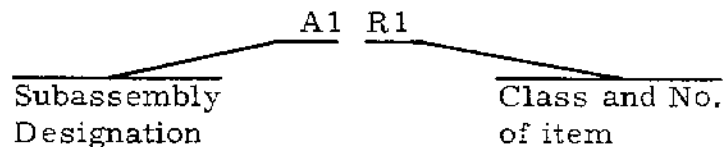


## SECTION VI REPLACEMENT PARTS LIST

### 6.1 UNIT NUMBERING METHOD

The unit numbering method of assigning reference designations (electrical symbol numbers) has been used to identify assemblies, subassemblies (and modules), and parts. An example of the unit method follows:



Identify from right to left as: First (1) resistor (R) of  
first (1) subassembly (A)

As shown on the main chassis schematic, components which are an integral part of the main chassis have no subassembly designation.

### 6.2 REFERENCE DESIGNATION PREFIX

Partial reference designations have been used on the equipment and on the illustrations in this manual. The partial reference designations consist of the class letter(s) and identifying item number. The complete reference designations may be obtained by placing the proper prefix before the partial reference designations. Reference Designation Prefixes are provided on drawings and illustrations in parenthesis within the figure titles.

### 6.3 LIST OF MANUFACTURERS

<u>Mfr. Code</u>	<u>Name and Address</u>	<u>Mfr. Code</u>	<u>Name and Address</u>
01121	Allen-Bradley Company 1201 South 2nd Street Milwaukee, Wisc. 53204	01295	Texas Instruments, Inc. Semiconductor-Components Div. 13500 North Central Expressway Dallas, Texas 75231
01281	TRW Semiconductors, Inc. 14520 Aviation Boulevard Lawndale, California 90260	02114	Ferroxcube Corp. P.O. Box 359 Mt. Marion Road Saugerties, N. Y. 12477

## REPLACEMENT PARTS LIST

WJ-8888

<u>Mfr. Code</u>	<u>Name and Address</u>	<u>Mfr. Code</u>	<u>Name and Address</u>
02735	RCA Corporation Solid State Division Route 202 Somerville, N.J. 08876	07388	Totorel Incorporated 13402 S. 71 Highway Grandview, Missouri 64030
04013	Taurus Corporation 1 Academy Hill Lambertville, N.J. 08530	08108	Lamp industry for use with industry designations and abbreviations for lamps.
04099	Capco, Incorporated Foresight Industrial Park P.O. Box 2164 Grand Junction, Colo. 81501	12498	Teledyne Crystalonics 147 Sherman Street Cambridge, Mass. 02140
04713	Motorola Incorporated Semiconductor Products Div. 5005 East McDowell Road Phoenix, Ariz. 85008	12969	Unitrode Corporation 580 Pleasant Street Watertown, Mass. 02172
06001	General Electric Co. Capacitor Department P.O. Box 158 Irmo, S.C. 29063	13103	Thermalloy Company 2021 W. Valley View Lane Dallas, Texas 75234
06961	Vernitron Corporation Piezo Electric Division 232 Forbes Road Bedford, Ohio 44146	14632	Watkins-Johnson Company 700 Quince Orchard Road Gaithersburg, Md. 20760
06978	Aladdin Electronics Div. of Aladdin Industries 703 Murfreesboro Road Nashville, Tenn. 37210	14655	Cornell-Dubilier Electronics Division of Federal Pacific Electric Company 150 Avenue L Newark, N.J. 07101
07126	The Digitran Company 855 South Arroyo Parkway Pasadena, Calif. 91109	15454	Rodan Industries, Inc. 2905 Blue Star Street Anaheim, California 92806
07263	Fairchild Camera and Instrument Corporation Semiconductor Division 464 Ellis Street Mountain View, Calif. 94040	15818	Teledyne Semiconductor 1300 Terra Bella Avenue Mountain View, Calif. 94040

WJ-8888

## REPLACEMENT PARTS LIST

<u>Mfr. Code</u>	<u>Name and Address</u>	<u>Mfr. Code</u>	<u>Name and Address</u>
17856	Siliconix, Incorporated 2201 Laurelwood Road Santa Clara, Calif. 95050	33095	Spectrum Control, Incorporated 152 E. Main Street Fairview, Penn. 16415
18324	Signetics Corporation 811 East Arques Avenue Sunnyvale, Calif. 94086	34156	Semicoa 333 McCormick Avenue Costa Mesa, Calif. 92626
19505	Applied Engineering Products, Company Div. of Samarius, Inc. 300 Seymour Avenue Derby, Conn. 06418	49956	Raytheon Company 141 Spring Street Lexington, Mass. 02173
21604	The Buckeye Stamping Co. 555 Marion Road Columbus, Ohio 43207	50721	Datel Systems, Inc. 1020 Turnpike Street Canton, Mass. 02021
25088	Siemens America, Inc. 186 Wood Avenue S. Iselin, N.J. 08830	56289	Sprague Electric Co. Marshall Street North Adams, Mass. 01247
27014	National Semi-Conductor Corporation 2950 San Ysidro Way Santa Clara, Calif. 95051	71279	Cambridge Thermionic Corp. 445 Concord Avenue Cambridge, Mass. 02138
27956	Relcom 3333 Hillview Avenue Palo Alto, Calif. 94304	71400	Bussman Manufacturing Div. of McGraw-Edison Co. 2536 W. University Street St. Louis, Missouri 63107
28480	Hewlett Packard Company Corporate Headquarters 1501 Page Mill Road Palo Alto, Calif. 94304	71468	ITT Cannon Electric 666 East Dyer Road Santa Ana, Calif. 92702
32897	ErieTech. Products, Inc. Erie Frequency Control Div. 453 Lincoln Street Carlisle, Penn. 17013	71482	C. P. Clare and Company 3101 Pratt Boulevard Chicago, Illinois 60645

## REPLACEMENT PARTS LIST

WJ-8888

<u>Mfr. Code</u>	<u>Name and Address</u>	<u>Mfr. Code</u>	<u>Name and Address</u>
71590	Centralab Electronics Div. of Globe-Union Inc. 5757 North Green Bay Ave. Milwaukee, Wisc. 53201	74868	Bunker Ramo Corporation The Amphenol RF Division 33 East Franklin Street Danbury, Conn. 06810
71744	Chicago Miniature Lamp Works 4433 Ravenswood Avenue Chicago, Illinois 60646	75037	Minnesota Mining and Mfg. Co. Electro Products Division 3M Center St. Paul, Minn. 55101
71785	TRW Electronic Components Cinch Connector Operations 1501 Morse Avenue Elk Grove Village, Ill. 60007	75042	TRW Electronic Components IRC Fixed Resistors Philadelphia Division 401 North Broad Street Philadelphia, Penn. 19108
72136	Electro Motive Manufacturing Company, Incorporated South Park & John Streets Willimantic, Conn. 06226	75915	Littelfuse, Incorporated 800 E. Northwest Highway Des Plaines, Ill. 60016
72619	Dialight Corporation Sub. of Digitronics Corp. 60 Stewart Avenue Brooklyn, N. Y. 11237	76055	Mallory Controls Division P. R. Mallory and Co., Inc. P. O. Box 327 State Road 28W Frankfort, Indiana 46041
72982	Erie Tech. Products, Inc. 644 West 12th Street Erie, Penn. 16512	76541	Monsanto Company, Inc. 800 N. Lindbergh Blvd. St. Louis, Mo. 63166
73138	Beckman Instruments, Inc. Helipot Division 2500 Harbor Boulevard Fullerton, Calif. 92634	77820	Bendix Corporation Electrical Components Div. Sherman Avenue Sidney, N. Y. 13838
73899	JFD Electronics Co. 15th at 62nd Street Brooklyn, N. Y. 11219	80031	Electra-Midland Corp. MEPCO Division 22 Columbia Road Morristown, N. J. 07960
74306	Piezo Crystal Co. 100 K Street Carlisle, Penn. 17013	80058	Joint Electronic Type Designation System



