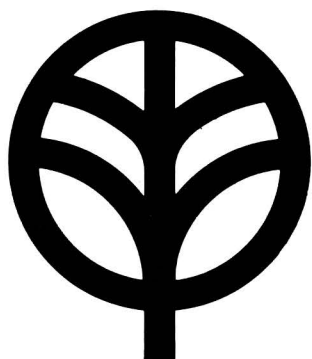




KENWOOD
HI/FI STEREO COMPONENTS

SERVICE MANUAL

KR-7070



SOLID STATE
AUTO TUNING STEREO RECEIVER

PARTS DESCRIPTION LIST

MAIN CHASSIS (AD9K) SECTION				
PRINTED CIRCUIT BOARD				
—	FM · RF Block	(UA1131K)		
—	FM · AM · IF Block	(UA1226K)		
—	MPX Block	(UA1405K3)		
—	PRE AMP Block	(UA1342K2)		
—	NF TONE Block	(UA2301K)		
—	MAIN AMP Block	(UA1391K)		
—	AUTO TUNING Block	(UA0106K)		
—	LOW LEVEL Block	(UA1361J)		
—	BOOST AMP Block	(UA1392K)		
—	REMOTE CONTROL	(XA-7K)		
Symbol No.	Description		Part No.	Remarks
CAPACITOR				
C131, 132	Mylar	0.047 μ F $\pm$ 20%		
C133	Electrolytic Tubular	3.3 μ F 50WV		
C134, 135	Mylar	0.22 μ F $\pm$ 20%		
C136	Mylar	2200pF $\pm$ 20%		
C137	Mylar	1000pF $\pm$ 20%		
C171	Electrolytic Block	3300 μ F 63WV		
C172, 173	Mylar	0.22 μ F $\pm$ 20%		
C231, 232	Mylar	0.22 μ F $\pm$ 20%		
C233	Electrolytic Tubular	3.3 μ F 50WV		
C234,	Mylar	0.22 μ F $\pm$ 20%		
C235	Mylar	2200pF $\pm$ 20%		
C236	Mylar	1000pF $\pm$ 20%		
C237	Mylar	0.22 μ F $\pm$ 20%		
C271	Electrolytic Block	3300 μ F 63WV		
C272, 273	Mylar	0.22 μ F $\pm$ 20%		
C301	Oil Impregnated Tubular	0.01 μ F $\pm$ 20%		
C302~305	Oil Impregnated Tubular	0.02 μ F $\pm$ 20%		
C306	Electrolytic Tubular	470 μ F 35WV		
C307	Electrolytic Tubular	200 μ F 25WV		
C308	Electrolytic Tubular	100 μ F 16WV		
C309	Electrolytic Tubular	200 μ F 16WV		
C310	Electrolytic Block	5000 μ F 100WV		
C311	Electrolytic Tubular	1000 μ F 35WV		
C312~314	Electrolytic Tubular	1000 μ F 25WV		
C315, 316	Electrolytic Tubular	4.7 μ F 25WV		
C318, 319	Electrolytic Tubular	1000 μ F 35WV		
C320	Electrolytic Tubular	1000 μ F 3.15WV		
RESISTOR				
R101~103	Insulated Carbon Film	100k Ω $\pm$ 10% 1/4W		
R104	Insulated Carbon Film	390k Ω $\pm$ 10% 1/4W		
R105	Insulated Carbon Film	100k Ω $\pm$ 10% 1/4W		
R107	Insulated Carbon Film	390k Ω $\pm$ 10% 1/4W		
R111	Insulated Carbon Film	47 Ω $\pm$ 10% 1/4W		
R112	Insulated Carbon Film	22k Ω $\pm$ 10% 1/4W		
R131	Insulated Carbon Film	3.9k Ω $\pm$ 5% 1/4W		
R132	Insulated Carbon Film	3.3k Ω $\pm$ 5% 1/8W		
R133	Insulated Carbon Film	5.6k Ω $\pm$ 5% 1/8W		
R134	Insulated Carbon Film	7.5k Ω $\pm$ 5% 1/8W		
R135	Insulated Carbon Film	12k Ω $\pm$ 5% 1/8W		
R136, 137	Insulated Carbon Film	15k Ω $\pm$ 5% 1/8W		
R138	Insulated Carbon Film	12k Ω $\pm$ 5% 1/8W		
R139	Insulated Carbon Film	7.5k Ω $\pm$ 5% 1/8W		
R140	Insulated Carbon Film	5.6k Ω $\pm$ 5% 1/8W		
R141	Insulated Carbon Film	3.3k Ω $\pm$ 5% 1/8W		
R142, 143	Insulated Carbon Film	3.9k Ω $\pm$ 5% 1/4W		
R144	Insulated Carbon Film	3.3k Ω $\pm$ 5% 1/8W		
R145	Insulated Carbon Film	5.6k Ω $\pm$ 5% 1/8W		
R146	Insulated Carbon Film	7.5k Ω $\pm$ 5% 1/8W		
R147	Insulated Carbon Film	12k Ω $\pm$ 5% 1/8W		
R148, 149	Insulated Carbon Film	1.5k Ω $\pm$ 5% 1/8W		
R150	Insulated Carbon Film	12k Ω $\pm$ 5% 1/8W		
R151	Insulated Carbon Film	7.5k Ω $\pm$ 5% 1/8W		
R152	Insulated Carbon Film	5.6k Ω $\pm$ 5% 1/8W		
R153	Insulated Carbon Film	3.3k Ω $\pm$ 5% 1/8W		
R154	Insulated Carbon Film	3.9k Ω $\pm$ 5% 1/4W		
R155	Insulated Carbon Film	22k Ω $\pm$ 10% 1/4W		
R156, 157	Insulated Carbon Film	56k Ω $\pm$ 10% 1/4W		
R158, 159	Insulated Carbon Film	10k Ω $\pm$ 10% 1/4W		
R160	Insulated Carbon Film	3.3k Ω $\pm$ 10% 1/4W		
R161	Insulated Carbon Film	27k Ω $\pm$ 10% 1/4W		
R171, 172	Wire Wound	0.47 Ω 3W	R92-0003-05	
R173	Metal Film	4.7 Ω 2W		
R174	Fixed Carbon Composition	10 Ω $\pm$ 10% 1W		
R175	Fixed Carbon Composition	560 Ω $\pm$ 10% 1/2W		

Symbol No.	Description	Part No.	Re- marks
R176	Wire Wound 22 Ω 15WV	R92-0002-05	
R177	Fixed Carbon Composition 1k Ω $\pm$ 10% 1/2W		
R178	Metal Film 4.7k Ω 2W		
R201, 202	Insulated Carbon Film 100k Ω $\pm$ 10% 1/4W		
R203	Insulated Carbon Film 10k Ω $\pm$ 10% 1/4W		
R204	Insulated Carbon Film 390k Ω $\pm$ 10% 1/4W		
R205	Insulated Carbon Film 100k Ω $\pm$ 10% 1/4W		
R211	Insulated Carbon Film 47 Ω $\pm$ 10% 1/4W		
R212	Insulated Carbon Film 27k Ω $\pm$ 10% 1/4W		
R213	Insulated Carbon Film 22k Ω $\pm$ 10% 1/4W		
R214	Insulated Carbon Film 27k Ω $\pm$ 10% 1/4W		
R231	Insulated Carbon Film 3.9k Ω $\pm$ 5% 1/4W		
R232	Insulated Carbon Film 3.3k Ω $\pm$ 5% 1/8W		
R233	Insulated Carbon Film 5.6k Ω $\pm$ 5% 1/8W		
R234	Insulated Carbon Film 7.5k Ω $\pm$ 5% 1/8W		
R235	Insulated Carbon Film 12k Ω $\pm$ 5% 1/8W		
R236, 237	Insulated Carbon Film 15k Ω $\pm$ 5% 1/8W		
R238	Insulated Carbon Film 12k Ω $\pm$ 5% 1/8W		
R239	Insulated Carbon Film 7.5k Ω $\pm$ 5% 1/8W		
R240	Insulated Carbon Film 5.6k Ω $\pm$ 5% 1/8W		
R241	Insulated Carbon Film 3.3k Ω $\pm$ 5% 1/8W		
R242, 243	Insulated Carbon Film 3.9k Ω $\pm$ 5% 1/4W		
R244	Insulated Carbon Film 3.3k Ω $\pm$ 5% 1/8W		
R245	Insulated Carbon Film 5.6k Ω $\pm$ 5% 1/8W		
R246	Insulated Carbon Film 7.5k Ω $\pm$ 5% 1/8W		
R247	Insulated Carbon Film 12k Ω $\pm$ 5% 1/8W		
R248, 249	Insulated Carbon Film 15k Ω $\pm$ 5% 1/8W		
R250	Insulated Carbon Film 12k Ω $\pm$ 5% 1/8W		
R251	Insulated Carbon Film 7.5k Ω $\pm$ 5% 1/8W		
R252	Insulated Carbon Film 5.6k Ω $\pm$ 5% 1/8W		
R253	Insulated Carbon Film 3.3k Ω $\pm$ 5% 1/8W		
R254	Insulated Carbon Film 3.9k Ω $\pm$ 5% 1/4W		
R255	Insulated Carbon Film 22k Ω $\pm$ 10% 1/4W		
R256	Insulated Carbon Film 3.3k Ω $\pm$ 10% 1/4W		
R257	Insulated Carbon Film 27k Ω $\pm$ 10% 1/4W		
R271, 272	Wire Wound 0.47 Ω 3W	R92-0003-05	
R273	Metal Film 4.7 Ω 2W		
R274	Fixed Carbon Composition 10 Ω $\pm$ 10% 1W		
R275	Fixed Carbon Composition 560 Ω $\pm$ 10% 1/2W		
R276	Fixed Carbon Composition 22 Ω 15W		
R277	Fixed Carbon Composition 1k Ω $\pm$ 10% 1/2W		
R278	Metal Film 4.7 Ω $\pm$ 10% 2W		
R301	Insulated Carbon Film 1k Ω 8W		
R302	Insulated Carbon Film 1k Ω 4W		
R303	Fixed Carbon Composition 220 Ω $\pm$ 10% 1/2W		
R304	Fixed Carbon Composition 470 Ω $\pm$ 10% 1/2W		
R305	Fixed Carbon Composition 1k Ω $\pm$ 10% 1/2W		
R306	Fixed Carbon Composition 47 Ω $\pm$ 10% 1/2W		
R307	Fixed Carbon Composition 1.5k Ω $\pm$ 10% 1/2W		
R308	Fixed Carbon Composition 22 Ω $\pm$ 10% 1/2W		
R309	Fixed Carbon Composition 270 Ω $\pm$ 10% 1/2W		
R310	Fixed Carbon Composition 1M Ω $\pm$ 10% 1/2W		
R311	Fixed Carbon Composition 12 Ω $\pm$ 10% 1/2W		
R312	Fixed Carbon Composition 18 Ω $\pm$ 10% 1/2W		
TRANSISTOR/DIODE			
Q1~4	2SC898R		
Q5	ST-303		
Q1~4	ED-20L		
D5	S1802-03B		
D6	1S338-T		
D7	FR-2P		
D8, 9	STV-3		
D10, 11	1N60		
—	1S1555		
SWITCH			
S1	SELECTOR (Rotary) F · 6 · 14 · 5	S04-6001-05	
S2	MODE (Rotary) F · 2 · 3 · 5	S04-2008-05	
S4	TREBLE (Rotary) F · 2 · 2 · 11	S04-2009-05	
S5	BASS (Rotary) F · 2 · 4 · 11	S04-2007-05	
S6	SPEAKERS (Rotary) F · 1 · 4 · 5 (with power Switch)	S05-1001-05	
S7	MUTING (Lever) 2 · 2	S36-2002-05	
S8	LOUDNESS (Rotary-lever) 1 · 2 · 3	S06-1003-15	
S9	AUTO (Rotary-lever) 2 · 4 · 3	S06-2002-15	
S10	FM-MUTING (Lever) 2 · 2	S36-2002-15	
S11	PRESENCE (Rotary-lever) 2 · 4 · 3	S06-2002-15	
S12	HIGH-FILTER (Lever) 2 · 2	S36-2002-15	
S13	LOW-FILTER (Lever) 2 · 2	S36-2002-15	

