/4W	
Rm27, 28	PD14BY2E561J	Insulated Carbon Film	560Ω	±5%	1/4W	
Rm29, 30	PD14BY2E334J	Insulated Carbon Film	330kΩ	±5%	1/4W	
Rm31, 32	PD14BY2E474J	Insulated Carbon Film	470kΩ	±5%	1/4W	
Rm33, 34	PD14BY2E332J	Insulated Carbon Film	3.3kΩ	±5%	1/4W	
Rm35, 36	PD14BY2E333J	Insulated Carbon Film	33kΩ	±5%	1/4W	
Rm37, 38	PD14BY2E470J	Insulated Carbon Film	47Ω	±5%	1/4W	
Rm40	PD14BY2E473J	Insulated Carbon Film	47kΩ	±5%	1/4W	
Rm41	PD14BY2E474J	Insulated Carbon Film	470kΩ	±5%	1/4W	
TRANSISTOR/FILTER						
Qm1 ~ 4		2SC871 (E)				
Qm5 ~ 8		2SC871 (E) or (F)				
Qm9		3SK30 (A)				
Fm1, 2	L79-0011-05	Low-Pass Filter				
PC BOARD						
–	J25-0515-13	PC Board				

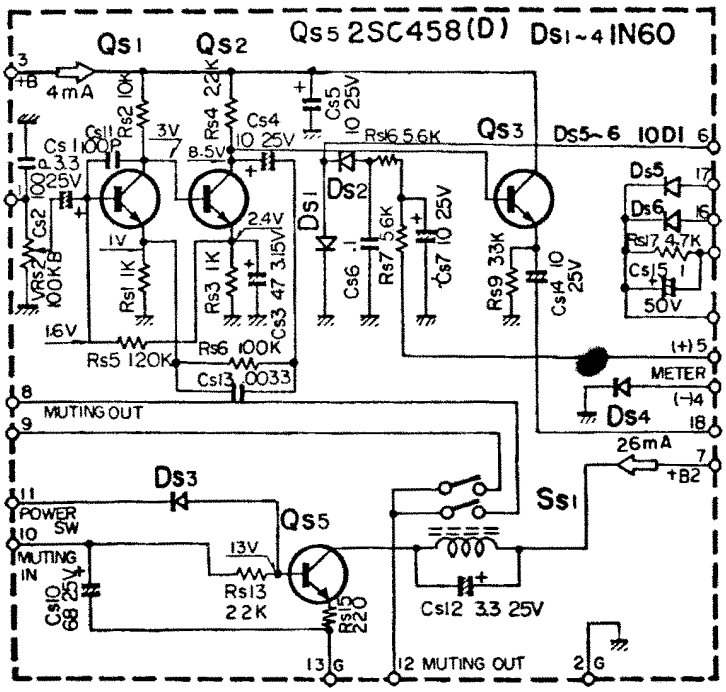
SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTOR

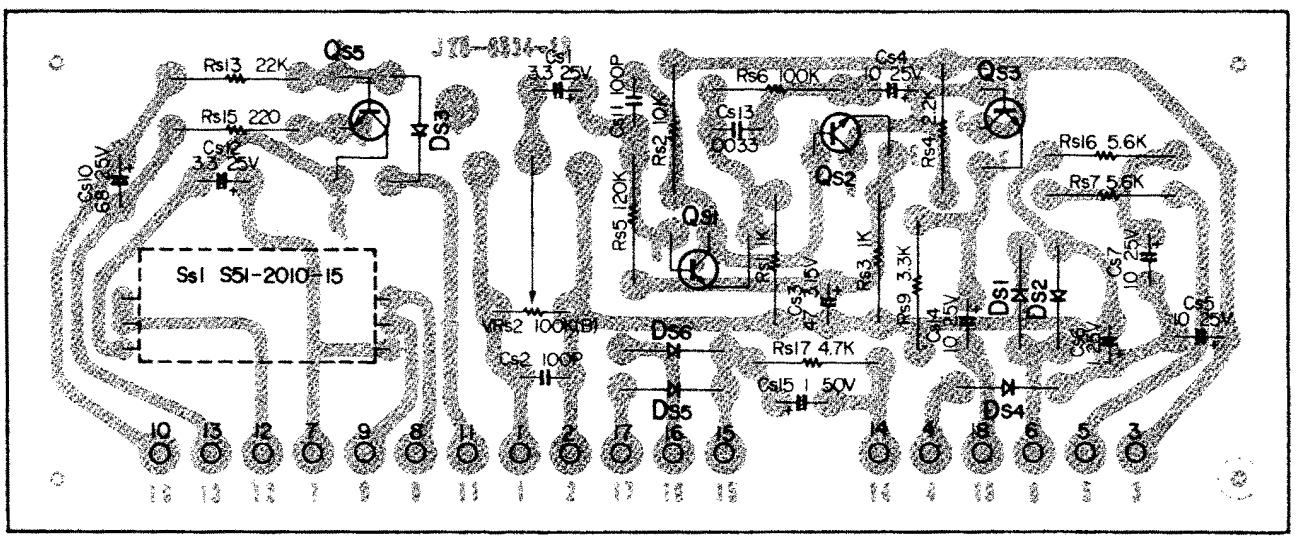
2SC711



2SC458



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS

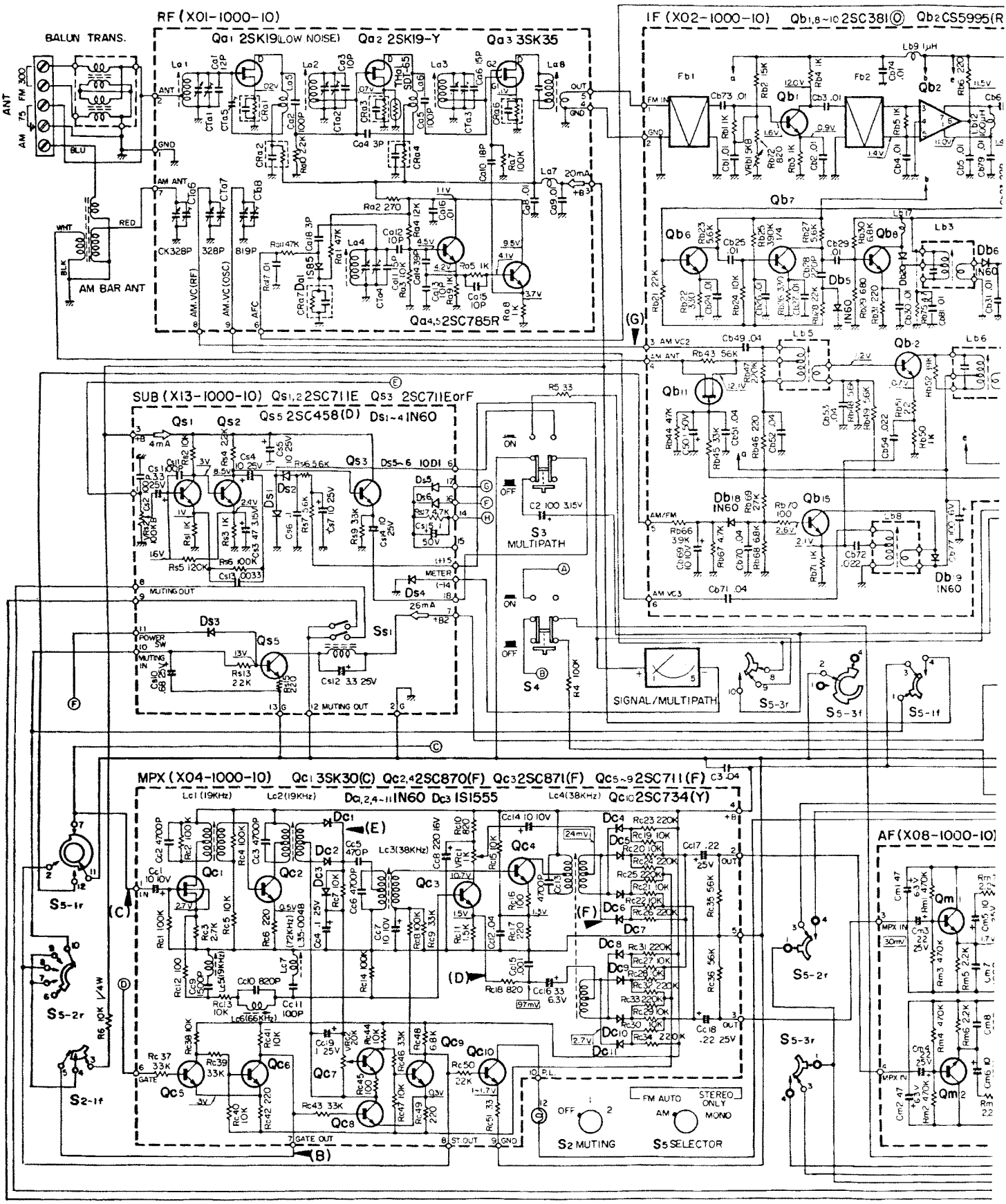