WJ-8888

## REPLACEMENT PARTS LIST

<u>Mfr. Code</u>	<u>Name and Address</u>	<u>Mfr. Code</u>	<u>Name and Address</u>
80131	Electronic Industries Assoc. 2001 Eye Street, N.W. Washington, D.C. 20006	91418	Radio Materials Co. 4242 West Bryn Mawr Ave. Chicago, Illinois 60646
81312	Winchester Electronics Div. Litton Industries, Inc. Main Street & Hillside Ave. Oakville, Conn. 06779	92702	IMC Magnetics, Corp. Eastern Division 570 Main Street Westbury, N.Y. 11591
81349	Military Specifications	93332	Sylvania Electric Products, Inc. Semiconductor Products Division 100 Sylvan Road Woburn, Mass. 01801
81350	Joint Army-Navy Specifications	93958	Republic Electronics Co. 176 East 7th Street Paterson, N.J. 07524
82389	Switchcraft, Inc. 5555 North Elston Ave. Chicago, Illinois 60630	95104	Collins Radio Company 1200 N. Alma Road Richardson, Texas 75080
83740	Union Carbide Corp. Consumers Product Div. 270 Park Avenue New York, N.Y. 10017	95121	Quality Components, Inc. P.O. Box 113 St. Mary's, Penn. 15857
84411	TRW Electric Components TRW Capacitors 112 W. First Street Ogallala, Nebraska 69153	98978	International Electronic Research Corporation 135 West Magnolia Blvd. Burbank, Calif. 91502
87034	Marco-Oak Industries Oak Electro/Netics Corp. 207 South Helena Street Anaheim, Calif. 92803	99800	American Precision Industries Delevan Electronics Div. 270 Quaker Road East Aurora, N.Y. 14052
91293	Johanson Manufacturing Co. P.O. Box 329 Boonton, N.J. 07005	99848	Wilco Corporation 4030 West 10th Street P.O. Box 22248 Indianapolis, Indiana 46222

#### 6.4 PARTS LIST

The parts list which follows contains all electrical parts used in the equipment and certain mechanical parts which are subject to unusual wear or damage. When ordering replacement parts from the Watkins-Johnson Company, specify the type and serial number of the equipment and the reference designation and description of each part ordered. The list of manufacturers provided in paragraph 5.3 and the manufacturer's part number for components are included as a guide to the user of the equipment in the field. These parts may not necessarily agree with the parts installed in the equipment, however, the parts specified in this list will provide satisfactory operation of the equipment. Replacement parts may be obtained from any manufacturer as long as the physical and electrical parameters of the part selected agree with the original indicated part. In the case of components defined by a military or industrial specification, a vendor which can provide the necessary component is suggested as a convenience to the user.

#### NOTE

As improved semiconductors become available it is the policy of Watkins-Johnson to incorporate them in proprietary products. For this reason some transistors, diodes and integrated circuits installed in the equipment may not agree with those specified in the parts lists and schematic diagrams of this manual. However, the semiconductors designated in the manual may be substituted in every case with satisfactory results.

## 6.4.1 TYPE WJ-8888 HF RECEIVER, MAIN CHASSIS

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
A1	INPUT FILTER ASSEMBLY	1	791199	14632	
A2	INPUT CONVERTER	1	791166	14632	
A3	10.7/455 kHz CONVERTER	1	791198	14632	
A4*	IF FILTER ASSEMBLY	1	72399-X	14632	
A5**	SPARE				
A6*	IF FILTER ASSEMBLY	1	72399-X	14632	
A7**	LOG IF AMPLIFIER	1	791451	14632	
A8	455 kHz IF AMPLIFIER	1	72409	14632	
A9	AM DEMODULATOR	1	791113	14632	
A10	FM DEMODULATOR	1	791162	14632	
A11	USB/CW DEMODULATOR	1	791180-1	14632	
A12	LSB DEMODULATOR	1	791180-2	14632	
A13	AUDIO AMPLIFIER	1	7453	14632	
A14	GAIN CONTROL	1	7899	14632	
A15	VCO	1	791271	14632	
A16**	SYNCHRONOUS REMOTE I/O	1	791200-1	14632	
A16**	ASYNCHRONOUS I/O	1	791201	14632	
A17	RECEIVER REGISTER	1	791140	14632	
A18	FIRST LO, THIRD LO, & TIME BASE	1	791109	14632	
A19	2ND LO/BFO	1	791117	14632	
A20	PROGRAM SEQUENCE	1	791124	14632	
A21	SWITCH ENCODER	1	791137	14632	
A22	FRONT PANEL REGISTER	1	791134	14632	
A23	DISPLAY BUFFER	1	791126	14632	
A24	OPTIONAL TUNING CONNECTOR FILTER	1	791276	14632	
A25	ENCODER ASSEMBLY	1	791202	14632	
A26	POWER SUPPLY	1	76210-7	14632	
A27	SWITCHING REGULATOR	1	76209	14632	
A28	PHONE JACK ASSEMBLY	1	791275	14632	
A29	LIGHT BOARD	1	791203	14632	
A30	.5-30 MHz BANDPASS FILTER	1	791312	14632	
B1	BLOWER, FAN	1	MWS2107F2	92702	
CR1	DIODE	2	1N1614	80131	02735
	* Customer Selected				
	** Optional Assembly				