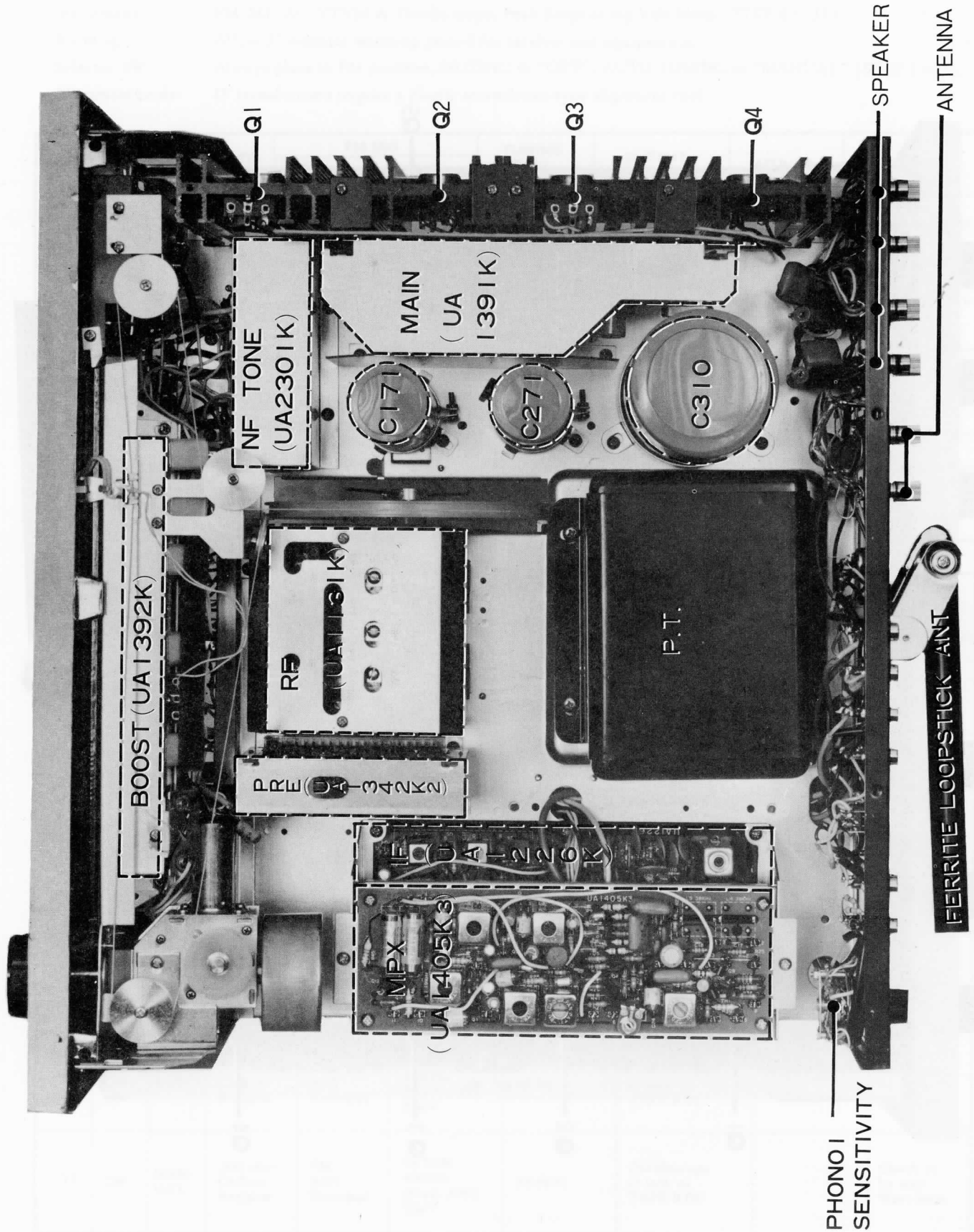
PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Re- marks	Symbol No.	Description	Part No.	Re- marks
S14	MONITOR (Lever) 2 · 2	S36-2002-15		—	Corrugated Cardboard Case	H01-0032-23	
S16	PHONO/MIC (Slide) 4 · 2	S31-4001-05		—	Accessory Box	H09-0015-03	
S17	AC VOLT SELECT (Slide) 2 · 2	S60-22D		—	Polystyrene Form Fixture x 2	H10-0104-12	
S19	START (AUTO-Start Switch)	S40-2001-05		—	Protection Board	H10-0105-14	
S20	TURN (Return Switch)	S59-2001-05		—	Protection Board	H10-0227-04	
MISCELLANEOUS				—	Protection Board	H10-0228-04	
—	Case	A01-0013-02		—	Buffer Protection Bag	H13-22	
—	Chassis	A10-0031		—	Protection Cover (430 x 200 x 330)	H20-0009-03	
—	Panel Framework	A20-0062-01		—	Protection Cover (430 x 200 x 330)	H20-0024-13	
—	Panel	A20-0063-01		—	Warranty Card	H26-02	
—	Sub-Panel	A22-0019-01		—	Instructions	H4068	
—	Back-Panel	A23-0026-02		—	Fuse Holder x 3	J13-0004-05	
—	Radiator	A26-31		—	Varistor Holder x 2	J19-0010-04	
—	Reflector	A33-0004-04		—	Front Glass Holder x 2	J19-0029-04	
—	Sole Plate	A40-0007-03		—	Dial Scale Holder (L)	J19-0030-04	
—	Meter Holder	A3778		—	Dial Scale Holder (R)	J19-0031-04	
—	Radiator Holder	A4932		—	Meter-light Holder	J19-0032-04	
—	ANT-Holder	A5065		—	Small Pulley Holder	J21-0084-04	
—	Sticker	B09-190		—	Rotary Switch Holder	J21-0085-04	
—	Notice Sticker	B09-192		—	MPX-Amp Holder (A)	J21-0086-03	
—	Front Glass	B10-0009-03		—	MPX-Amp Holder (B)	J21-0087-04	
—	White Filter	B19-0012-04		—	MPX-Amp Holder (C)	J21-0088-04	
—	Dial Scale	B20-0032-03		—	Radiator (Joint) x 2	J21-0089-04	
—	Dial Pointer	B21-2004-04		—	Radiator (Joint) x 2	J21-0090-04	
P. L.	Pilot Lamp (Dial Pointer)	B30-0004-05		—	Dial Pointer Metal Fittings	J21-0091-04	
M	Meter	B31-0006-05		—	P. L. Holder	J21-0092-04	
—	Destination Sticker	B40-0066-04		—	Radiator	J21-0677-04	
—	Certification	B42-0009-04		—	Spacer	J30-0010-14	
—	Sticker	B42-0042-02		—	Hexagon Boss x 5	J32-0022-04	
—	Instruction Manual	B50-0074-00		—	Soft Tape (25 x 8 x 10t) x 2	K11-164	
—	Schematic Diagram	B52-0012-00		—	Soft Tape (70 x 5 x 3t)	K11-212	
—	Flywheel	D05-52B		—	Soft Tape (50 x 5 x 3t) x 2	K11-213	
—	Dial Spring	D06-02		—	Soft Tape (300 x 3 x 3t)	K11-402	
—	Dial Cord Strings (1.8 m)	D07-03		—	Soft Tape (55 x 10 x 10t)	K11-411	
—	Small Bushing x 4	D10-05		—	Knob (A)	K20-0025-04	
—	Return Lever x 2	D10-0026-04		—	Knob (B) x 6	K22-0001-04	
—	Dial Pointer Metal Fittings	D11-18		—	Knob x 8	K29-0019-04	
—	Pulley (Large, 127φ)	D15-0016-04		—	Knob	K29-0020-04	
—	Pulley	D15-0017-04		P. T.	Power Transformer	L03-0003-05	
—	Small Pulley x 4	D15-0018-04		ANT	Loop Stick Antenna	L15-39	
—	Return Lever Shaft	D21-0048-04		L	Choke Coil	L33-0025-05	
—	Motor Gear Box Assembly	D40-0018-05		—	Decorated Screw x 4	N08-0003-04	
—	PL Socket x 6	E03-02H		—	Hexagon Nut (Dial Shaft)	N10-2060-11	
—	Lug x 3	E04-040		—	Decorated Screw x 5	N13-0004-04	
—	Lug	E04-101		VR	Potentiometer 50kΩ (B) x 2	R06-4001-05	
—	Lug x 5	E04-101C		VR	Potentiometer 500Ω	R10-69	
—	Lug x 12	E04-202		VR	Potentiometer 50K (G)	R13-4002-05	
—	Lug x 3	E04-202D		—	Knob	S14-825	
—	Connector (4φ)	E06-0401-05		—	Fuse Holder	S15-09	
—	5P Connector Receptacle	E07-35B		P. L.	Pilot Lamp x 6	S16-06	
—	Connector (18P)	E07-418D		P. L.	Pilot Lamp x 5	S16-22	
J	Pin Jack (1P)	E08-11C		F	Fuse (5A) x 3	S17-05	
J	Pin Jack (2P)	E08-12J		—	Slider	S4132	
J	Pin Jack (4P)	E08-14G		—	Switch Stopper	S4136	
J	Pin Jack (8P)	E08-18F		—	Bobbin	S89-746	
J	Pin Jack (4P)	E08-34D		T	ANT-Transformer	T09-33	
—	AC Outlet x 3	E08-0205-05		—	Tinned Wire (0.8φ, 0.3 m)	W03-08	
—	Connector	E10-2201-05		—	Tinned Wire (1.2φ, 0.15 m)	W03-12	
J	US Jack x 2	E11-0002-05		—	Vinyl Tube (Transparency, 3φ, 0.2 m)	W07-03Z	
—	Terminal x 13	E11-18		—	Vinyl Tube (Transparency, 7φ, 0.35 m)	W07-07Z	
—	Shorted Adaptor x 2	E19-0201-05		—	AC Cord (with Plug)	W09-15	
—	Transistor Socket	E4082		—	Low-Capacitance Shielded Wire (0.55 m)	W11-012	
—	Radiator x 2	F01-0008-03		—	Coaxial Cable (0.45 m)	W13-06	
—	Main-Amp Shield Board	F10-0034-03		—	Reticular Wire (0.25 m)	W14-01	
—	Tone-Amp Shield Board	F10-0035-04		—	Flexible Wire (6φ)	W19-634	
—	Pre-Amp Shield Board	F10-0044-04		—	P. V. C. Insulated Wire (Black, 6.5 m)	W32-50	
—	Return Switch Shield	F11-0025-04		—	P. V. C. Insulated Wire (Red, 9.1 m)	W32-52	
—	Dust Sheet	F15-0007-04		—	P. V. C. Insulated Wire (Yellow, 8.6 m)	W32-54	
—	Dust Sheet x 5	F15-0014-04		—	P. V. C. Insulated Wire (Blue, 7 m)	W32-56	
—	Dust Sheet x 3	F15-0015-04		—	P. V. C. Insulated Wire (White, 9.1 m)	W32-59	
—	Adiabatic Paper	F19-0013-04		—	Single-Core Shielded Wire (Red, 2 m)	W51-012C	
—	Shading Board	F19-0014-04		—	Single-Core Shielded Wire (Brown, 2 m)	W51-011C	
—	Shading Board Holder	F19-0015-03		—	Single-Core Shielded Wire (Yellow, 2.9 m)	W51-014C	
—	Gear Box Armature	F31-0008-04		—	Single-Core Shielded Wire (Blue, 2.8 m)	W51-016C	
—	Leg x 4	G10-02		—	Single-Core Shielded Wire (Grey, 0.5 m)	W51-018C	
—	Cord Bushing	G11-19		—	Double-Core Shielded Wire (2.1 m)	W51-020	
—	AC Cord Bushing	G11-25		—	Three-Core Shielded Wire (1.2 m)	W51-030	
—	Corrugated Cardboard Case	H01-0093-13		—	Stranded Wire (0.4 m)	020-0992-05	
				—	Insulating Sleeve (3.0 m)	212-2001-05	

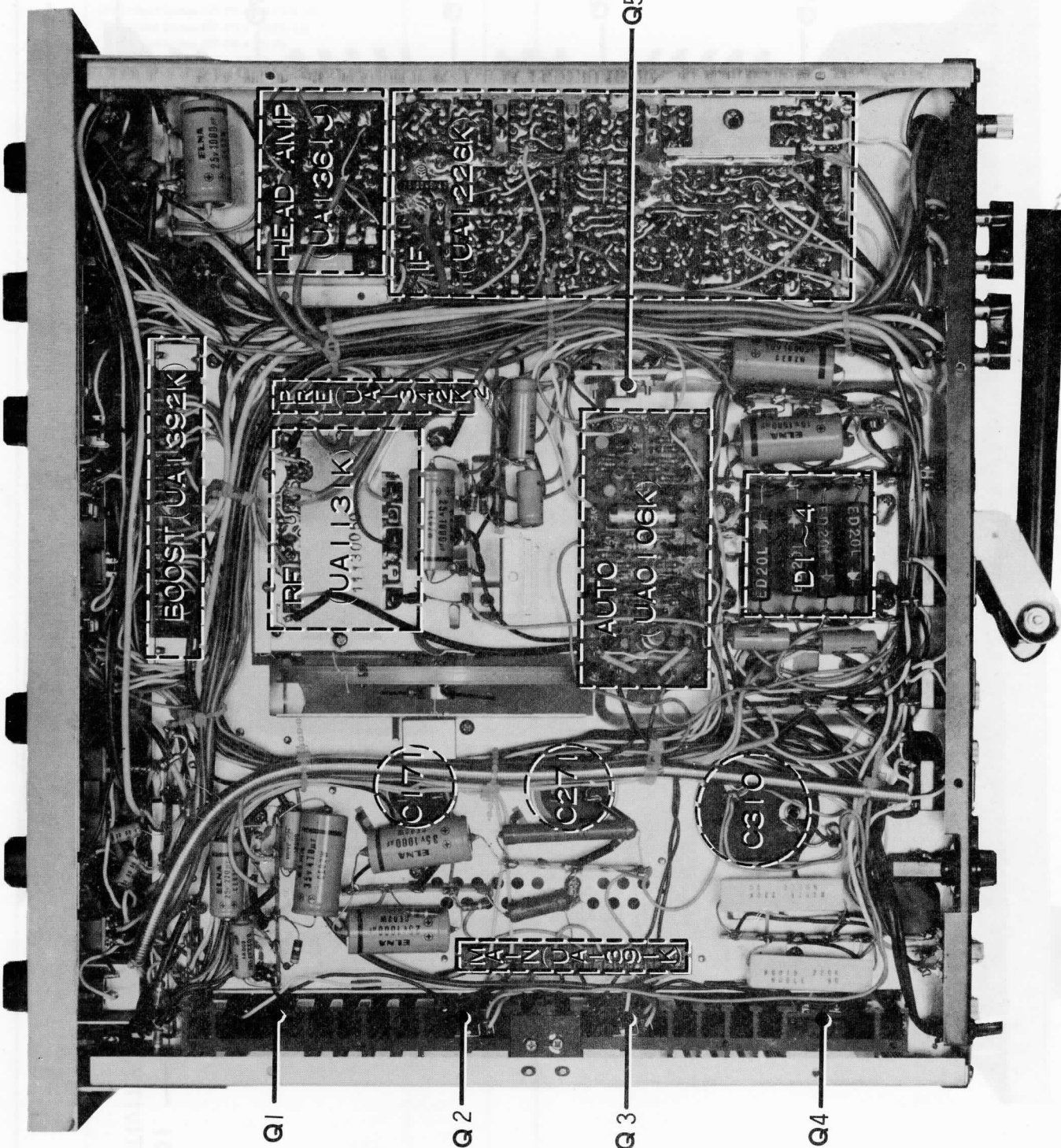
PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Re- marks
—	Pan Head Screw (⊕ P2 x 10-F) x 2		
—	Pan Head Screw (⊕ P2.6 x 4-F) x 4		
—	Pan Head Screw (⊕ P3 x 4-F) x 13		
—	Pan Head Screw (⊕ P3 x 6-F) x 35		
—	Pan Head Screw (⊕ P3 x 8-F) x 31		
—	Pan Head Screw (⊕ P3 x 10-F) x 16		
—	Pan Head Screw (⊕ P3 x 20-F) x 4		
—	Pan Head Screw (⊕ P4 x 25-F)		
—	Pan Head Screw (P3 x 12-F) x 8		
—	Black Truss Screw (T3 x 6-B · K) x 2		
—	Flat Head Screw (⊕ S3 x 4-F) x 19		
—	Flat Head Screw (⊕ S3 x 14-F) x 2		
—	Hexagon Nut (N3-F) x 25		
—	Hexagon Nut (N4-F) x 3		
—	Tapping (⊕ TM3 x 6-F) x 36		
—	Tapping (⊕ TM3 x 10-F) x 18		
—	Tapping (⊕ TM4 x 6-F) x 13		
—	Tapping (⊕ TM4 x 8-F) x 4		
—	Tapping (⊕ TM3 x 8-F) x 16		
—	Flat Head Washer (W4-F) x 7		
—	Spring Washer (SW4-F) x 2		
—	Inter Lock Washer (KW19-S) x 2		

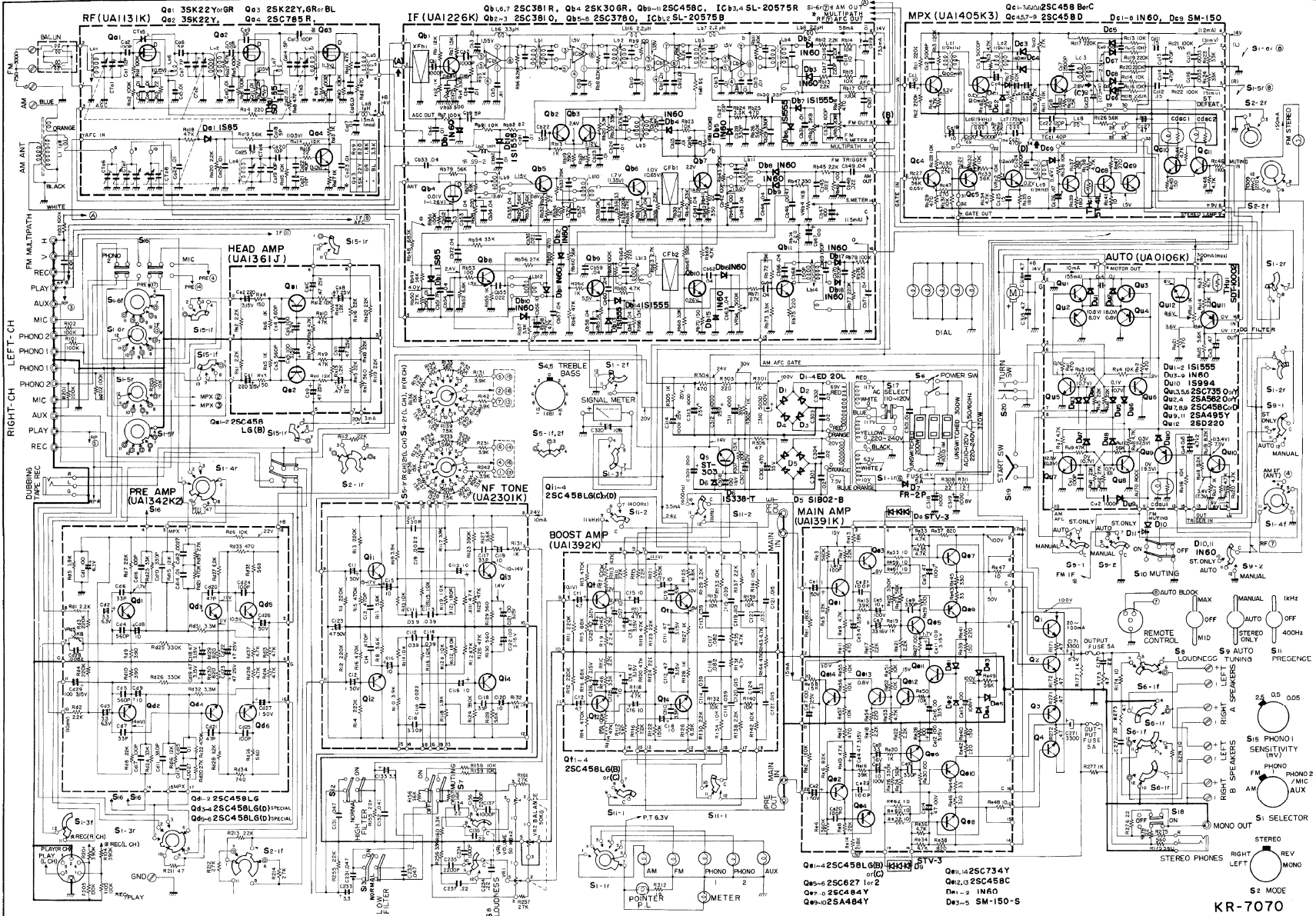
CHASSIS TOP VIEW



CHASSIS BOTTOM VIEW



SCHEMATIC DIAGRAM



ALIGNMENT PROCEDURE

FM ALIGNMENT PROCEDURE

Instruments: FM SG, AC VTVM & Oscilloscope, Peak Responcing Volt Meter (STEP 6 ~ 11).
 Warm-up: Allow 30 minutes warm-up period for receiver and equipments.
 Selector SW: Always place in FM position, MUTING in "OFF", AUTO TUNING in "MANUAL" (STEP 1 ~ 5).
 Alignment tools: IF transformers require a plastic screwdriver-type alignment tool.