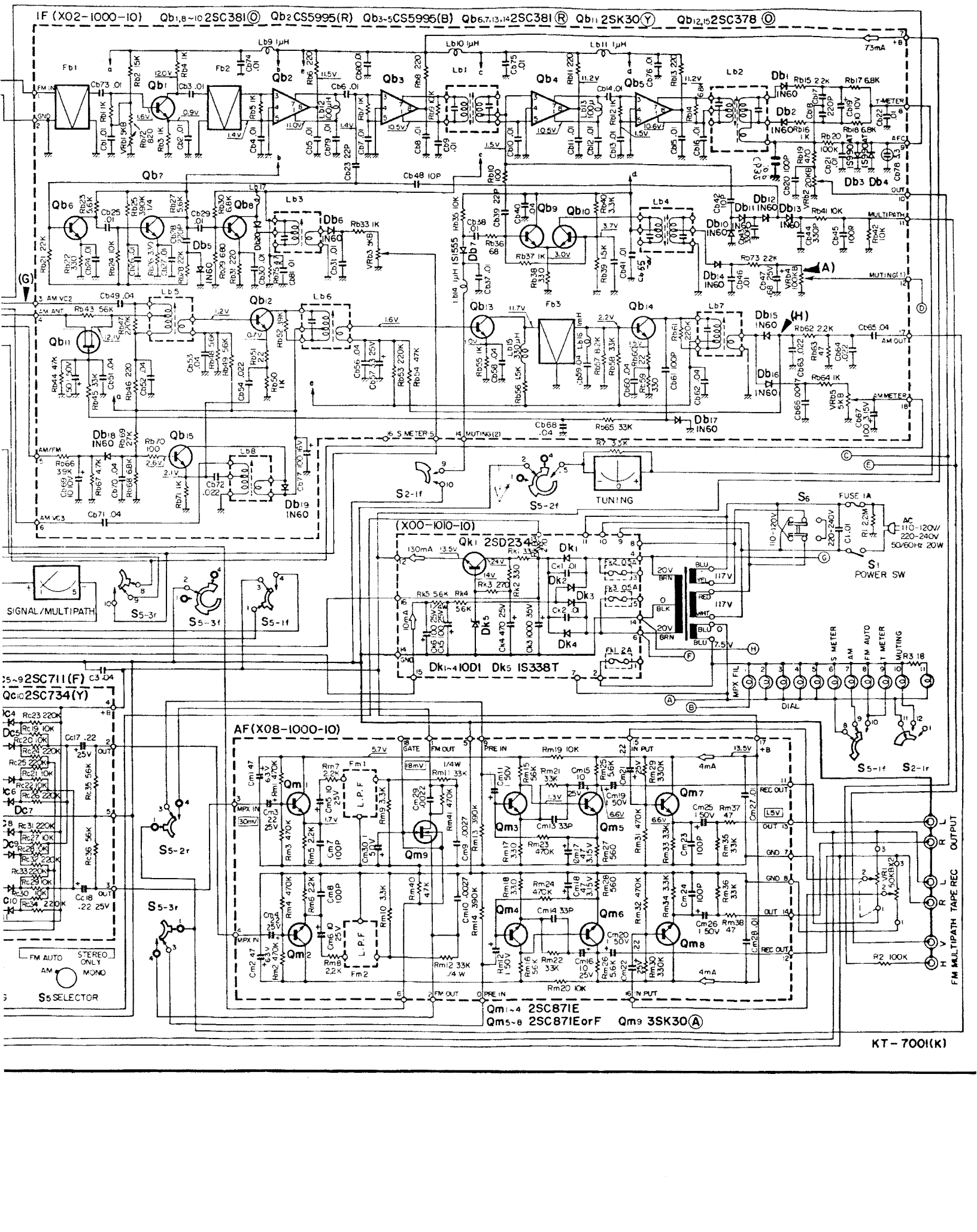
Qs1,2: 2SC711-E, Qs3: 2SC711-E or F, Qs5: 2SC458-D, Ds1~4: 1N60, Ds5,6: 10D1