Figure 6-1  
Figure 6-2

WJ-8888

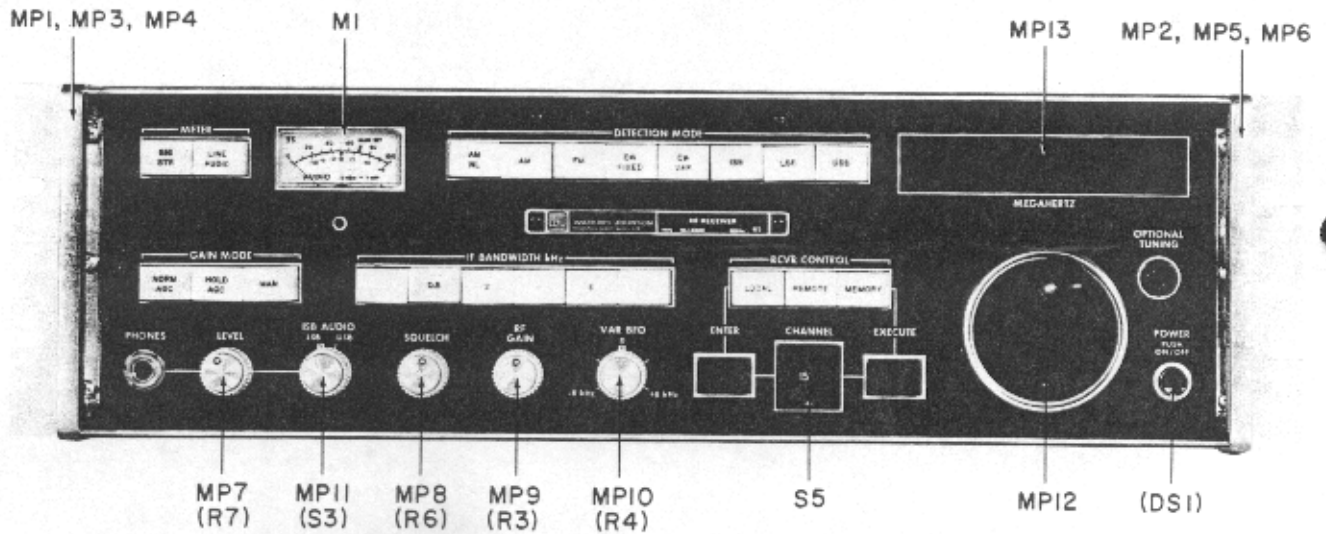


Figure 6-1. Type WJ-8888 Receiver, Front View, Location of Components

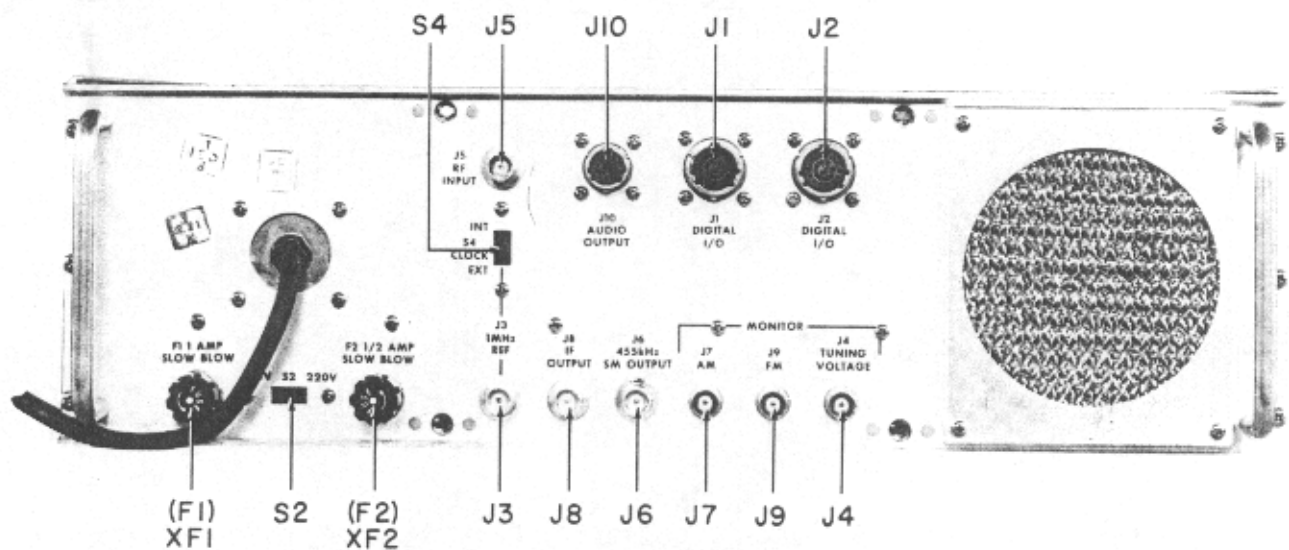


Figure 6-2. Type WJ-8888 Receiver, Rear View, Location of Components

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR2	Same as CR1				
C1	CAPACITOR, CERAMIC, FEEDTHRU: 0.05 $\mu$ F, GMV, 300 V	28	54-785-001-DA503P	33095	
C2 Thru C7	Same as C1				
C8	NOT USED				
C9 Thru C19	Same as C1				
C20	NOT USED				
C21 Thru C27	Same as C1				
C28	CAPACITOR, CERAMIC, FEEDTHRU: 1000 pF, 20%, 500 V	3	CK70AW102M	81349	56289
C29	Same as C28				
C30	Same as C28				
C31	CAPACITOR, CERAMIC, FEEDTHRU: 0.05 $\mu$ F, GMV,	14	54-785-002-503P	33095	
C32 Thru C41	Same as C31				
C42 Thru C46	NOT USED				
C47	CAPACITOR, CERAMIC, FEEDTHRU: 1000 pF, GMV, 500 V	29	2404-000X5U0-102P	72982	
C48 Thru C75	Same as C47				
C76 Thru C80	NOT USED				
C81	CAPACITOR, FIXED, PAPER: 0.01 $\mu$ F, 20%, 500 V	2	102P515	56289	
C82	Same as C81				
C83	CAPACITOR, CERAMIC, FEEDTHRU: 5000 pF, GMV, 200 V	9	2425-001X5W0- 502AA	32897	
C84	Same as C83				
C85	Same as C1				
C86 Thru C90	Same as C83				