STEP	ALIGN	DUMMY ANTENNA	FM SSG		TUNING DIAL SETTING	OUTPUT INDICATOR	ADJUST	REMARKS
			COUPL-ING	INPUT SIGNAL				
1	IFT	Direct	High side to (A) Low side to Chassis	10.7 MHz (Unmod.)	Any non-interfering setting	Tuning Indicator	(UA1131K) La5	Maximum Deflection
2	DIS-CRIMI-NATOR	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	(UA1226K) Lb4 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	(UA1131K) 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	(UA1131K) CTa1 ~ 4	Maximum Deflection

5 Repeat steps 3 & 4 until no further improvement is possible.

* In this adjustment, the S.G. output voltage should be set so that linear amplification is maintained at the IF stage.

STEP	FM MUT-ING	AUTO TUN-ING	DUMMY ANTENNA	FM SG		TUNING DIAL SETTING	OUTPUT INDICATOR	ADJUST	REMARKS
				COUPL-ING	FREQUEN-CY				
*6	OFF	MAN-UAL	300 ohm Carbon Resistor	FM ANT Terminal	98 MHz (Unmod.)	98 MHz	VTVM at Terminal No. 6 in UA1405K3	(UA1226K) Lb5 Top & Bottom	Maximum Deflection
7	OFF	AUTO	300 ohm Carbon Resistor	FM ANT Terminal	98 MHz 400 Hz (Mod. 30%) 1mV	98 MHz	VTVM at Terminal No. 6 in UA1405K3	(UA1226K) VRb1	Set the output to 2.5V
8	OFF	AUTO	300 ohm Carbon Resistor	FM ANT Terminal	98 MHz 400 Hz (Mod. 30%) 1mV	98 MHz	VTVM at Terminal No. 6 in UA1405K3	(UA1226K) VRb2	4, 5 Indicates
9	OFF	AUTO	300 ohm Carbon Resistor	FM ANT Terminal	98 MHz 400 Hz (Mod. 30%) 20μV	98 MHz	VTVM at Terminal No. 6 in UA1405K3	(UA1226K) VRb3	Set the output to 1.8V
10	ON	AUTO	300 ohm Carbon Resistor	FM ANT Terminal	98 MHz 400 Hz (Mod. 30%) 20μV	98 MHz	Oscilloscope at jack of TAPE REC	(UA1226K) VRb1	Check to be seen Waveform
11	ON	MAN-UAL	300 ohm Carbon Resistor	FM ANT Terminal	98 MHz 400 Hz (Mod. 30%) 10μV	98 MHz	Oscilloscope at jack of TAPE REC		Check to be seen Waveform

ALIGNMENT PROCEDURE

ADJUSTING THE SQUELCH (MUTING)

The MUTING is related with the AUTO-Tuning. Accordingly, when the AUTO-Tuning is correctly adjusted, the MUTING is so adjusted. In this case, it is only necessary to make sure that the MUTING is properly adjusted.

STEP	AUTO TUNING	DUMMY ANTENNA	FM SSG		OUTPUT INDICATOR	REMARKS
			COUPLING	INPUT SIGNAL		
1	MANUAL	300 ohm Carbon Resistor	FM ANT Terminal	98 MHz (400 Hz. Mod.) 10 μ V	Oscilloscope at jack of TAPE REC	Check to be seen Waveform
2	AUTO	300 ohm Carbon Resistor	FM ANT Terminal	98 MHz (400 Hz. Mod.) 14 μ V	Oscilloscope at jack of TAPE REC	Check to be seen Waveform

FM MPX ALIGNMENT PROCEDURE

(a) SCA FILTER

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

STEP	AUDIO SIGNAL GENERATOR COUPLING	AUDIO SIGNAL GENERATOR FREQUENCY	AC VTVM & OSCILLO- SCOPE COUPLING	ADJUST	REMARKS
1	High side to (B) Low side to chassis	72 kHz (0.7V)	High side to (C) Low side to chassis	(UA1405K3) Lc 7	Minimum Deflection
2	High side to (B) Low side to chassis	66 kHz (0.7V)	High side to (C) Low side to chassis	(UA1405K3) CTc 1	Minimum Deflection

ALIGNMENT PROCEDURE

(b) MPX

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

STEP	ALIGN	COUPL- ING	FM SSG		19 kHz PILOT CARRIER SWITCH	AC VTVM & OSCILLOSCOPE CONNECTION	ADJUST	REMARKS
			MODULA- TION FRE- QUENCY	INPUT SELEC- TOR				
1	19 kHz STAGE	FM Antenna terminal	OFF	OFF	ON	High side to (D) Low side to chassis	(UA1405K3) Lc1, Lc2 Lc3	Maximum Deflec- tion
2	38 kHz STAGE	FM Antenna terminal	400 Hz (Mod.)	L + R or REVERSE	ON	Left or Right jack of TAPE REC.	(UA1405K3) Lc3	To obtain a stable wave form at 400 Hz on Oscilloscope
3	SEPARA- TION CONTROL	FM Antenna terminal	98 MHz 2kHz(Mod.) 67.5 kHz (Dev.) ImV(Input)	LEFT	ON	Left jack of TAPE REC. output	(UA1342K2) VRc5	Minimum Deflec- tion
4	SEPARA- TION CONTROL	FM Antenna terminal	98 MHz 2kHz(Mod.) 67.5 kHz (Dev.) ImV(Input)	RIGHT	ON	Left jack of TAPE REC. output	(UA1342K2) VRc5	Minimum Deflec- tion
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, Peak Responcing Volt Meter (STEP 10 ~ 15).
 Selector SW: Always place in AM position, AUTO TUNING in "MANUAL".
 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
			COUPL-ING	FRE-QUENCY				
1	IFT	Direct	AM ANT Terminals	455 kHz (400 Hz 30% AM)	Any non-interfering setting	Tuning Indicator, VTVM & Oscilloscope	(UA1226K) Lb9, Lb11 Top & Bottom	Maximum Deflection
2	OSC		AM ANT Terminals	600 kHz (400 Hz 30% AM)	600 kHz	Tuning Indicator, VTVM & Oscilloscope	(UA1226K) Lb12	Maximum Deflection
3	OSC		AM ANT Terminals	1,400 kHz (400 Hz 30% AM)	1,400 kHz	Tuning Indicator, VTVM & Oscilloscope	(UA1131K) 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	(UA1226K) Lb9	Maximum Deflection
6	RF AMP.		AM ANT Terminals	1,400 kHz (400 Hz 30% AM)	1,400 kHz	Tuning Indicator, VTVM & Oscilloscope	(UA1131K) CTa7	Maximum Deflection
7	ANT CIRCUIT		AM ANT Terminals	600 kHz (400 Hz 30% AM)	600 kHz	Tuning Indicator, VTVM & Oscilloscope	(UA1226K) Lb9 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	(UA1131K) CTa6, 7	Maximum Deflection
9	Repeat steps 5 ~ 8 until no further improvement is possible.							
*	Before adjusting, looking at front of Amplifier, VRb6 in UA1226K Sets Counterclockwise.							
STEP	AUTO TUNING	DUMMY ANTENNA	AM SG		TUNING DIAL SETTING	OUTPUT INDICATOR	ADJUST	REMARKS
			COUPL-ING	FRE-QUENCY				
10	MANUAL	Direct	AM ANT Terminals	1 MHz 30 μ V	1 MHz	VTVM at Terminal No. 6 in UA1405K3	(UA1226K) Lb13	Macimum Deflection
11	MANUAL	Direct	AM ANT Terminals	1 MHz 3mV	1 MHz	VTVM at Terminal No. 6 in UA1405K3		Remember the output
12	MANUAL	Direct	AM ANT Terminals	1 MHz 30 μ V	1 MHz	VTVM at Terminal No. 6 in UA1405K3	(UA1226K) VRb5	Set the output to a half of the step 2
13	MANUAL	Direct	AM ANT Terminals	1 MHz 30 μ V	1 MHz	VTVM at Terminal No. 7 in UA1405K3	(UA1226K) VRb6	Set the output to more than 10V
14	MANUAL	Direct	AM ANT Terminals	1 MHz 100mV	1 MHz	TUNING METER	(UA1226K) VRb4	4, 5 Indicates
15	AUTO	Direct	AM ANT Terminals	1 MHz Input of the half of TUNING METER	1 MHz	TUNING METER	(UA1226K) Lb14 Top	4, 5 Indicates

PROCEDURE FOR REPLACING OUTPUT TRANSISTOR

Symptoms:

- A. When there is load hum at the speakers.
- B. When there is no output at all.
- C. When you cannot get rated output.

Replacing Method:

Replace all the four transistors 2SC898R.

Testing Procedures:

Until replacement is completed, do not operate the set the unit without first testing.

Perform the test according to the following procedures.

1. Using variable transformer, lower the AC line voltage to approximately 30 volts.
2. Using a tester, measure the voltage between the chassis and "collector" of the power transistor Q1 or Q4.
If a tester indicates approximately 100V, it is normal.
3. Also measure the voltage between the chassis and "collector" of the power transistor Q2 or Q3.
If a tester indicates approximately 50V, it is normal.

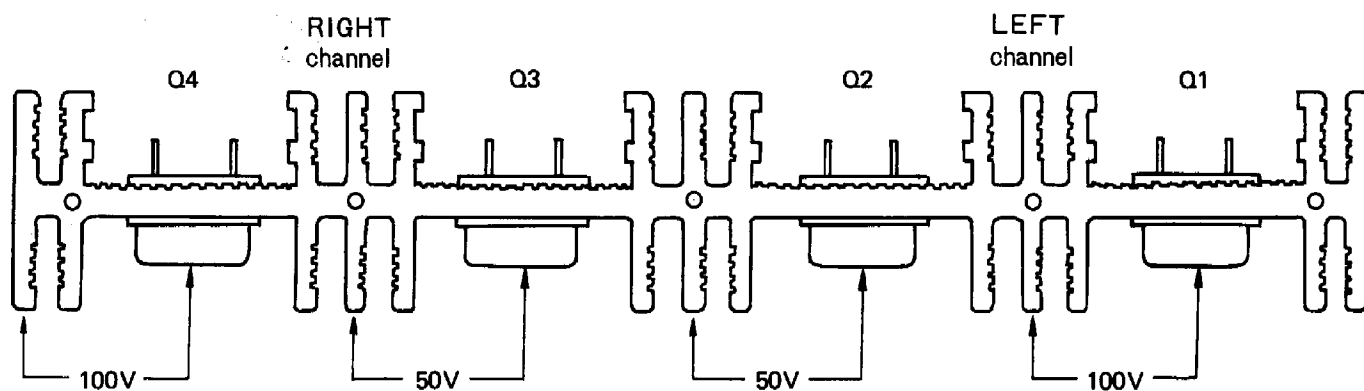
Protection Adjustment Procedures:

The protection circuit in "UA1391K" is a non-adjustment circuit. But, check the circuit for normal operation as follows for cautions sake;

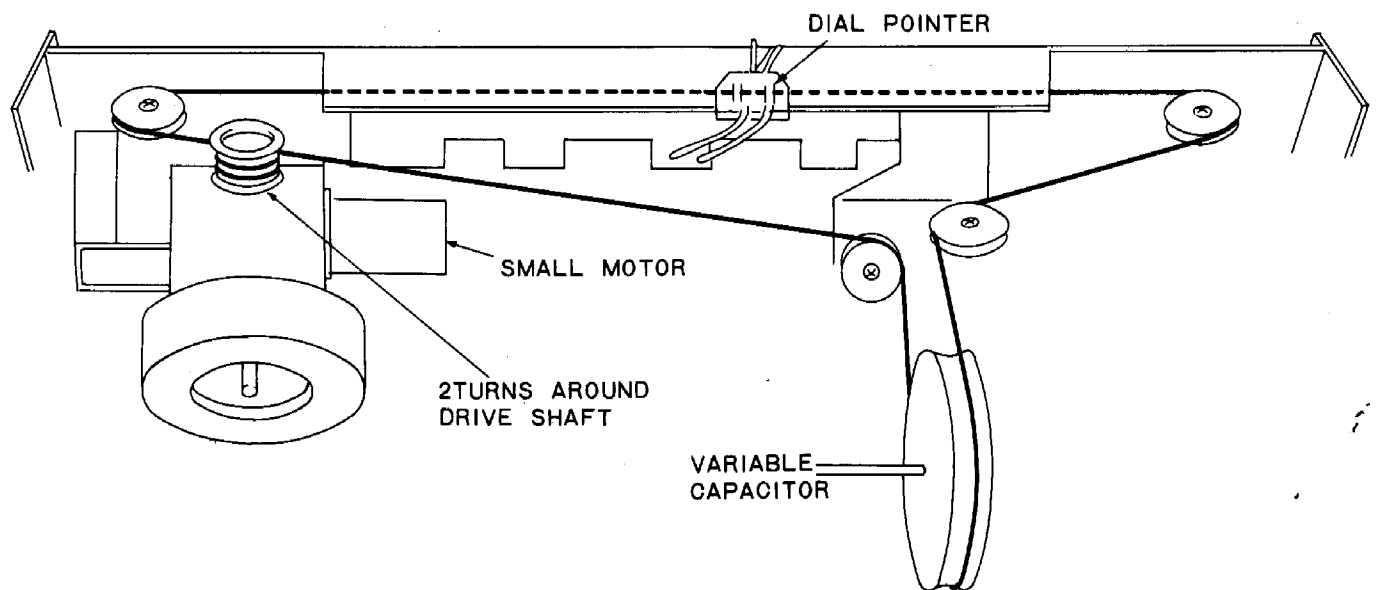
With a 8 ohms dummy load and an oscilloscope connected in parallel to the output terminal, place the controls on "KR-7070" in their normal positions.

Apply a signal of 1,000 Hz to the input and adjustment the volume control until "UA1391K" provides an output of 10 W as measured across the dummy load.

Try to short across the dummy and then restore it to the normal connection under the above conditions and check to see that the scope sweeps with no waveform once and then with the waveform represented, thereby showing that the protection circuit is operated normally. If the protection circuit fails to operate, turn off the power switch immediately, otherwise the final stage transistors may be damaged. And then check transistors, Qe11 ~ 14 and Diodes, De1, 2 whether they are good or not.