PARTS DESCRIPTION LIST

Circuit No.	Parts No.	Description				Remarks
		CAPACITOR				
Cs1	CE04W1E3R3	PC electrolytic	3.3μF	25WV		
Cs2	CC94SL1H101K	TC ceramic	100pF	±10%		
Cs3	CE04W0F470	PC electrolytic	47μF	3.15WV		
Cs4, 5	CE04W1E100	PC electrolytic	10μF	25WV		
Cs6	CA06E1ER10X	Solid aluminum	0.1μF	25WV		
Cs7	CE04W1E100	PC electrolytic	10μF	25WV		
Cs10	CA06E1ER68X	Solid aluminum	0.68μF	25WV		
Cs11	CC94SL1H101K	TC ceramic	100pF	±10%		
Cs12	CE04W1E3R3	PC electrolytic	3.3μF	25WV		
Cs13	CK94YY1H332M	Ceramic	0.0033μF	±20%		
Cs14	CE04W1E100	PC electrolytic	10μF	25WV		
Cs15	CE04W1H010	PC electrolytic	1μF	50WV		
		RESISTOR				
Rs1	PD14BY2E102J	Insulated carbon film	1kΩ	±5%	1/4W	
Rs2	PD14BY2E103J	Insulated carbon film	10kΩ	±5%	1/4W	
Rs3	PD14BY2E102J	Insulated carbon film	1kΩ	±5%	1/4W	
Rs4	PD14BY2E222J	Insulated carbon film	2.2kΩ	±5%	1/4W	
Rs5	PD14BY2E124J	Insulated carbon film	120kΩ	±5%	1/4W	
Rs6	PD14BY2E104J	Insulated carbon film	100kΩ	±5%	1/4W	
Rs7	PD14BY2E562J	Insulated carbon film	5.6kΩ	±5%	1/4W	
Rs9	PD14BY2E332J	Insulated carbon film	3.3kΩ	±5%	1/4W	
Rs13	PD14BY2E223J	Insulated carbon film	22kΩ	±5%	1/4W	
Rs15	PD14BY2E221J	Insulated carbon film	220Ω	±5%	1/4W	
Rs16	PD14BY2E562J	Insulated carbon film	5.6kΩ	±5%	1/4W	
Rs17	PD14BY2E472J	Insulated carbon film	4.7kΩ	±5%	1/4W	
		POTENTIOMETER/RELAY				
Rs2	R12-5019-05	PC trimmer potentiometer	100kΩ (B)			
Ss1	S51-2010-15	Relay				
		TRANSISTOR/DIODE/PC BOARD				
Qs1, 2		2SC711 (E)				
Qs3		2SC711 (E) or (F)				
Qs5		2SC458 (D)				
Ds1 ~ 4		1N60				
Ds5, 6		10D1				
—	J25-0534-13	PC board				

● SCHEMATIC DIAGRAM




IF (X02-1000-10) Qb1,8~10 2SC381 Ⓞ Qb2 CS5995(R) Qb3~5 CS5995(B) Qb6,7,13,14 2SC381 Ⓡ Qb11 2SK30 Ⓨ Qb12,15 2SC378 Ⓞ
AF(X08-1000-10)
(X00-1010-10)
Qm1~4 2SC871E
Qm5~8 2SC871EorF Qm9 3SK30 Ⓐ
Dk1~4 1001 Dk5 1S338T
Qc10 2SC734(Y)
~9 2SC711(F)
SIGNAL/MULTIPATH
S5-3r
S5-3f
S5-1f
S2-1f
S5-2f
TUNING
S6
POWER SW
S5-2r
S5-3r
S5-1f
S2-1r
DIAL
FM MULTIPATH TAPE REC OUTPUT
S5 SELECTOR
KT-7001(K)