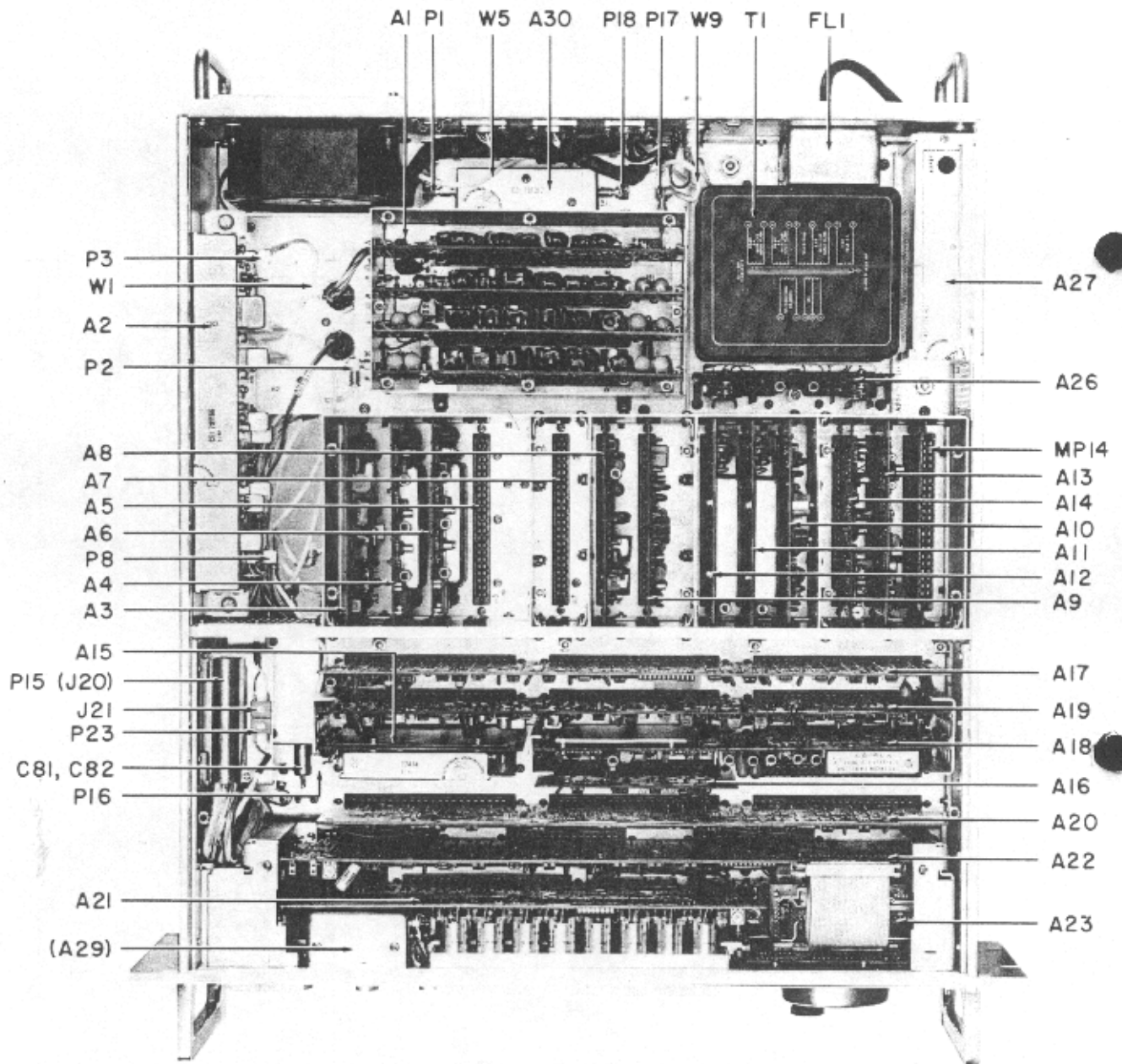


Figure 6-3. Type WJ-8888 Receiver, Top View, Location of Components

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C91	NOT USED				
C92	Same as C83				
C93	NOT USED				
C94	Same as C83				
C95	Same as C1				
C96	Same as C1				
C97	CAPACITOR, ELECTROLYTIC, ALUMINUM: 1100 $\mu$ F, -10+75%, 40 V	2	39D118G040HL4	56289	
C98	Same as C97				
C99	CAPACITOR, ELECTROLYTIC, ALUMINUM: 250 $\mu$ F, -10+75%, 50 V	1	39D257G050HE4	56289	
C100	CAPACITOR, ELECTROLYTIC, ALUMINUM: 8000 $\mu$ F, -10+75%, 15 V	2	39D808G015JT4	56289	
C101	Same as C100				
C102	CAPACITOR, ELECTROLYTIC, TANTALUM: 100 $\mu$ F, 20%, 20 V	2	196D107X0020MA3	56289	
C103	CAPACITOR, CERAMIC, DISC: 0.47 $\mu$ F, 20%, 100 V	1	8131M100-651-474M	72982	
C104	CAPACITOR, ELECTROLYTIC, TANTALUM: 220 $\mu$ F, 20%, 10 V	1	196D227X0010MA3	56289	
C105	Same as C102				
C106	CAPACITOR, ELECTROLYTIC, TANTALUM: 47 $\mu$ F, 20%, 35 V	2	196D476X0035TE4	56289	
C107	Same as C106				
C108 Thru C110	Same as C31				
C111	CAPACITOR, ELECTROLYTIC, TANTALUM: 27 $\mu$ F, 10%, 35 V	2	196D276X9035MA3	56289	
C112	Same as C111				
DS1	LAMP, INCANDESCENT	Ref	330	08108	71744
FB1	FERRITE CHOKE	5	VK200-10-38	02114	
FB2 Thru FB5	Same as FB1				
FL1	POWER LINE FILTER	1	23154-1	14632	
F1	FUSE, CARTRIDGE: 1 AMP, 3AG, SLOW-BLOW	1	MDL1	71400	
F2	FUSE, CARTRIDGE: 1/2 AMP, 3AG, SLOW-BLOW	1	MDL1/2	71400	
J1	CONNECTOR, RECEPTACLE, MULTIPIN	2	JTP02RE12-22S	77820	
J2	Same as J1				