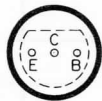
DIAL CORD STRINGING



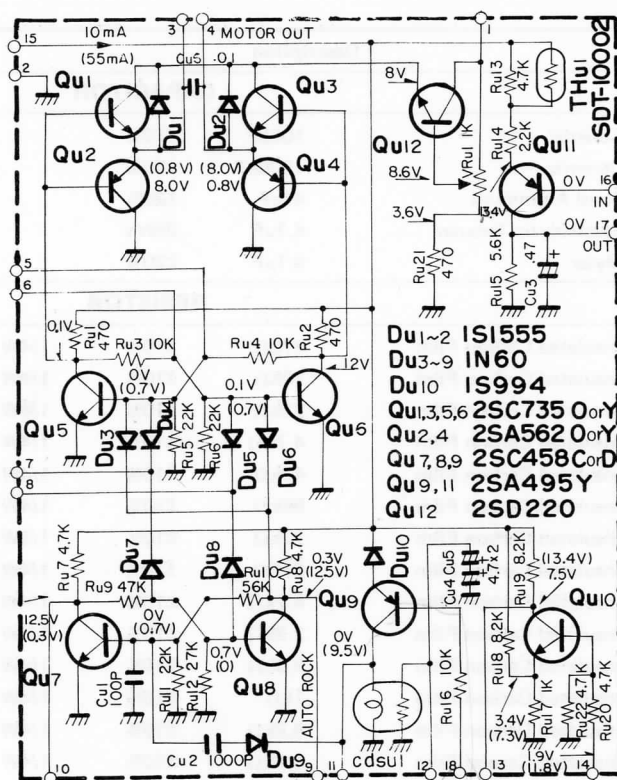
SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTORS

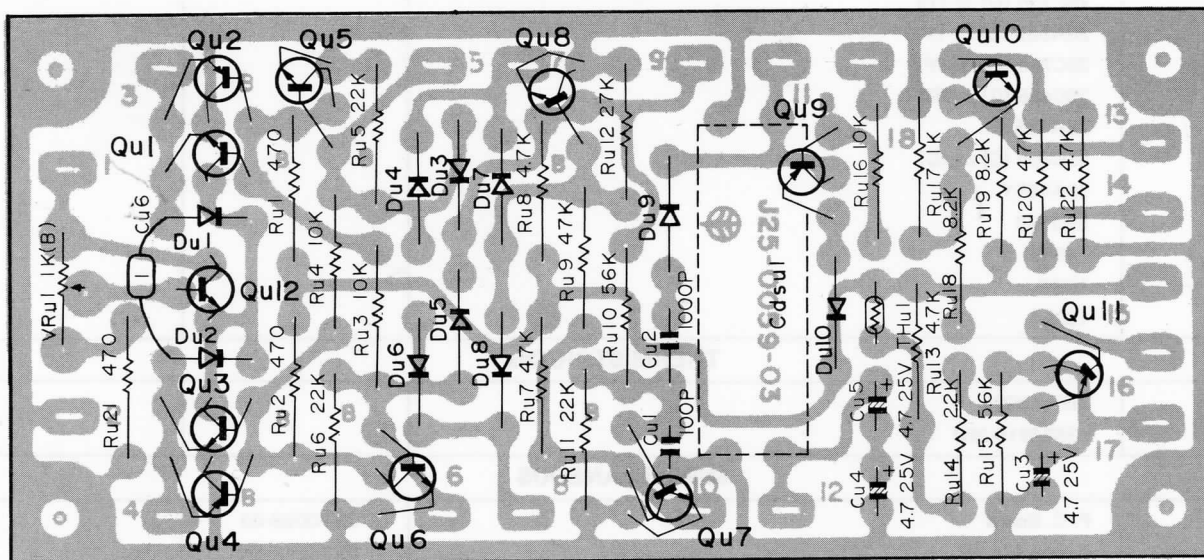
2SA562
2SC735



2SC458



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qu1,3,5 2SC735(O) or (Y). Qu2,4 2SA562(O) or (Y). Qu7,8,10 2SC458(C) or (D). Qu9,11 2SA-495Y. Qu12 2SD220. Du1,2 ISI555. Du3~9 IN 60. Du10 IS994

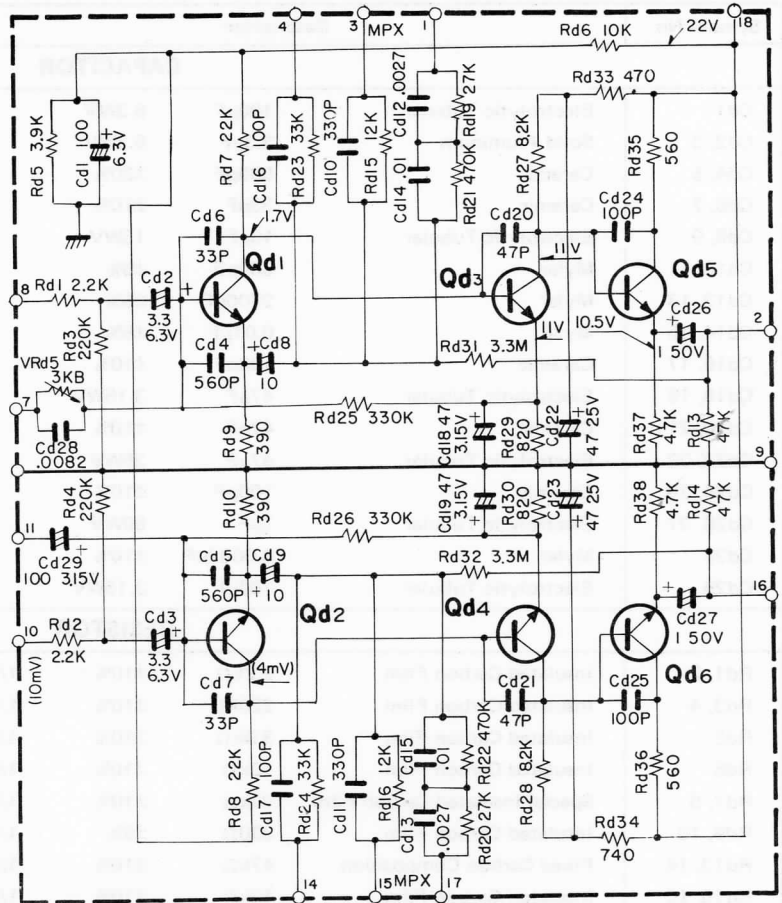
PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Remarks
CAPACITOR			
Cu1	Ceramic 100pF $\pm 10\%$		
Cu2	Ceramic 1000pF $\pm 20\%$		
Cu3	Solid Aluminum 47 μ F $\pm 20\%$		
Cu4, 5	Electrolytic Tubular 4.7 μ F 25WV		
Cu6	Mylar 0.1 μ F $\pm 20\%$		
RESISTOR			
Ru1, 2	Insulated Carbon Film 470 Ω $\pm 10\%$ 1/4W		
Ru3, 4	Insulated Carbon Film 10k Ω $\pm 10\%$ 1/4W		
Ru5, 6	Insulated Carbon Film 22k Ω $\pm 10\%$ 1/4W		
Ru7, 8	Insulated Carbon Film 4.7k Ω $\pm 10\%$ 1/4W		
Ru9	Insulated Carbon Film 47k Ω $\pm 10\%$ 1/4W		
Ru10	Insulated Carbon Film 56k Ω $\pm 10\%$ 1/4W		
Ru11	Insulated Carbon Film 22k Ω $\pm 10\%$ 1/4W		
Ru12	Insulated Carbon Film 27k Ω $\pm 10\%$ 1/4W		
Ru13	Insulated Carbon Film 4.7k Ω $\pm 10\%$ 1/4W		
Ru14	Insulated Carbon Film 2.2k Ω $\pm 10\%$ 1/4W		
Ru15	Insulated Carbon Film 5.6k Ω $\pm 10\%$ 1/4W		
Ru17	Insulated Carbon Film 1k Ω $\pm 10\%$ 1/4W		
Ru18, 19	Insulated Carbon Film 8.2k Ω $\pm 10\%$ 1/4W		
Ru20	Insulated Carbon Film 4.7k Ω $\pm 10\%$ 1/4W		
Ru21	Insulated Carbon Film 470 Ω $\pm 10\%$ 1/4W		
Ru22	Insulated Carbon Film 4.7k Ω $\pm 10\%$ 1/4W		
VRu1	Potentiometer 1k Ω (B)	R10-73	
TRANSISTOR/DIODE			
Qu1	2SC735 (O) or (Y)		
Qu2	2SA562 (O) or (Y)		
Qu3	2SC735 (O) or (Y)		
Qu4	2SA562 (O) or (Y)		
Qu5, 6	2SC735 (O) or (Y)		
Qu7, 8	2SC458 (C) or (D)		
Qu9	2SA495Y		
Qu10	2SC458 (C) or (D)		
Qu11	2SA495Y		
Qu12	2SD220		
Du1, 2	1S555		
Du3~9	1N60		
D10	1S994		
THERMISTOR/Cds			
THu1	SDT-1000L		
Cdsu1	P388-W10-380		
MISCELLANEOUS			
—	P. C. Board	J25-0059-03	
—	Terminal x 18	E23-0005-04	

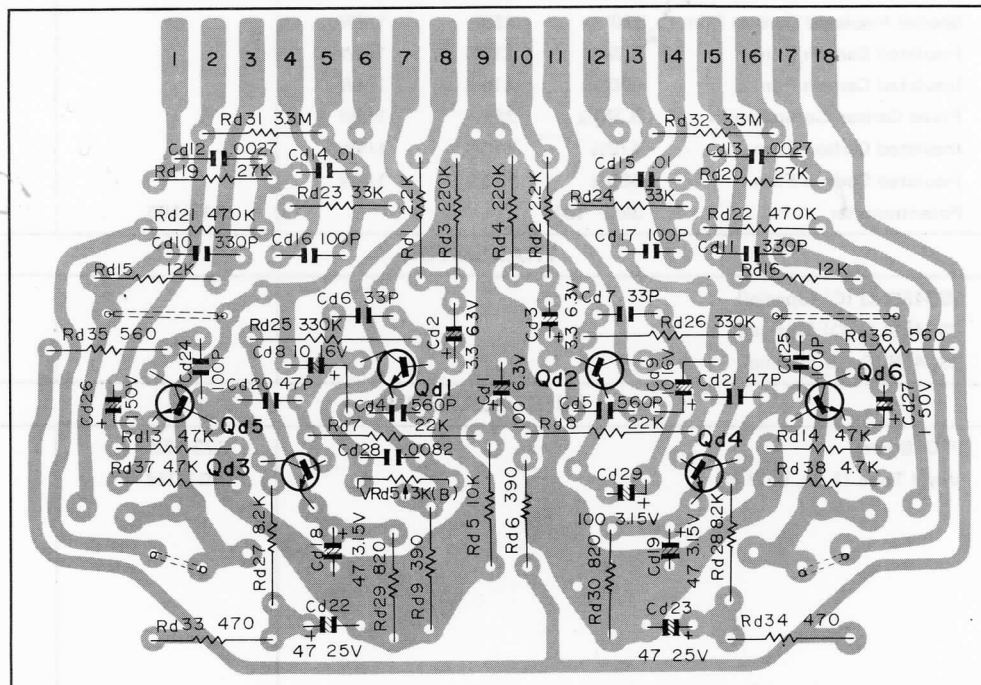
SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTORS

2SC458LG(C), (D)



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qd1,2,5,6 2SC458LG(C). Qd3,4 2SC458LG(D).

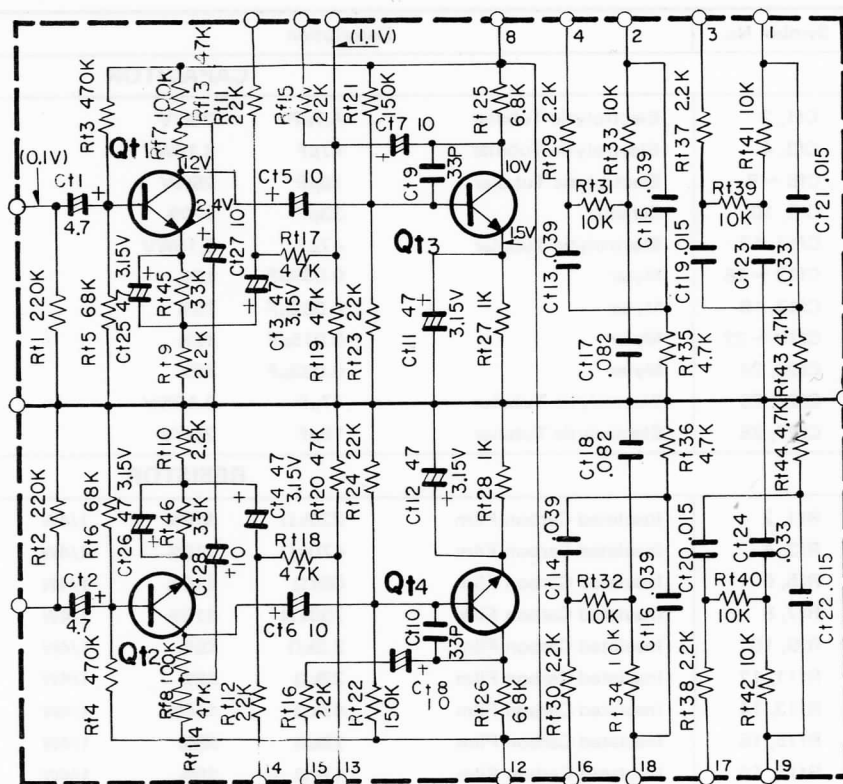
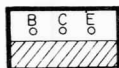
PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Remarks
CAPACITOR			
Cd1	Electrolytic Tubular 100 μ F 6.3WV		
Cd2, 3	Solid Aluminum 3.3 μ F 6.3WV		
Cd4, 5	Ceramic 560pF $\pm$ 20%		
Cd6, 7	Ceramic 33pF $\pm$ 10%		
Cd8, 9	Electrolytic Tubular 10 μ F 15WV		
Cd10, 11	Mylar 330pF $\pm$ 5%		
Cd12, 13	Mylar 2700pF $\pm$ 5%		
Cd14, 15	Mylar 0.01 μ F $\pm$ 5%		
Cd16, 17	Ceramic 100pF $\pm$ 10%		
Cd18, 19	Electrolytic Tubular 47 μ F 3.15WV		
Cd20, 21	Ceramic 47pF $\pm$ 10%		
Cd22, 23	Electrolytic Tubular 47 μ F 25WV		
Cd24, 25	Ceramic 100pF $\pm$ 10%		
Cd26, 27	Electrolytic Tubular 1 μ F 50WV		
Cd28	Mylar 0.0082 μ F $\pm$ 10%		
Cd29	Electrolytic Tubular 100 μ F 3.15WV		
RESISTOR			
Rd1, 2	Insulated Carbon Film 2.2k Ω $\pm$ 10% 1/4W		
Rd3, 4	Insulated Carbon Film 220k Ω $\pm$ 10% 1/4W		
Rd5	Insulated Carbon Film 3.9k Ω $\pm$ 10% 1/4W		
Rd6	Insulated Carbon Film 10k Ω $\pm$ 10% 1/4W		
Rd7, 8	Special Insulated Carbon Film 22k Ω $\pm$ 10% 1/4W		
Rd9, 10	Insulated Carbon Film 390 Ω $\pm$ 5% 1/4W		
Rd13, 14	Fixed Carbon Composition 47k Ω $\pm$ 10% 1/4W		
Rd15, 16	Insulated Carbon Film 12k Ω $\pm$ 10% 1/4W		
Rd19, 20	Special Insulated Carbon Film 27k Ω $\pm$ 5% 1/4W		
Rd21, 22	Special Insulated Carbon Film 470k Ω $\pm$ 5% 1/4W		
Rd23, 24	Special Insulated Carbon Film 33k Ω $\pm$ 5% 1/4W		
Rd25, 26	Special Insulated Carbon Film 330k Ω $\pm$ 5% 1/4W		
Rd27, 28	Insulated Carbon Film 8.2k Ω $\pm$ 10% 1/4W		
Rd29, 30	Insulated Carbon Film 820 Ω $\pm$ 10% 1/4W		
Rd31, 32	Fixed Carbon Composition 3.3M Ω $\pm$ 5% 1/2W		
Rd33, 34	Insulated Carbon Film 470 Ω $\pm$ 10% 1/4W		
Rd35, 36	Insulated Carbon Film 560 Ω $\pm$ 10% 1/4W		
VRd5	Potentiometer 3k Ω (B)	R10-106	
TRANSISTOR			
Qd1, 2	2SC458LG (C) (Special)		
Qd3, 4	2SC458LG (D) (Special)		
Qd5, 6	2SC458LG (C) (Special)		
MISCELLANEOUS			
—	P. C. Board	S23-178	
—	Vinyl Tube (1.0 ϕ , 0.07 m)	W07-014	

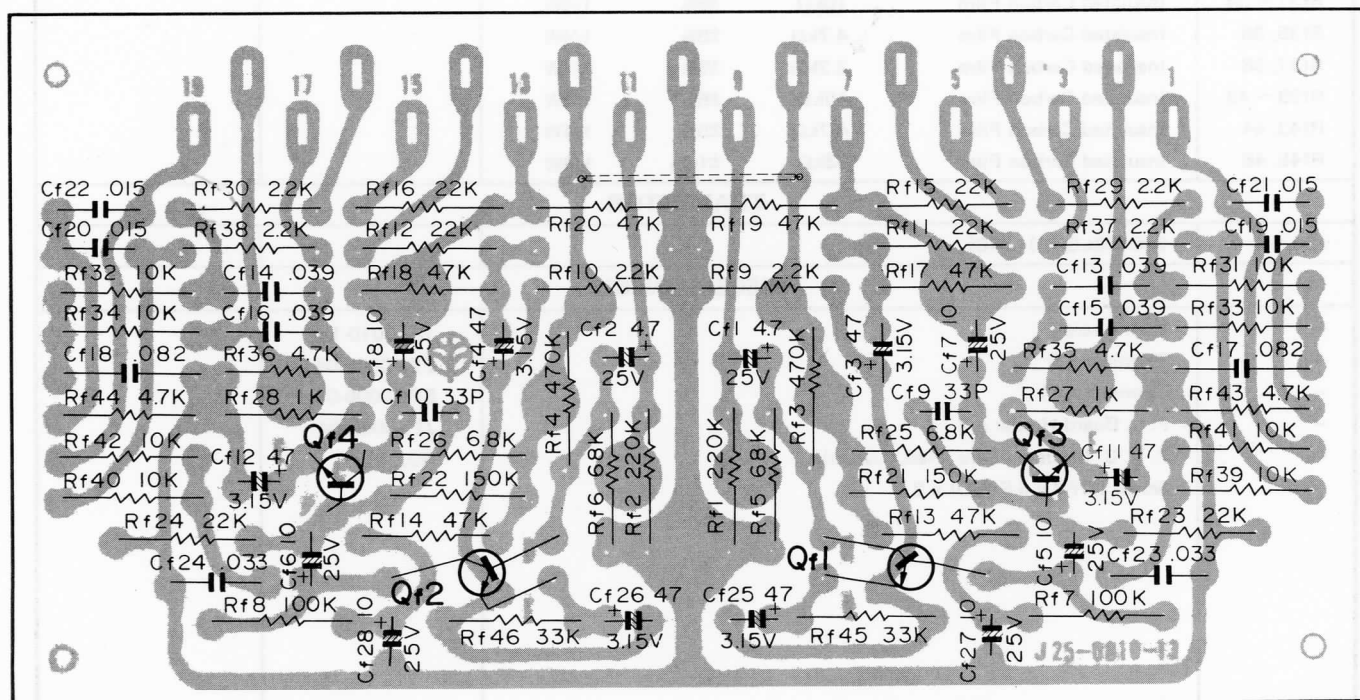
SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTORS

2SC458LG



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qf1~4 2SC458LG(B) or (C).

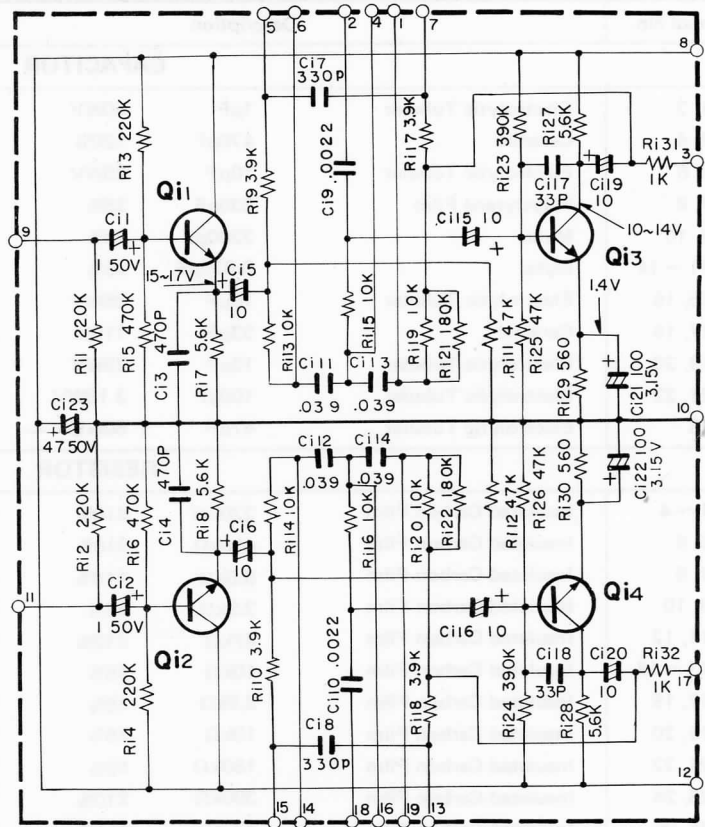
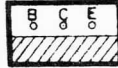
PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Remarks
CAPACITOR			
Cf1, 2	Electrolytic Tubular 4.7 μ F 25WV		
Cf3, 4	Electrolytic Tubular 47 μ F 3.15WV		
Cf5 ~ 8	Electrolytic Tubular 10 μ F 25WV		
Cf9, 10	Ceramic 33pF $\pm$ 20%		
Cf11, 12	Electrolytic Tubular 47 μ F 3.15WV		
Cf13 ~ 16	Mylar 0.039 μ F $\pm$ 5%		
Cf17, 18	Mylar 0.082 μ F $\pm$ 5%		
Cf19 ~ 22	Mylar 0.015 μ F $\pm$ 5%		
Cf23, 24	Mylar 0.033 μ F $\pm$ 5%		
Cf25, 26	Electrolytic Tubular 47 μ F 3.15WV		
Cf27, 28	Electrolytic Tubular 10 μ F 25WV		
RESISTOR			
Rf1, 2	Insulated Carbon Film 220k Ω $\pm$ 10% 1/4W		
Rf3, 4	Insulated Carbon Film 470k Ω $\pm$ 10% 1/4W		
Rf5, 6	Insulated Carbon Film 68k Ω $\pm$ 10% 1/4W		
Rf7, 8	Insulated Carbon Film 700k Ω $\pm$ 10% 1/4W		
Rf9, 10	Insulated Carbon Film 2.2k Ω $\pm$ 5% 1/4W		
Rf11, 12	Insulated Carbon Film 22k Ω $\pm$ 5% 1/4W		
Rf13, 14	Insulated Carbon Film 47k Ω $\pm$ 10% 1/4W		
Rf15, 16	Insulated Carbon Film 22k Ω $\pm$ 5% 1/4W		
Rf17, 18	Insulated Carbon Film 47k Ω $\pm$ 5% 1/4W		
Rf19, 20	Insulated Carbon Film 47k Ω $\pm$ 10% 1/4W		
Rf21, 22	Insulated Carbon Film 150k Ω $\pm$ 10% 1/4W		
Rf23, 24	Insulated Carbon Film 22k Ω $\pm$ 10% 1/4W		
Rf25, 26	Insulated Carbon Film 68k Ω $\pm$ 10% 1/4W		
Rf27, 28	Insulated Carbon Film 1k Ω $\pm$ 10% 1/4W		
Rf29, 30	Insulated Carbon Film 2.2k Ω $\pm$ 5% 1/4W		
Rf31 ~ 34	Insulated Carbon Film 10k Ω $\pm$ 5% 1/4W		
Rf35, 36	Insulated Carbon Film 4.7k Ω $\pm$ 5% 1/4W		
Rf37, 38	Insulated Carbon Film 2.2k Ω $\pm$ 5% 1/4W		
Rf39 ~ 42	Insulated Carbon Film 10k Ω $\pm$ 5% 1/4W		
Rf43, 44	Insulated Carbon Film 4.7k Ω $\pm$ 5% 1/4W		
Rf45, 46	Insulated Carbon Film 33k Ω $\pm$ 10% 1/4W		
TRANSISTOR			
Qf1 ~ 4	2SC458LG (B) or (C)		
MISCELLANEOUS			
—	P. C. Board	J25-0010-13	
—	Terminal x 8	E23-0004-04	
—	Terminal x 11	E23-0005-04	
—	P. C. Board Holder x 2	J21-0065-04	
—	P. V. C. Insulated Wire (Red, 0.03 m)	W32-52	
—	Screw (⊙P3 x 6-F-ISO) x 2		

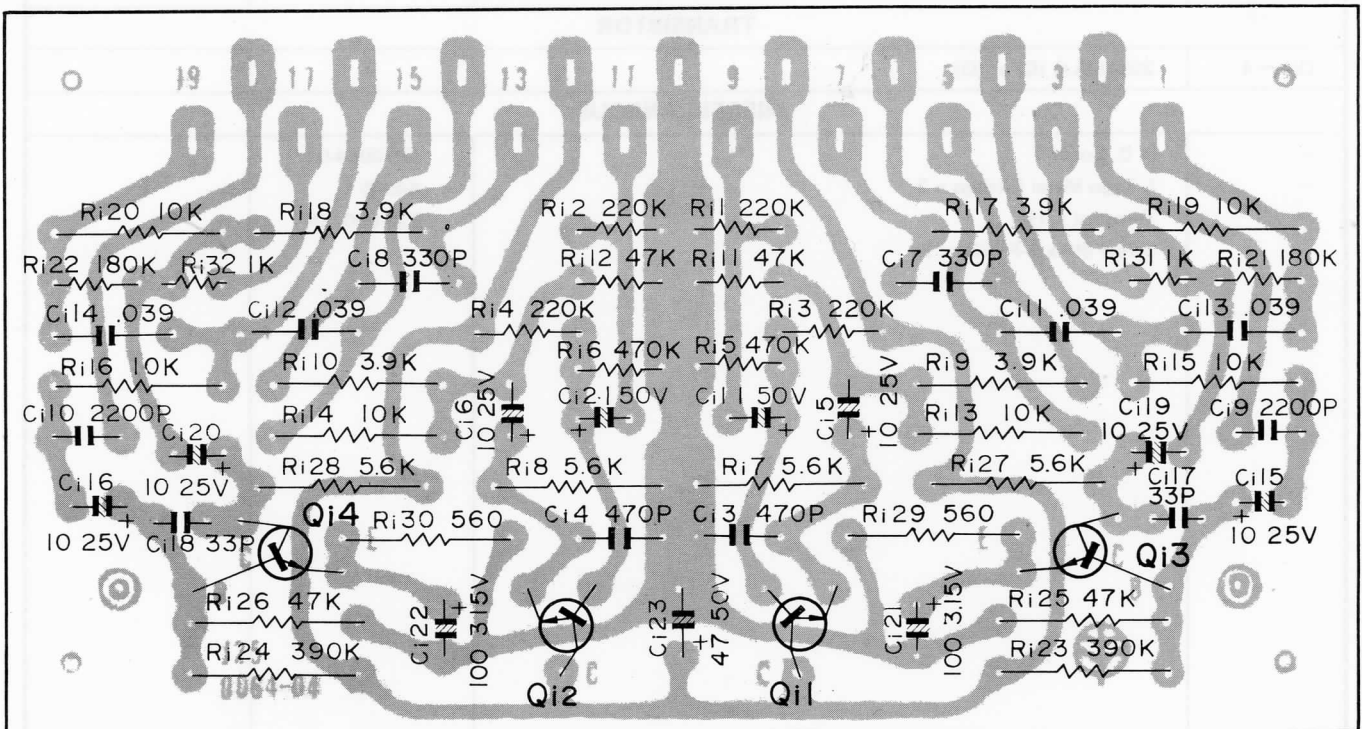
SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTORS

2SC458LG(C), (D)



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Q11~4 2SC458LG(D) or (C).

PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Remarks
CAPACITOR			
Ci1, 2	Electrolytic Tubular 1 μ F 50WV		
Ci3, 4	Ceramic 470pF $\pm$ 20%		
Ci5, 6	Electrolytic Tubular 10 μ F 25WV		
Ci7, 8	Polystyrene Film 330pF $\pm$ 5%		
Ci9, 10	Mylar 2200pF $\pm$ 5%		
Ci11 ~ 14	Mylar 0.039 μ F $\pm$ 5%		
Ci15, 16	Electrolytic Tubular 10 μ F 25WV		
Ci17, 18	Ceramic 33pF $\pm$ 10%		
Ci19, 20	Electrolytic Tubular 10 μ F 25WV		
Ci21, 22	Electrolytic Tubular 100 μ F 3.15WV		
Ci23	Electrolytic Tubular 47 μ F 50WV		
RESISTOR			
Ri1 ~ 4	Insulated Carbon Film 220k Ω $\pm$ 10% 1/4W		
Ri5, 6	Insulated Carbon Film 470k Ω $\pm$ 10% 1/4W		
Ri7, 8	Insulated Carbon Film 5.6k Ω $\pm$ 10% 1/4W		
Ri9, 10	Insulated Carbon Film 3.9k Ω $\pm$ 5% 1/4W		
Ri11, 12	Insulated Carbon Film 47k Ω $\pm$ 10% 1/4W		
Ri13 ~ 16	Insulated Carbon Film 10k Ω $\pm$ 5% 1/4W		
Ri17, 18	Insulated Carbon Film 3.9k Ω $\pm$ 5% 1/4W		
Ri19, 20	Insulated Carbon Film 10k Ω $\pm$ 5% 1/4W		
Ri21, 22	Insulated Carbon Film 180k Ω $\pm$ 5% 1/4W		
Ri23, 24	Insulated Carbon Film 390k Ω $\pm$ 10% 1/4W		
Ri25, 26	Insulated Carbon Film 47k Ω $\pm$ 10% 1/4W		
Ri27, 28	Insulated Carbon Film 5.6k Ω $\pm$ 10% 1/4W		
Ri29, 30	Insulated Carbon Film 560 Ω $\pm$ 10% 1/4W		
Ri31, 32	Insulated Carbon Film 1k Ω $\pm$ 10% 1/4W		
TRANSISTOR			
Qi1 ~ 4	2SC458LG (C) or (D)		
MISCELLANEOUS			
—	P. C. Board	J25-0064-04	
—	L Type Metal Fittings x 2	A4986	
—	Terminal x 19	E23-0004-04	
—	Screw (P3x 6-F-ISO) x 2		

SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTORS

2SC734Y

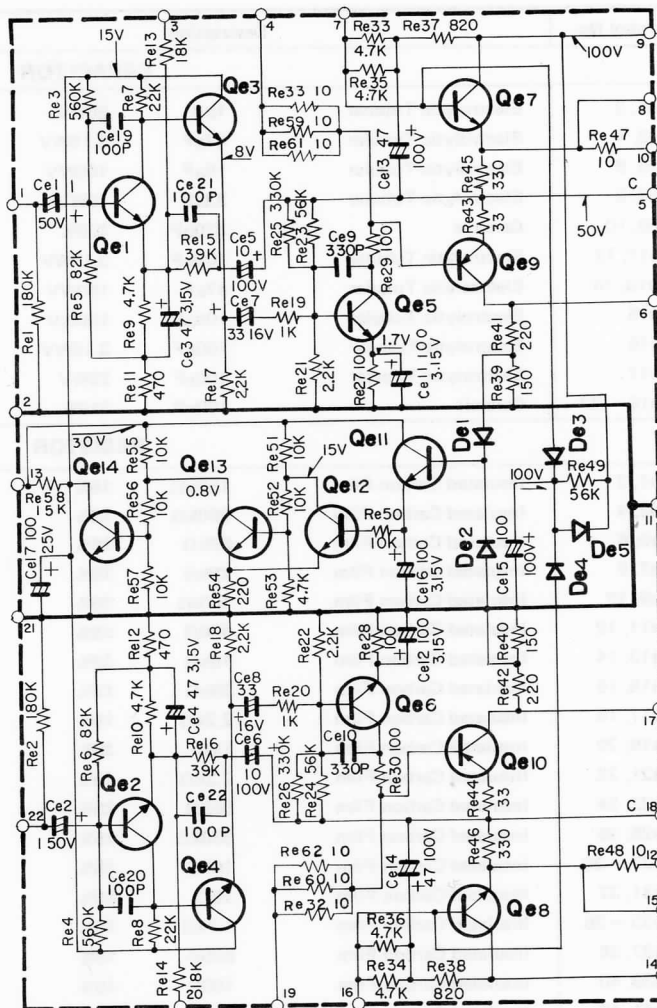


2SA484
2SC484
2SC627

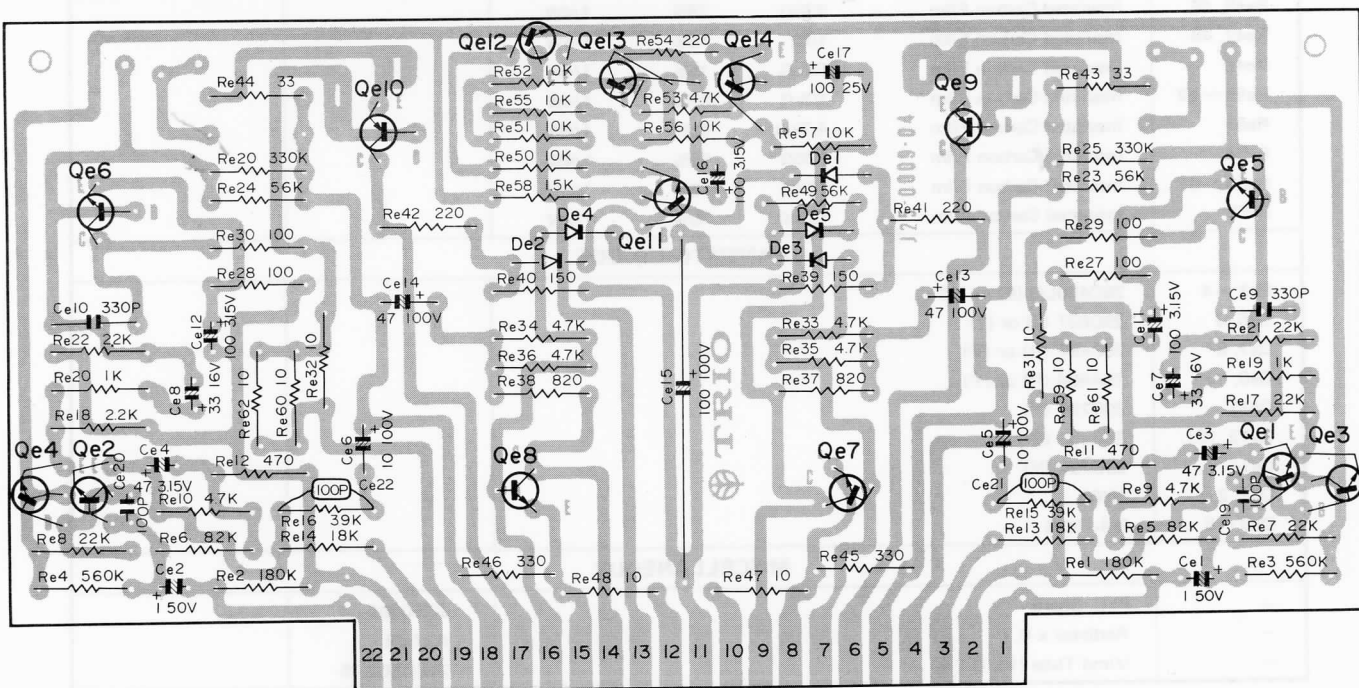


CASE
COLLECTOR

2SC458



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS

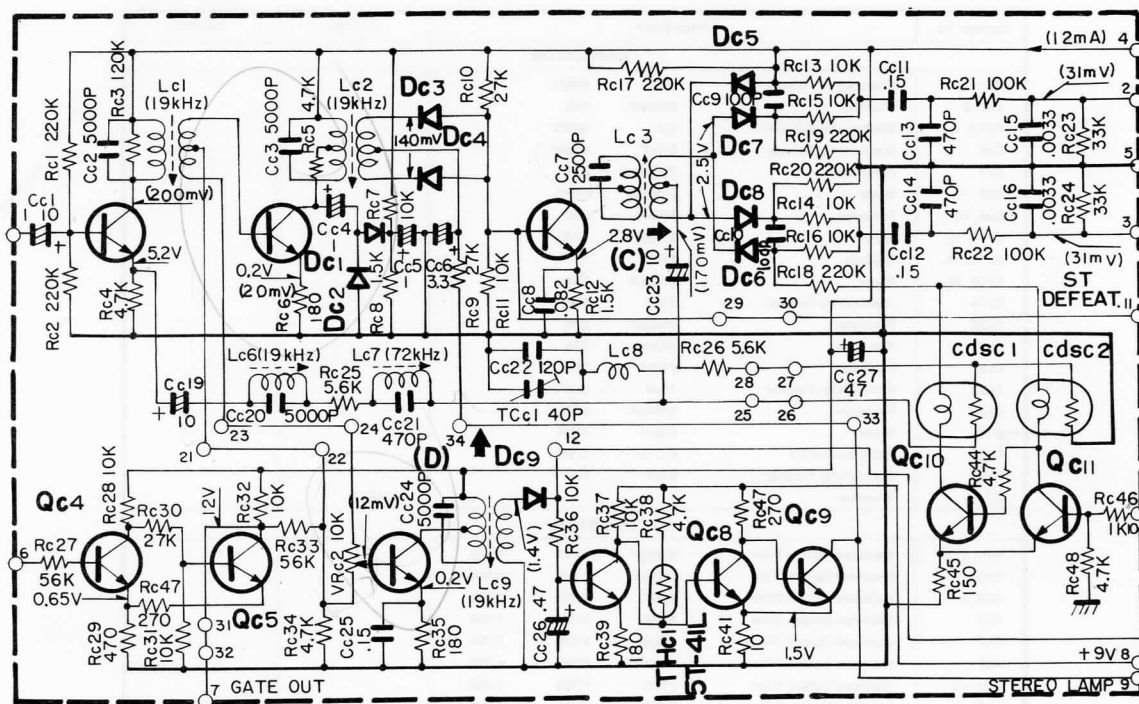


Qe1~4 2SC458LG(B)or(C). Qe5,6 2SC627(1)or(2). Qe7,8 2SC484(R)or(Y). Qe9,10 2SA484(R)or(Y). Qe11 2SC734Y. Qe12,13 2SC458C
Qe14 2SC734(Y). De1,2 1N 60. De3 5 SM-150-S.

PARTS DESCRIPTION LIST

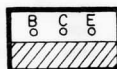
Symbol No.	Description	Part No.	Remarks
CAPACITOR			
Ce1, 2	Electrolytic Tubular 1 μ F 50WV		
Ce3, 4	Electrolytic Tubular 47 μ F 3.15WV		
Ce5, 6	Electrolytic Tubular 10 μ F 100WV		
Ce7, 8	Electrolytic Tubular 33 μ F 16WV		
Ce9, 10	Ceramic 330pF $\pm$ 20%		
Ce11, 12	Electrolytic Tubular 100 μ F 3.15WV		
Ce13, 14	Electrolytic Tubular 47 μ F 100WV		
Ce15	Electrolytic Tubular 100 μ F 100WV		
Ce16	Electrolytic Tubular 100 μ F 3.15WV		
Ce17	Electrolytic Tubular 100 μ F 25WV		
Ce19 ~ 22	Ceramic 100pF $\pm$ 10%		
RESISTOR			
Re1, 2	Insulated Carbon Film 180k Ω $\pm$ 5% 1/4W		
Re3, 4	Insulated Carbon Film 560k Ω $\pm$ 5% 1/4W		
Re5, 6	Insulated Carbon Film 82k Ω $\pm$ 5% 1/4W		
Re7, 8	Insulated Carbon Film 22k Ω $\pm$ 5% 1/4W		
Re9, 10	Insulated Carbon Film 4.7k Ω $\pm$ 5% 1/4W		
Re11, 12	Insulated Carbon Film 470 Ω $\pm$ 5% 1/4W		
Re13, 14	Insulated Carbon Film 18k Ω $\pm$ 5% 1/4W		
Re15, 16	Insulated Carbon Film 39k Ω $\pm$ 5% 1/4W		
Re17, 18	Insulated Carbon Film 2.2k Ω $\pm$ 5% 1/4W		
Re19, 20	Insulated Carbon Film 1k Ω $\pm$ 5% 1/4W		
Re21, 22	Insulated Carbon Film 2.2k Ω $\pm$ 5% 1/4W		
Re23, 24	Insulated Carbon Film 56k Ω $\pm$ 5% 1/4W		
Re25, 26	Insulated Carbon Film 330k Ω $\pm$ 5% 1/4W		
Re27 ~ 30	Insulated Carbon Film 100 Ω $\pm$ 5% 1/4W		
Re31, 32	Insulated Carbon Film 10 Ω $\pm$ 5% 1/4W		
Re33 ~ 36	Insulated Carbon Film 4.7k Ω $\pm$ 5% 1/4W		
Re37, 38	Insulated Carbon Film 820 Ω $\pm$ 5% 1/2W		
Re39, 40	Insulated Carbon Film 150 Ω $\pm$ 5% 1/4W		
Re41, 42	Insulated Carbon Film 220 Ω $\pm$ 5% 1/4W		
Re43, 44	Insulated Carbon Film 33 Ω $\pm$ 5% 1/2W		
Re45, 46	Insulated Carbon Film 330 Ω $\pm$ 5% 1/4W		
Re47, 48	Insulated Carbon Film 10 Ω $\pm$ 5% 1/4W		
Re49	Insulated Carbon Film 56k Ω $\pm$ 5% 1/4W		
Re50 ~ 52	Insulated Carbon Film 10k Ω $\pm$ 5% 1/4W		
Re53	Insulated Carbon Film 4.7k Ω $\pm$ 5% 1/4W		
Re54	Insulated Carbon Film 220 Ω $\pm$ 5% 1/4W		
Re55 ~ 57	Insulated Carbon Film 10k Ω $\pm$ 5% 1/4W		
Re58	Insulated Carbon Film 1.5k Ω $\pm$ 5% 1/2W		
TRANSISTOR/DIODE			
Qe1 ~ 4	2SC458LG (B) or (C)		
Qe5, 6	2SC627 (1) or (2)		
Qe7, 8	2SC484 (R) or (Y)		
Qe9, 10	2SA484 (R) or (Y)		
Qe11	2SC734 (Y)		
Qe12, 13	2SC458 (C)		
Qe14	2SC734 (Y)		
De1, 2	1N60		
De3 ~ 5	SM-150-S		
MISCELLANEOUS			
—	P. C. Board	J25-0009-04	
—	Radiator x 6	A27-05	
—	Vinyl Tube (1 ϕ , 0.1 m)	212-1002-05	

SCHEMATIC DIAGRAM

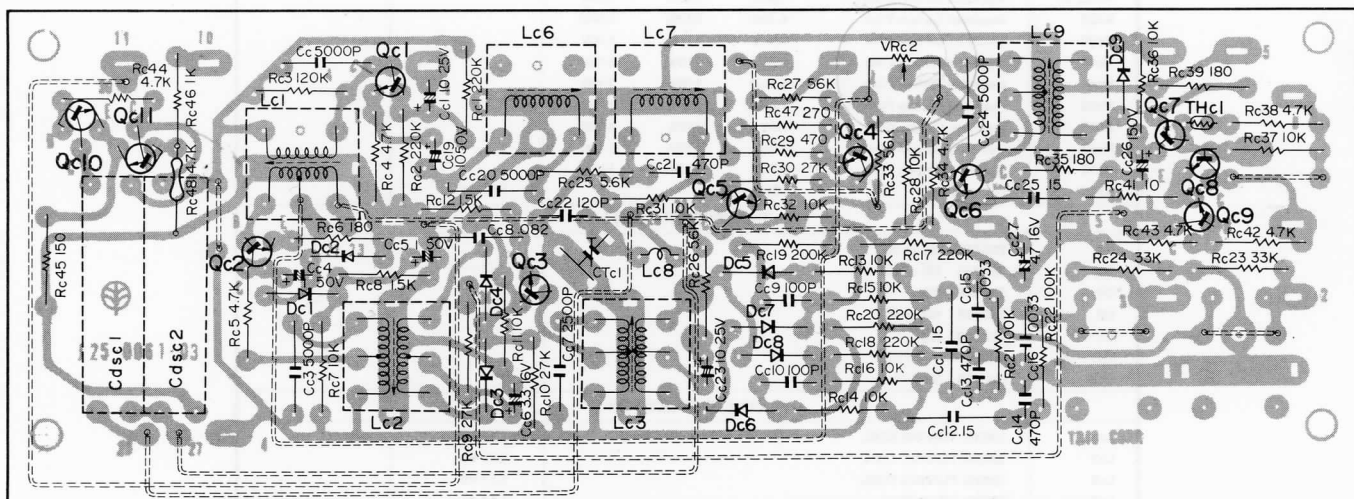


BOTTOM VIEW OF TRANSISTORS

2SC458



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qc1 2SC458L(B) or (C). Qc2,3,10,11 2SC458(B) or (C). Qc4,5,7~9 2SC458(D). Dc1~8 IN60. Dc9 SM-150. THc1 5T-41L.

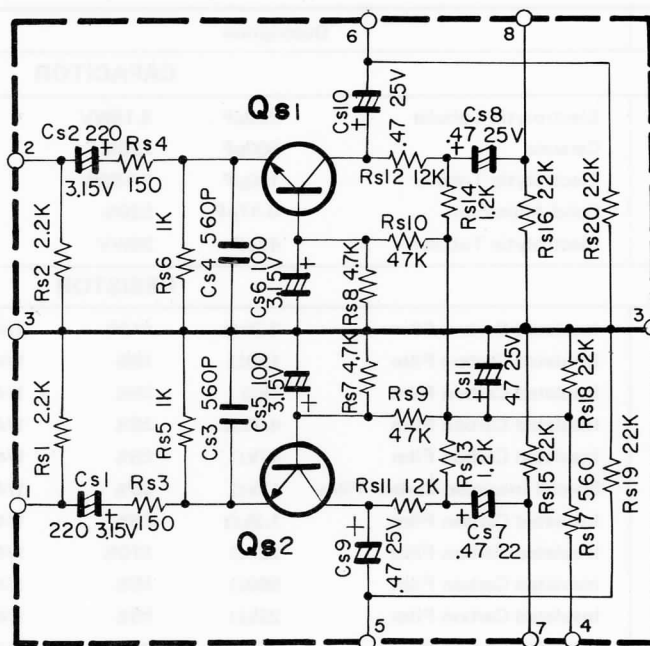
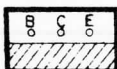
PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Remarks
CAPACITOR			
Cc1	Electrolytic Tubular 10 μ F 50WV		
Cc2, 3	Polyester 5000pF $\pm$ 5%		
Cc4, 5	Electrolytic Tubular 1 μ F 50WV		
Cc6	Electrolytic Tubular 3.3 μ F 50WV		
Cc7	Polyester 25000pF $\pm$ 5%		
Cc8	Myler 0.082 μ F $\pm$ 10%		
Cc9, 10	Polyester 100pF $\pm$ 5%		
Cc11, 12	Myler 0.15 μ F $\pm$ 10%		
Cc13, 14	Ceramic 470pF $\pm$ 10%		
Cc15, 16	Myler 3300pF $\pm$ 5%		
Cc19	Electrolytic Tubular 10 μ F 50WV		
Cc20	Polyester 5000pF $\pm$ 5%		
Cc21	Polyester 470pF $\pm$ 5%		
Cc22	Polyester 120pF $\pm$ 5%		
Cc23	Electrolytic Tubular 10 μ F 50WV		
Cc24	Polyester 5000pF 50WV		
Cc25	Myler 0.5 μ F $\pm$ 10%		
Cc26	Solid Aluminum 0.47 μ F $\pm$ 20%		
Cc27	Electrolytic Tubular 47 μ F 50WV		
CTc1	Trimmer	C4047	
RESISTOR			
Rc1, 2	Insulated Carbon Film 220k Ω $\pm$ 10% 1/4W		
Rc3	Insulated Carbon Film 720k Ω $\pm$ 10% 1/4W		
Rc4, 5	Insulated Carbon Film 4.7k Ω $\pm$ 10% 1/4W		
Rc6	Insulated Carbon Film 180 Ω $\pm$ 10% 1/4W		
Rc7	Insulated Carbon Film 10k Ω $\pm$ 10% 1/4W		
Rc8	Insulated Carbon Film 1.5k Ω $\pm$ 10% 1/4W		
Rc9, 10	Insulated Carbon Film 27k Ω $\pm$ 10% 1/4W		
Rc11	Insulated Carbon Film 10k Ω $\pm$ 10% 1/4W		
Rc12	Insulated Carbon Film 1.5k Ω $\pm$ 10% 1/4W		
Rc13 ~ 16	Insulated Carbon Film 10k Ω $\pm$ 5% 1/4W		
Rc17 ~ 20	Insulated Carbon Film 220k Ω $\pm$ 5% 1/4W		
Rc21, 22	Insulated Carbon Film 100k Ω $\pm$ 5% 1/4W		
Rc23, 24	Insulated Carbon Film 3.3k Ω $\pm$ 5% 1/4W		
Rc25, 26	Insulated Carbon Film 5.6k Ω $\pm$ 10% 1/4W		
Rc27	Insulated Carbon Film 56k Ω $\pm$ 10% 1/4W		
Rc28	Insulated Carbon Film 10k Ω $\pm$ 10% 1/4W		
Rc29	Insulated Carbon Film 470 Ω $\pm$ 10% 1/4W		
Rc30	Insulated Carbon Film 27k Ω $\pm$ 10% 1/4W		
Rc31, 32	Insulated Carbon Film 10k Ω $\pm$ 10% 1/4W		
Rc33	Insulated Carbon Film 56k Ω $\pm$ 10% 1/4W		
Rc34	Insulated Carbon Film 4.7k Ω $\pm$ 10% 1/4W		
Rc35	Insulated Carbon Film 180 Ω $\pm$ 10% 1/4W		
Rc36, 37	Insulated Carbon Film 10k Ω $\pm$ 10% 1/4W		
Rc38	Insulated Carbon Film 4.7k Ω $\pm$ 10% 1/4W		
Rc39	Insulated Carbon Film 180 Ω $\pm$ 10% 1/4W		
Rc41	Insulated Carbon Film 10 Ω $\pm$ 10% 1/4W		
Rc44	Insulated Carbon Film 4.7k Ω $\pm$ 10% 1/4W		
Rc45	Insulated Carbon Film 150 Ω $\pm$ 10% 1/8W		
Rc46	Insulated Carbon Film 1k Ω $\pm$ 10% 1/8W		
Rc47	Insulated Carbon Film 270 Ω $\pm$ 10% 1/8W		
Rc48	Insulated Carbon Film 4.7k Ω $\pm$ 10% 1/4W		
VRc2	Potentiometer 10k Ω (B)	R10-54	
TRANSISTOR/DIODE			
C1	2SC458L (B) or (C)		
C2, 3	2SC458 (B) or (C)		
C4, 5	2SC458 (D)		
C8	2SC458 (B) or (C)		
C7 ~ 9	2SC458 (D)		
Dc1 ~ 8	1N60		
Dc9	SM-150 (01)		
COIL/THERMISTOR			
Lc1, 2	19KHz TUNING COIL	L17-45	
Lc3	38KHz TUNING COIL	L17-48	
Lc6	19KHz TUNING COIL	L17-45	
Lc7	72KHz TRAP COIL	L17-44	
Lc8	Ferri-Inductor (FL11H-393J)		
Lc9	19KHz TUNING COIL	L17-46	
THc1	5T-41L		
MISCELLANEOUS			
—	P. C. Board	J25-0061-03	
—	Terminal x 16	N4085	
—	Vinyl Tube (1 ϕ , 0.1 m)	W07-014	
—	P. V. C. Insulated Wires (White, 0.5 ϕ , 0.6 m)	W32-59	