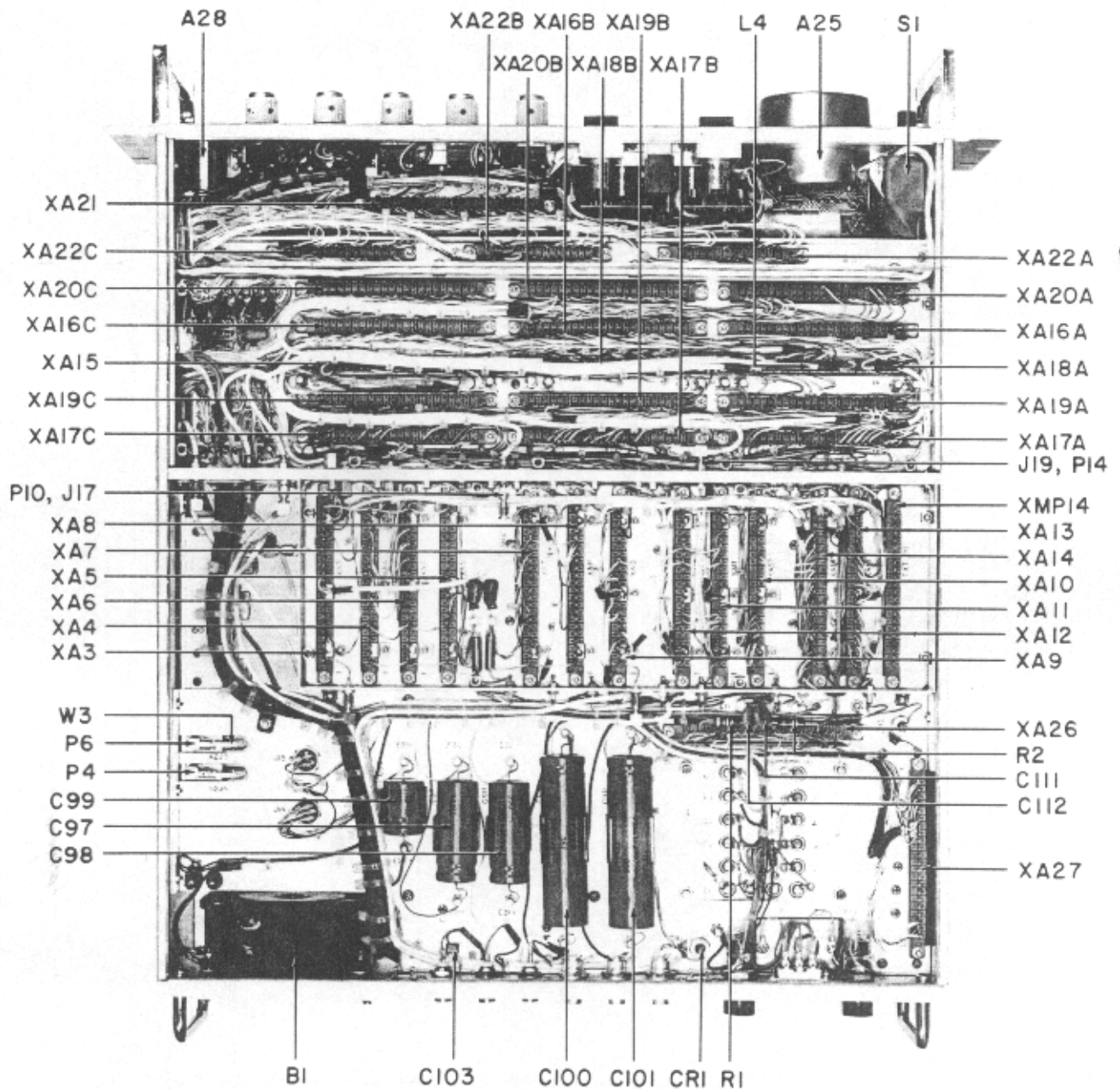


Figure 6-4a. Type WJ-8888 Receiver, Bottom View, Location of Components



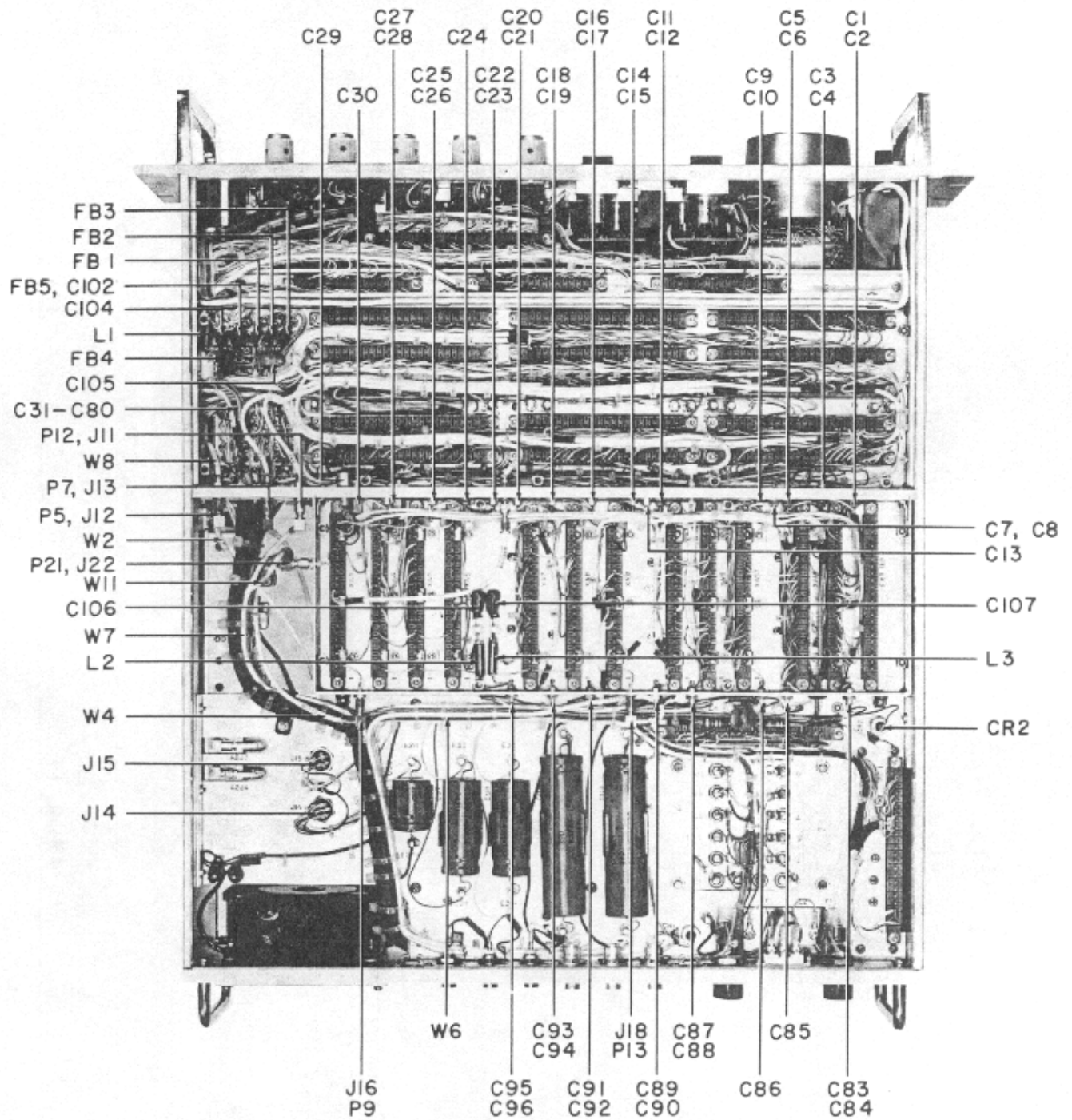


Figure 6-4b. Type WJ-8888 Receiver, Bottom View, Location of Components

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
J3	CONNECTOR, RECEPTACLE, BNC SERIES	5	17825-1002	74868	
J4	CONNECTOR, RECEPTACLE, BNC SERIES	3	UG1094/U	80058	74868
J5	Same as J3				
J6	Same as J3				
J7	Same as J4				
J8	Same as J3				
J9	Same as J4				
J10	CONNECTOR, RECEPTACLE, MULTIPIN	1	JTP02RE10-13S	77820	
J11	CONNECTOR, RECEPTACLE, SMC SERIES	4	UG1468/U	80058	19505
J12	Same as J11				
J13	Same as J11				
J14	CONNECTOR, RECEPTACLE, MULTIPIN	1	M9SLRN	81312	
J15	CONNECTOR, RECEPTACLE, MULTIPIN	1	M7SLRN	81312	
J16	CONNECTOR, RECEPTACLE, SMC SERIES	4	10-0104-002	19505	
J17	Same as J11				
J18	Same as J16				
J19	Same as J16				
J20	CONNECTOR, RECEPTACLE, MULTIPIN	1	DDM50S	71468	
J21	CONNECTOR, MULTIPIN	1	JF3S1PACD	81312	
J22	Same as J16				
J23	Same as J5				
L1	INDUCTOR	1	21210-126	14632	
L2	INDUCTOR	3	21210-112	14632	
L3	Same as L2				
L4	Same as L2				
M1	METER, SIGNAL STRENGTH	1	33542	14632	
MP1	HANDLE, FRONT	2	32306-1	14632	
MP2	Same as MP1				
MP3	HANDLE, INSERT	4	15743-3	14632	
MP4 Thru MP6	Same as MP3				
MP7	KNOB	3	PS70D1/LG	21604	
MP8	Same as MP7				
MP9	Same as MP7				
MP10	KNOB	1	PS70PL1/LG	21604	

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
MP11	KNOB	1	PS70PL2/LG	21604	
MP12	KNOB ASSEMBLY	1	23656-1	14632	
MP13	FILTER SCREEN	2	17238-1	14632	
MP14	EXTENDER BOARD	1	791211	14632	
P1	CONNECTOR, PLUG, SMC SERIES	16	UG1466/U	80058	19505
P2 Thru P9	Same as P1				
P10	CONNECTOR, PLUG, SMC SERIES	1	UG1465/U	80058	19505
P11	NOT USED				
P12 Thru P14	Same as P1				
P15	CONNECTOR, PLUG, MULTIPIN	1	DDM50P	71468	
P16 Thru P18	Same as P1				
P19	NOT USED				
P20	NOT USED				
P21	Same as P1				
P22	NOT USED				
P23	CONNECTOR, PLUG, MULTIPIN	1	JF3PISACD	81312	
R1	RESISTOR, FIXED, WIRE-WOUND: 0.47 $\Omega$ , 5%, 2W	1	BWH(0.47 $\Omega$ , J)	75042	
R2	RESISTOR, FIXED, WIRE-WOUND: 1.0 $\Omega$ , 5%, 2W	1	BWH(1 $\Omega$ , J)	75042	
R3	RESISTOR, VARIABLE, COMPOSITION: 10 k $\Omega$ , 10%, 1W	2	70A3N056L103U	01121	
R4	RESISTOR, VARIABLE, COMPOSITION: 50 k $\Omega$ , 10%, 1W	1	70A3N056L503U	01121	
R5	NOT USED				
R6	RESISTOR, VARIABLE, COMPOSITION: 5 k $\Omega$ , 10%, 1W	1	70A3N056L502U	01121	
R7	Same as R3				
R8	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	1	RCR07G103JS	81349	01121
S1	SWITCH, PUSHBUTTON: SPDT	1	671-6-330	87034	
S2	SWITCH, SLIDE: DPDT	2	11A1211	82389	
S3	SWITCH, ROTARY	1	1128-42	14632	
S4	Same as S2				
S5	SWITCH, ROTARY, THUMBWHEEL	1	8872/418-1	07126	
T1	TRANSFORMER	1	17201	14632	

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
W1	CABLE ASSEMBLY	1	17300-18-1	14632	
W2	CABLE ASSEMBLY	1	17300-18-2	14632	
W3	CABLE ASSEMBLY	1	17300-18-3	14632	
W4	CABLE ASSEMBLY	1	17300-18-4	14632	
W5	CABLE ASSEMBLY	1	17300-18-5	14632	
W6	CABLE ASSEMBLY	1	17300-18-6	14632	
W7	CABLE ASSEMBLY	1	17300-18-7	14632	
W8	CABLE ASSEMBLY	1	17300-18-8	14632	
W9	CABLE ASSEMBLY	1	17300-18-9	14632	
W10	NOT USED				
W11	CABLE ASSEMBLY	1	17300-18-11	14632	
XA3	CONNECTOR, PC BOARD	14	250-22-30-170	71785	
XA4 Thru XA13	Same as XA3				
XA14	CONNECTOR, PRINTED CIRCUIT CARD	17	251-22-30-160	71785	
XA15	Same as XA14				
XA16A	Same as XA14				
XA16B	Same as XA14				
XA16C	Same as XA14				
XA17A	Same as XA14				
XA17B	Same as XA14				
XA17C	Same as XA14				
XA18A	Same as XA14				
XA18B	Same as XA14				
XA19A	Same as XA14				
XA19B	Same as XA14				
XA19C	Same as XA14				
XA20A	Same as XA14				
XA20B	Same as XA14				
XA20C	Same as XA14				
XA21	Same as XA14				
XA22A	CONNECTOR, PRINTED CIRCUIT CARD	3	251-15-30-160	71785	
XA22B	Same as XA22A				
XA22C	Same as XA22A				
XA26	Same as XA3				

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
XA27	Same as XA3				
XF1	FUSEHOLDER	2	342004	75915	
XF2	Same as XF1				
XMP14	Same as XA3				
	ACCESSORY ITEMS FURNISHED WITH EQUIPMENT:				
---	CONNECTOR, PLUG, MULTIPIN	1	JTG06RE10-13PSR	77820	
---	CONNECTOR, PLUG, MULTIPIN	2	JTG06RE12-22PSR	77820	

6.4.2 TYPE 791199 INPUT FILTER ASSEMBLY

REF DESIG PREFIX A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
A1	FILTER MOTHER BOARD	1	23490	14632	
C1	CAPACITOR, CERAMIC, FEEDTHRU: .05 $\mu$ F, GMV, 300 V	5	54-785-002-503P	33095	
C2 Thru C5	Same as C1				
J1	CONNECTOR, RECEPTACLE, SMC SERIES	2	10-0104-002	19505	
J2	Same as J1				
P1	CONNECTOR, PLUG, MULTIPIN	1	M9PLSH19C	81312	