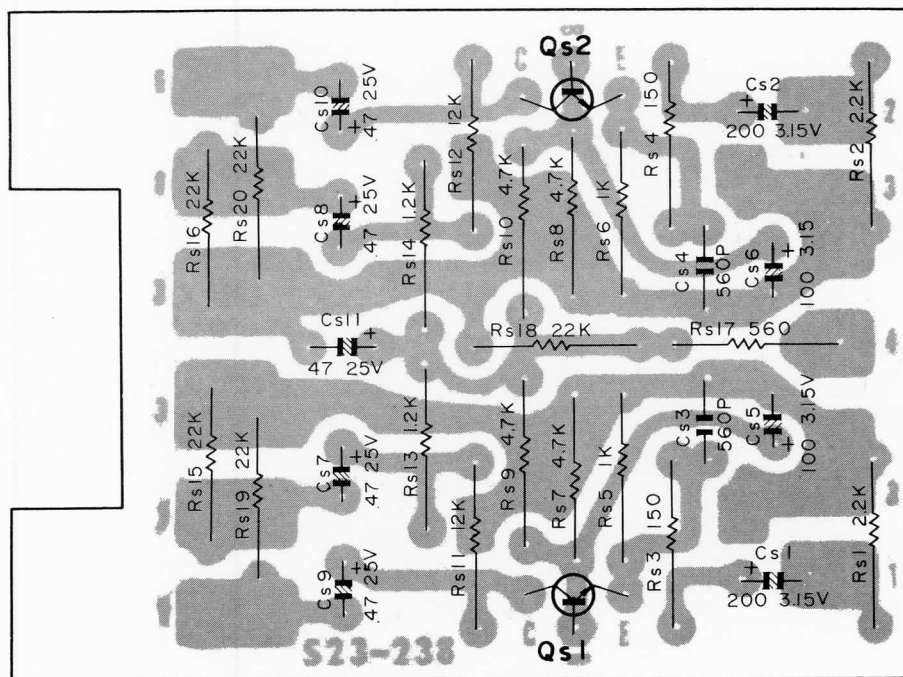
SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTORS

2SC458LG(B)



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qs1.2 2SC458LG(B)

PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Remarks
CAPACITOR			
Cs1, 2	Electrolytic Tubular 220 μ F 3.15WV		
Cs3, 4	Ceramic 560pF $\pm$ 20%		
Cs5, 6	Electrolytic Tubular 100 μ F 3.15WV		
Cs7 ~ 10	Solid Aluminum 0.47 μ F $\pm$ 20%		
Cs11	Electrolytic Tubular 47 μ F 25WV		
RESISTOR			
Rs1, 2	Insulated Carbon Film 2.2k Ω $\pm$ 10% 1/4W		
Rs3, 4	Insulated Carbon Film 150 Ω $\pm$ 5% 1/4W		
Rs5, 6	Insulated Carbon Film 1k Ω $\pm$ 5% 1/4W		
Rs7, 8	Insulated Carbon Film 4.7k Ω $\pm$ 5% 1/4W		
Rs9, 10	Insulated Carbon Film 47k Ω $\pm$ 5% 1/4W		
Rs11, 12	Special Insulated Carbon Film 12k Ω $\pm$ 5% 1/4W		
Rs13, 14	Insulated Carbon Film 1.2k Ω $\pm$ 5% 1/4W		
Rs15, 16	Insulated Carbon Film 22k Ω $\pm$ 10% 1/4W		
Rs17	Insulated Carbon Film 560 Ω $\pm$ 5% 1/4W		
Rs18	Insulated Carbon Film 22k Ω $\pm$ 5% 1/4W		
Rs19, 20	Insulated Carbon Film 22k Ω $\pm$ 10% 1/4W		
TRANSISTOR			
Os1, 2	2SC458LG (B)		
MISCELLANEOUS			
—	P. C. Board	S23-238	
—	Vinyl Tube (1 ϕ , 0.02 m)	W07-014	

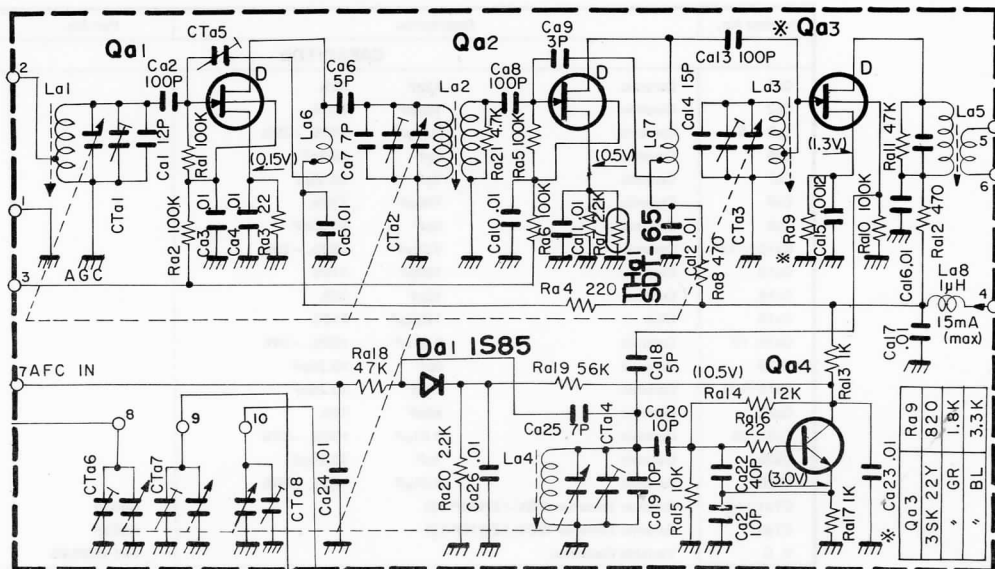
SCHEMATIC DIAGRAM

BOTTOM VIEW OF TRANSISTORS

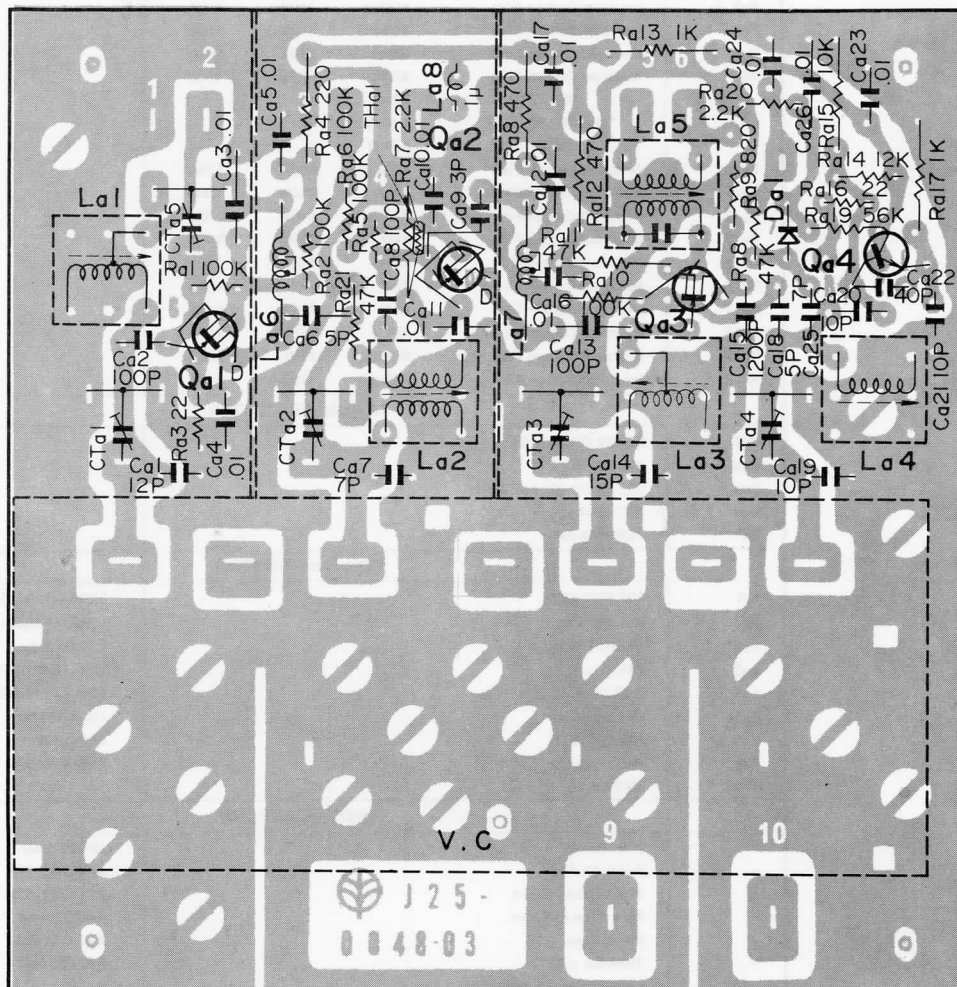
2SC785R



3SK22



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS

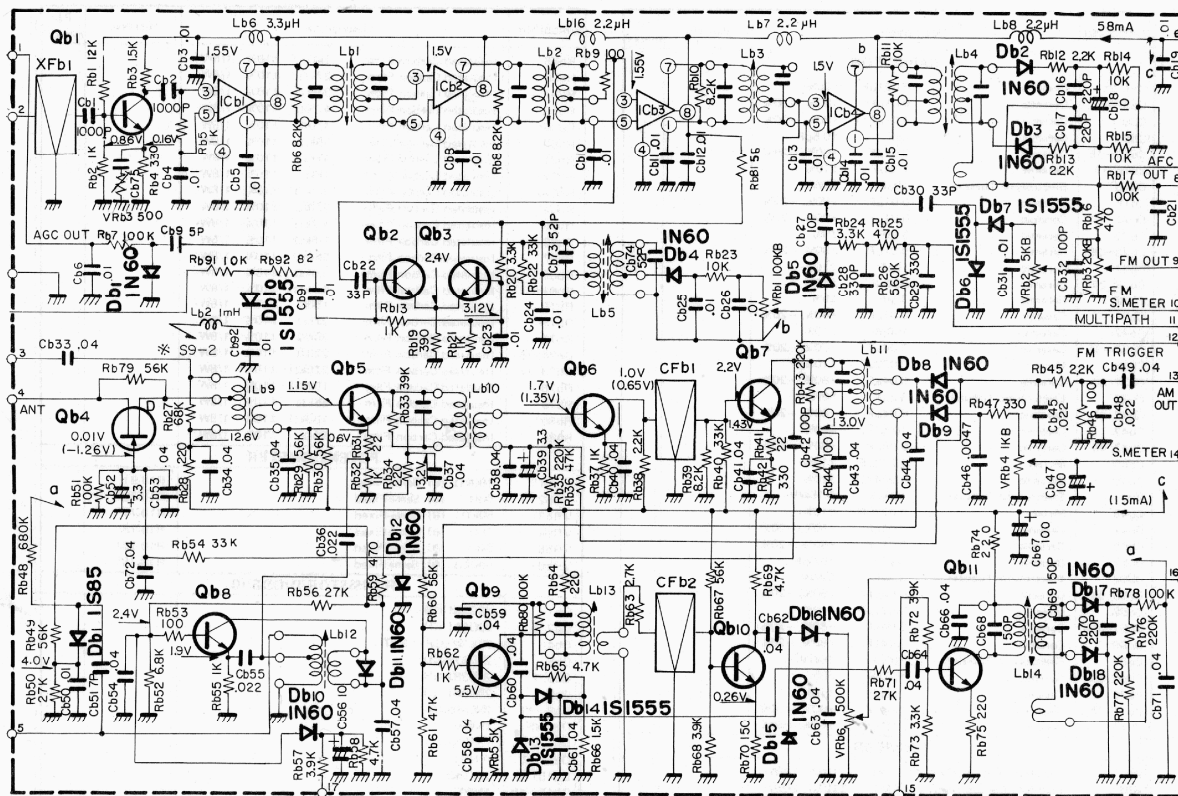


Qa1 3SK22(Y) or (GR). Qa2 3SK22(Y). Qa3 3SK22(Y), (GR) or (BL).
Qa4 2SC785R. Di1 IS85 (White). THa1 SDT-65

PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Remarks
CAPACITOR			
Ca1	Ceramic 12pF ±5%		
Ca2	Ceramic 100pF ±10%		
Ca3 ~ 5	Ceramic 0.01μF +80%, -20%		
Ca6	Ceramic 5pF ±0.5pF		
Ca7	Ceramic 7pF ±0.25pF		
Ca8	Ceramic 100pF ±10%		
Ca9	Ceramic 3pF ±0.25pF		
Ca10 ~ 12	Ceramic 0.01μF +80%, -20%		
Ca13	Ceramic 100pF ±10%		
Ca14	Ceramic 15pF ±5%		
Ca15	Mica 1200pF ±10%		
Ca16, 17	Ceramic 0.01μF +80%, -20%		
Ca18	Ceramic 5pF ±0.25pF		
Ca19 ~ 21	Ceramic 10pF ±0.25pF		
Ca22	Ceramic 40pF ±5%		
Ca23, 24	Ceramic 0.01μF +80%, -20%		
Ca25	Ceramic 7pF ±0.25pF		
Ca26	Ceramic 0.01μF +80%, -20%		
CTa1 ~ 4	Ceramic Trimmer (ECV-1ZW10P-12)	C4036	
CTa5	Ceramic Trimmer (ECV-1ZW10P-12)	C4035	
V. C.	Variable Capacitor	C01-0005-05	
RESISTOR			
Ra1, 2	Insulated Carbon Film 100kΩ ±10% 1/4W		
Ra3	Insulated Carbon Film 22Ω ±10% 1/4W		
Ra4	Insulated Carbon Film 220Ω ±10% 1/8W		
Ra5, 6	Insulated Carbon Film 100kΩ ±10% 1/4W		
Ra7	Insulated Carbon Film 2.2kΩ ±10% 1/8W		
Ra8	Insulated Carbon Film 470Ω ±10% 1/8W		
Ra9	Insulated Carbon Film 820Ω ±10% 1/4W		
	3SK22 (Y) 820Ω		
	*Qa3 3SK22 (GR) 1.8kΩ		
	3SK22 (BL) 3.3kΩ		
Ra10	Insulated Carbon Film 100kΩ ±10% 1/4W		
Ra11	Insulated Carbon Film 47kΩ ±10% 1/8W		
Ra12	Insulated Carbon Film 470Ω ±10% 1/8W		
Ra13	Insulated Carbon Film 1kΩ ±10% 1/8W		
Ra14	Insulated Carbon Film 12kΩ ±10% 1/4W		
Ra16	Insulated Carbon Film 22Ω ±10% 1/4W		
Ra17	Insulated Carbon Film 1kΩ ±10% 1/8W		
Ra18	Insulated Carbon Film 47kΩ ±10% 1/4W		
Ra19	Insulated Carbon Film 56kΩ ±10% 1/4W		
Ra20	Insulated Carbon Film 2.2kΩ ±10% 1/4W		
TRANSISTOR/DIODE			
Qa1	3SK22 (Y) or (GR)		
Qa2	3SK22 (Y)		
Qa3	3SK22 (Y) (BL) or (GR)		
Qa4	2SC785R		
Da1	1S85 (White)		
COIL/THERMISTOR			
La1	FM ANT-COIL	L24-UA1124JA	
La1	FM ANT-COIL	L24-UA1124JA	
La2	FM RF1-COIL	L34-0035-04	
La3	FM RF2-COIL	L24-UA1122KR8	
La4	OSC-COIL	L24-UA1122KS	
La5	IFT-COIL	L30-0022-05	
La6, 7	Choke Coil	L20-010D	
La8	Ferri-Inductor	FL5H-1ROM	
THa1	SDT-55		
MISCELLANEOUS			
-	P. C. Board	J25-0048-03	
-	Front Chassis	A03-UA1128J	
-	Front Shield Board	A13-UA1122K	
-	Back Plate of Front	A44-0001-04	
-	Front Cover	A91-UA1124J	
-	Terminal x 7	E23-0004-04	
-	Screw (P3 x 4-F-ISO) x 4		
-	Screw (P3 x 6-F-ISO) x 5		
-	SP Washer (SW3-F) x 2		
-	Flat Head Washer x 2		

SCHEMATIC DIAGRAM



BOTTOM VIEW OF TRANSISTORS

2SC381
2SC378 (B)



2SK30



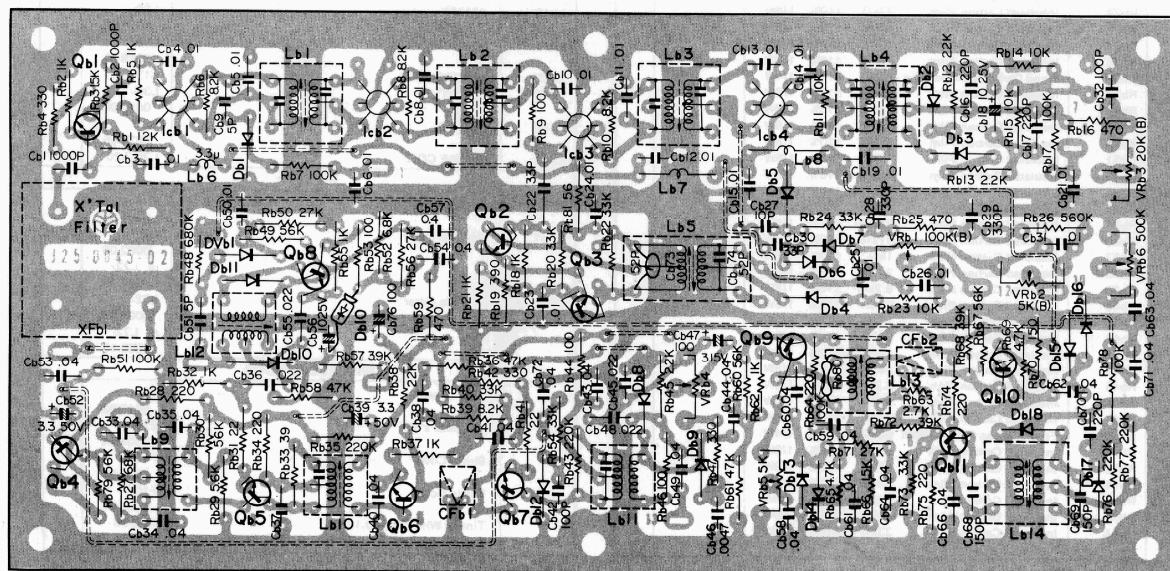
2SC458



SL-20575



SEALED CIRCUIT ASSEMBLIES-PHANTOM VIEWS



Qb1,6,7 2SC381(R). Qb2,3 2SC381(O). Qb4 2SK30(GR). Qb5-8 2SC378(B). Qb9-11 2SC458C. Icb1,2 SL-20575(B). Icb3,4 SL-20575(R).
Db1-5,8-12,15-18 IN60. Db6,7,13,14 IS555. Db1 IS85(White).

PARTS DESCRIPTION LIST

Symbol No.	Description	Part No.	Re- marks
CAPACITOR			
Cb1, 2	Ceramic 0.001 μ F $\pm$ 20%		
Cb3~6	Ceramic 0.01 μ F +80%, -20%		
Cb8	Ceramic 0.01 μ F +80%, -20%		
Cb9	Ceramic 5pF $\pm$ 0.5pF		
Cb10~15	Ceramic 0.01 μ F +80%, -20%		
Cb16, 17	Ceramic 220pF $\pm$ 10%		
Cb18	Electrolytic Tubular 10 μ F 25WV		
Cb19	Ceramic 0.01 μ F +80%, -20%		
Cb21	Ceramic 0.01 μ F +80%, -20%		
Cb22	Ceramic 33pF $\pm$ 5%		
Cb23~26	Ceramic 0.01 μ F +80%, -20%		
Cb27	Ceramic 10pF $\pm$ 10%		
Cb28, 29	Ceramic 330pF $\pm$ 10%		
Cb30	Ceramic 33pF $\pm$ 5%		
Cb31	Ceramic 0.01 μ F +80%, -20%		
Cb32	Ceramic 100pF $\pm$ 10%		
Cb33~35	Ceramic 0.04 μ F +80%, -20%		
Cb36	Mylar 0.022 μ F $\pm$ 10%		
Cb37, 38	Ceramic 0.04 μ F +80%, -20%		
Cb39	Electrolytic Tubular 3.3 μ F 50WV		
Cb40, 41	Ceramic 0.04 μ F +80%, -20%		
Cb42	Ceramic 100pF $\pm$ 10%		
Cb43, 44	Ceramic 0.04 μ F +80%, -20%		
Cb45	Mylar 0.022 μ F $\pm$ 10%		
Cb46	Ceramic 0.0047 μ F $\pm$ 20%		
Cb47	Electrolytic Tubular 100 μ F 3.15WV		
Cb48	Mylar 0.022 μ F $\pm$ 10%		
Cb49	Ceramic 0.04 μ F +80%, -20%		
Cb50	Ceramic 0.01 μ F +80%, -20%		
Cb51	Ceramic 5pF $\pm$ 0.5pF		
Cb52	Electrolytic Tubular 3.3 μ F 50WV		
Cb53, 54	Ceramic 0.04 μ F +80%, -20%		
Cb55	Mylar 0.022 μ F $\pm$ 10%		
Cb57~64	Ceramic 0.04 μ F +80%, -20%		
Cb66	Ceramic 0.04 μ F +80%, -20%		
Cb67	Electrolytic Tubular 100 μ F 16WV		
Cb68, 69	Ceramic 150pF $\pm$ 5%		
Cb70	Ceramic 220pF $\pm$ 10%		
Cb71, 72	Ceramic 0.04 μ F +80%, -20%		
Cb75	Ceramic 0.01 μ F +80%, -20%		
RESISTOR			
Rb1	Insulated Carbon Film 12k Ω $\pm$ 10% 1/8W		
Rb2	Insulated Carbon Film 1k Ω $\pm$ 10% 1/8W		
Rb3	Insulated Carbon Film 1.5k Ω $\pm$ 10% 1/8W		
Rb4	Insulated Carbon Film 330 Ω $\pm$ 10% 1/8W		
Rb5	Insulated Carbon Film 1k Ω $\pm$ 10% 1/8W		
Rb6	Insulated Carbon Film 8.2k Ω $\pm$ 10% 1/8W		
Rb7	Insulated Carbon Film 100k Ω $\pm$ 10% 1/8W		
Rb8	Insulated Carbon Film 8.2k Ω $\pm$ 10% 1/8W		
Rb9	Insulated Carbon Film 100 Ω $\pm$ 10% 1/8W		
Rb10	Insulated Carbon Film 8.2 Ω $\pm$ 10% 1/8W		
Rb11	Insulated Carbon Film 10k Ω $\pm$ 10% 1/8W		
Rb12, 13	Insulated Carbon Film 2.7k Ω $\pm$ 10% 1/8W		
Rb14, 15	Insulated Carbon Film 10k Ω $\pm$ 10% 1/8W		
Rb16	Insulated Carbon Film 470 Ω $\pm$ 10% 1/8W		
Rb17	Insulated Carbon Film 100k Ω $\pm$ 10% 1/8W		
Rb18	Insulated Carbon Film 1k Ω $\pm$ 10% 1/8W		
Rb19	Insulated Carbon Film 390 Ω $\pm$ 10% 1/8W		
Rb20	Insulated Carbon Film 3.3k Ω $\pm$ 10% 1/8W		
Rb21	Insulated Carbon Film 1k Ω $\pm$ 10% 1/8W		
Rb22	Insulated Carbon Film 33k Ω $\pm$ 10% 1/8W		
Rb23	Insulated Carbon Film 10k Ω $\pm$ 10% 1/8W		
Rb24	Insulated Carbon Film 3.3k Ω $\pm$ 10% 1/8W		
Rb25	Insulated Carbon Film 470 Ω $\pm$ 10% 1/8W		
Rb26	Fixed Carbon Composition 560 Ω $\pm$ 10% 1/4W		
Rb27	Insulated Carbon Film 68k Ω $\pm$ 10% 1/8W		
Rb28	Insulated Carbon Film 220 Ω $\pm$ 10% 1/8W		
Rb29	Insulated Carbon Film 5.6k Ω $\pm$ 10% 1/8W		
Rb30	Insulated Carbon Film 56k Ω $\pm$ 10% 1/8W		
Rb31	Insulated Carbon Film 22 Ω $\pm$ 10% 1/8W		
Rb32	Insulated Carbon Film 1k Ω $\pm$ 10% 1/8W		
Rb33	Insulated Carbon Film 39k Ω $\pm$ 10% 1/8W		
Rb34	Insulated Carbon Film 220 Ω $\pm$ 10% 1/8W		
Rb35	Insulated Carbon Film 220k Ω $\pm$ 10% 1/8W		
Rb36	Insulated Carbon Film 47k Ω $\pm$ 10% 1/8W		
Rb37	Insulated Carbon Film 1k Ω $\pm$ 10% 1/8W		
Rb38	Insulated Carbon Film 2.2k Ω $\pm$ 10% 1/8W		
Rb39	Insulated Carbon Film 8.2k Ω $\pm$ 10% 1/8W		
Rb40	Insulated Carbon Film 33k Ω $\pm$ 10% 1/8W		
Rb41	Insulated Carbon Film 22 Ω $\pm$ 10% 1/8W		
Rb42	Insulated Carbon Film 330 Ω $\pm$ 10% 1/8W		
Rb43	Insulated Carbon Film 220k Ω $\pm$ 10% 1/8W		
Rb44	Insulated Carbon Film 100 Ω $\pm$ 10% 1/8W		
Rb45	Insulated Carbon Film 2.2k Ω $\pm$ 10% 1/8W		
Rb46	Insulated Carbon Film 100 Ω $\pm$ 10% 1/8W		
Rb47	Insulated Carbon Film 330 Ω $\pm$ 10% 1/8W		
Rb48	Fixed Carbon Composition 680 Ω $\pm$ 10% 1/4W		
Rb49	Insulated Carbon Film 56k Ω $\pm$ 10% 1/8W		
Rb50	Insulated Carbon Film 27k Ω $\pm$ 10% 1/8W		
Rb51	Insulated Carbon Film 100k Ω $\pm$ 10% 1/8W		
Rb52	Insulated Carbon Film 6.8k Ω $\pm$ 10% 1/8W		
Rb53	Insulated Carbon Film 100 Ω $\pm$ 10% 1/8W		
Rb54	Insulated Carbon Film 33k Ω $\pm$ 10% 1/8W		

Symbol No.	Description	Part No.	Re- marks
Rb55	Insulated Carbon Film 1k Ω $\pm$ 10% 1/8W		
Rb56	Insulated Carbon Film 27k Ω $\pm$ 10% 1/8W		
Rb57	Insulated Carbon Film 3.9k Ω $\pm$ 10% 1/8W		
Rb58	Insulated Carbon Film 4.7k Ω $\pm$ 10% 1/8W		
Rb59	Insulated Carbon Film 470 Ω $\pm$ 10% 1/8W		
Rb60	Insulated Carbon Film 56k Ω $\pm$ 10% 1/8W		
Rb61	Insulated Carbon Film 47k Ω $\pm$ 10% 1/8W		
Rb62	Insulated Carbon Film 1k Ω $\pm$ 10% 1/8W		
Rb63	Insulated Carbon Film 2.7k Ω $\pm$ 10% 1/8W		
Rb64	Insulated Carbon Film 220 Ω $\pm$ 10% 1/8W		
Rb65	Insulated Carbon Film 4.7k Ω $\pm$ 10% 1/8W		
Rb66	Insulated Carbon Film 1.5k Ω $\pm$ 10% 1/8W		
Rb67	Insulated Carbon Film 56k Ω $\pm$ 10% 1/8W		
Rb68	Insulated Carbon Film 3.9k Ω $\pm$ 10% 1/8W		
Rb69	Insulated Carbon Film 4.7k Ω $\pm$ 10% 1/8W		
Rb70	Insulated Carbon Film 150 Ω $\pm$ 10% 1/8W		
Rb71	Insulated Carbon Film 27k Ω $\pm$ 10% 1/8W		
Rb72	Insulated Carbon Film 39k Ω $\pm$ 10% 1/8W		
Rb74, 75	Insulated Carbon Film 220 Ω $\pm$ 10% 1/8W		
Rb76, 77	Insulated Carbon Film 220k Ω $\pm$ 10% 1/8W		
Rb78	Insulated Carbon Film 100k Ω $\pm$ 10% 1/8W		
Rb79	Insulated Carbon Film 56k Ω $\pm$ 10% 1/8W		
Rb80	Insulated Carbon Film 100k Ω $\pm$ 10% 1/8W		
Rb81	Insulated Carbon Film 56 Ω $\pm$ 10% 1/8W		
POTENTIOMETER			
VRb1	100k Ω (B) Semi-Fixed	R10-91	
VRb2	5k Ω (B) Semi-Fixed	R10-70	
VRb3	50k Ω (B) Semi-Fixed	R10-77	
VRb4	1k Ω (B) Semi-Fixed	R10-73	
VRb5	5k Ω (B) Semi-Fixed	R10-70	
VRb6	500k Ω (B) Semi-Fixed	R10-78	
TRANSISTOR/DIODE/IC			
Qb1	2SC381 (R)		
Qb2, 3	2SC381 (O)		
Qb4	2SK30 (GR) FET		
Qb5	2SC378 (O)		
Qb6, 7	2SC381 (R)		
Qb8	2SC381 (O)		
Qb9~11	2SC458 (C)		
Db1~5	1N60		
Db6, 7	1S1555		
Db8~12	1N60		
Db13, 14	1S1555		
Db15~18	1N60		
VDb1	1S85 (White)		
ICb1, 2	SL-20575 (B)		
ICb3, 4	SL-20575 (R)		
IF TRANSFORMER			
Lb1~3	FM IFT	L30-0014-05	
Lb4	FM IFT	L30-0016-05	
Lb5	FM IFT	L30-0017-05	
Lb6	CHOKE COIL (FL5H3R3M)	L33-0088-05	
Lb7, 8	CHOKE COIL (2.2 μ H)	L20-0002-20	
Lb9	AM-RF-TUNING COIL	L31-0027-15	
Lb10	AM IFT	L30-0018-05	
Lb11	AM IFT	L30-0019-05	
Lb12	AM OSC COIL	L11-70	
Lb13	AM IFT	L30-0018-05	
Lb14	AM IFT	L30-0020-05	
Lb16	CHOKE COIL	L20-2-20	
FILTER			
XFb1	Crystal Filter	L71-0001-05	
CFb1	Ceramic Filter	L72-0002-05	
		or L72-0005-05	
CFb2	Ceramic Filter	L72-0004-05	
		or L72-0003-15	
MISCELLANEOUS			
-	P. C. Board	J25-0045-02	
-	Terminal x 16	E23-0004-04	
-	Shield Cover	F10-0033-04	
-	Shield Cover	F10-0050-04	
-	Tinned Wire (0.8 ϕ , 0.13 m)	W03-08	
-	P. V. C. Insulated Wire (White, 0.6 ϕ , 0.37 m)	W32-59	

—NOTES—

KENWOOD ELECTRONICS, INC.

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