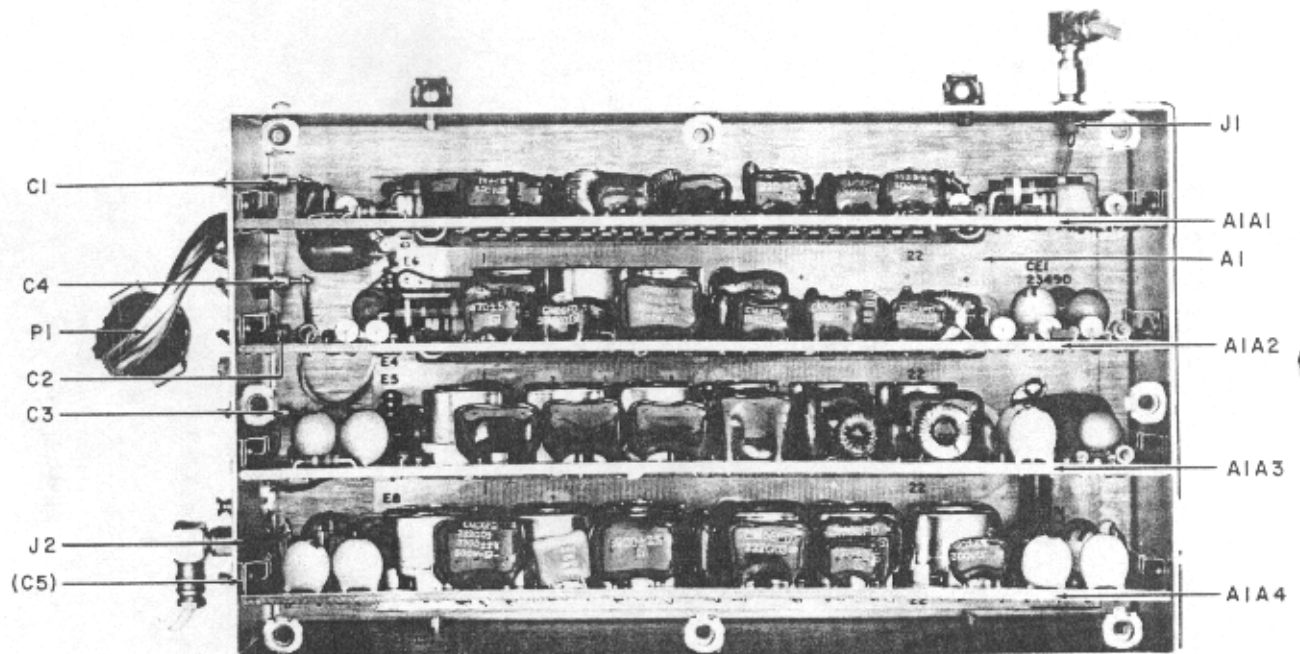


Figure 6-5. Type 791199 Input Filter Assembly (A1), Location of Components

## 6.4.2.1 Part 23490 Filter Mother Board

REF DESIG PREFIX A1A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
A1	10-18/18-30 MHz FILTER	1	791247	14632	
A2	3.4-6.0/6-10 MHz FILTER	1	791250	14632	
A3	1.2-2.0/2.0-3.4 MHz FILTER	1	791249	14632	
A4	0.5-0.8/0.8-1.2 MHz FILTER	1	791248	14632	
C1	CAPACITOR, ELECTROLYTIC, TANTALUM: 100 $\mu$ F, 20%, 20 V	1	196D107X0020MA3	56289	
C2	CAPACITOR, ELECTROLYTIC, TANTALUM: 220 $\mu$ F, 20%, 10 V	1	196D227X0010MA3	56289	
E1	TERMINAL, FORKED	8	140-1941-02-01	71279	
E2 Thru E8	Same as E1				
L1	COIL, FIXED	2	21210-112	14632	
L2	Same as L1				

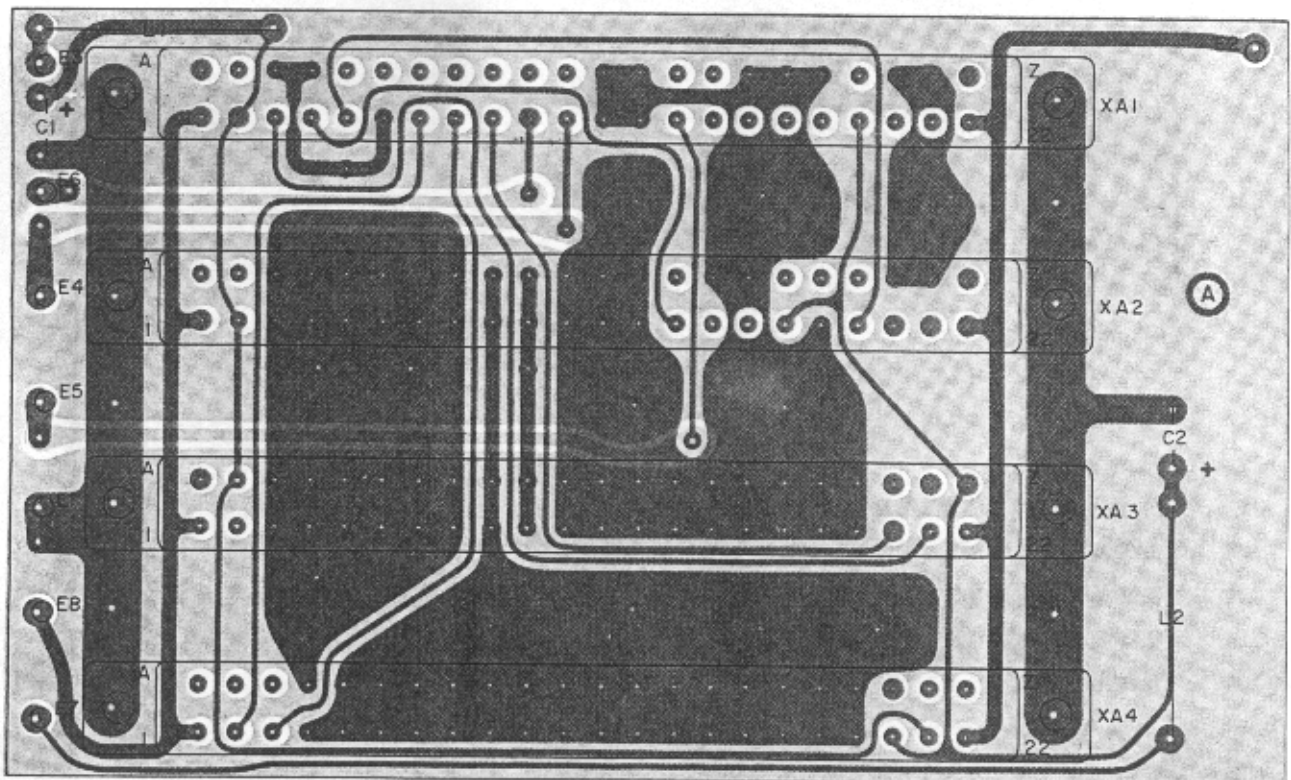


Figure 6-6. Part 23490 Filter Mother Board (A1A1), Location of Components

## REPLACEMENT PARTS LIST

WJ-8886

6.4.2.1.1 Type 791247 10-18/18-30 MHz Filter

REF DESIG PREFIX A1A1A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	4	1N4446	80131	93332
CR2	DIODE	8	MPN3401	04713	
CR3	Same as CR2				
CR4	Same as CR1				
CR5 Thru CR10	Same as CR2				
CR11	Same as CR1				
CR12	Same as CR1				
C1	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	6	8131M100-651-104M	72982	
C2 Thru C4	Same as C1				
C5	CAPACITOR, MICA, DIPPED: 33 pF, 2%, 500 V	1	CM05ED330G03	81349	72136
C6	CAPACITOR, MICA, DIPPED: 180 pF, 2%, 500 V	3	CM05FD181G03	81349	72136
C7	CAPACITOR, MICA, DIPPED: 56 pF, 2%, 500 V	1	CM05ED560G03	81349	72136
C8	CAPACITOR, MICA, DIPPED: 130 pF, 2%, 500 V	3	CM05FD131G03	81349	72136
C9	CAPACITOR, MICA, DIPPED: 51 pF, 2%, 500 V	1	CM05ED510G03	81349	72136
C10	CAPACITOR, MICA, DIPPED: 330 pF, 2%, 500 V	2	CM05FD331G03	81349	72136
C11	Same as C8				
C12	CAPACITOR, MICA, DIPPED: 220 pF, 2%, 500 V	2	CM05FD221G03	81349	72136
C13	Same as C8				
C14	Same as C6				
C15	CAPACITOR, MICA, DIPPED: 100 pF, 2%, 500 V	2	CM05FD101G03	81349	72136
C16	CAPACITOR, MICA, DIPPED: 62 pF, 2%, 500 V	1	CM05ED620G03	81349	72136
C17	CAPACITOR, MICA, DIPPED: 620 pF, 5%, 300 V	1	DM15-621J	72136	
C18	Same as C12				
C19	CAPACITOR, MICA, DIPPED: 390 pF, 2%, 500 V	1	CM05FD391G03	81349	72136
C20	CAPACITOR, MICA, DIPPED: 160 pF, 2%, 500 V	1	CM05FD161G03	81349	72136
C21	CAPACITOR, MICA, DIPPED: 110 pF, 2%, 500 V	1	CM05FD111G03	81349	72136
C22	CAPACITOR, MICA, DIPPED: 910 pF, 5%, 100 V	1	DM15-911J	72136	
C23	CAPACITOR, MICA, DIPPED: 150 pF, 2%, 500 V	3	CM05FD151G03	81349	72136
C24	Same as C23				
C25	CAPACITOR, MICA, DIPPED: 200 pF, 2%, 500 V	1	CM05FD201G03	81349	72136
C26	CAPACITOR, MICA, DIPPED: 300 pF, 2%, 500 V	1	CM05FD301G03	81349	72136
C27	Same as C15				
C28	Same as C23				



REF DESIG PREFIX A1A1A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C29	CAPACITOR, MICA, DIPPED: 270 pF, 2%, 500 V	1	CM05FD271G03	81349	72136
C30	Same as C10				
C31	CAPACITOR, MICA, DIPPED: 18 pF, 5%, 500 V	1	CM05CD180J03	81349	72136
C32	CAPACITOR, MICA, DIPPED: 510 pF, 5%, 500 V	1	DM15-511J	72136	
C33	Same as C6				
C34	CAPACITOR, MICA, DIPPED: 250 pF, 5%, 500 V	1	DM15-251J	72136	
C35	Same as C1				
C36	Same as C1				
L1	COIL, FIXED: 18 $\mu$ H	6	1537-42	99800	
L2	COIL, FIXED: 27 $\mu$ H	6	1537-48	99800	
L3	NOT USED				
L4	Same as L1				
L5	Same as L1				
L6	Same as L2				
L7	Same as L2				
L8	COIL, TOROIDAL	1	20681-110	14632	
L9	COIL, TOROIDAL	1	20681-136	14632	
L10	COIL, TOROIDAL	1	20681-104	14632	
L11	COIL, TOROIDAL	1	20681-105	14632	
L12	COIL, TOROIDAL	1	20681-112	14632	
L13	COIL, TOROIDAL	1	20681-113	14632	
L14	COIL, TOROIDAL	1	20681-99	14632	
L15	COIL, TOROIDAL	1	20681-107	14632	
L16	COIL, TOROIDAL	1	20681-114	14632	
L17	COIL, TOROIDAL	1	20681-85	14632	
L18	COIL, TOROIDAL	1	20681-108	14632	
L19	COIL, TOROIDAL	1	20681-68	14632	
L20	Same as L1				
L21	Same as L1				
L22	Same as L2				
L23	Same as L2				
L24	Same as L1				
L25	Same as L2				
R1	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	4	RCR07G153JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 24 $\Omega$ , 5%, 1W	4	RCR32G240JS	81349	01121
R3	Same as R2				

REF DESIG PREFIX A1A1A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R4	Same as R1				
R5	RESISTOR, FIXED, COMPOSITION: 18 $\Omega$ , 5%, 1/4W	4	RCR07G180JS	81349	01121
R6	Same as R5				
R7	Same as R1				
R8	Same as R2				
R9	Same as R2				
R10	Same as R1				
R11	Same as R5				
R12	Same as R5				
U1	INTEGRATED CIRCUIT	1	SN75453P	01295	

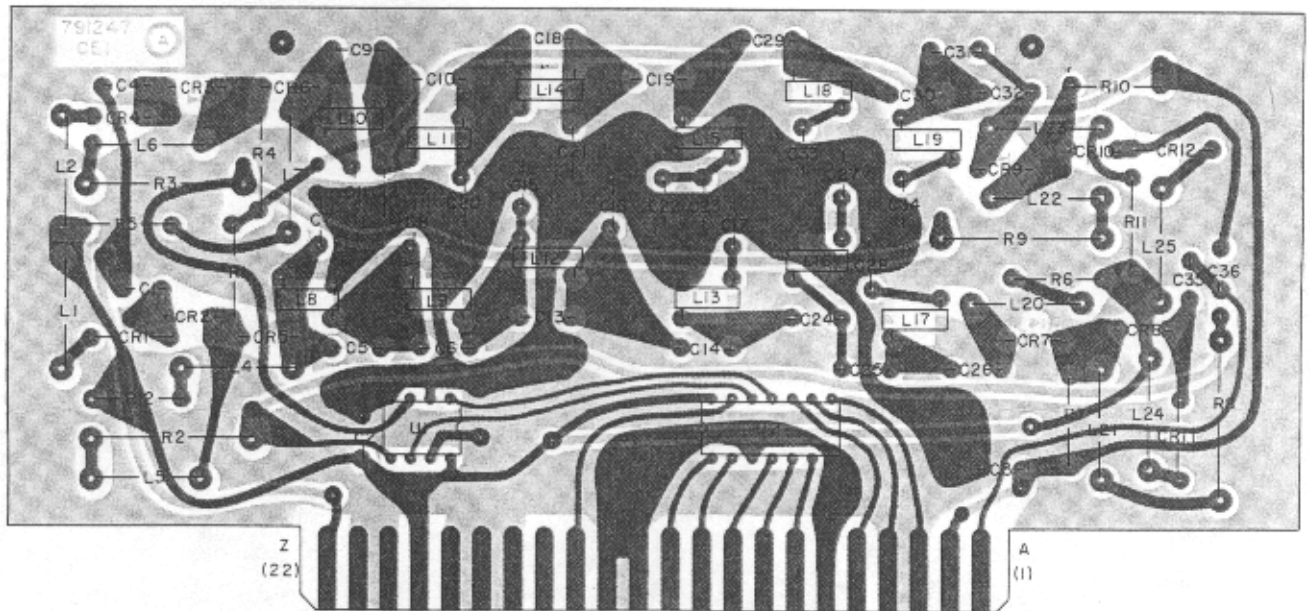


Figure 6-7. Type 791247 10-18/18-30 MHz Filter (A1A1A1), Location of Components

## 6.4.2.1.2 Type 791250 3.4-6/6-10 MHz Filter

REF DESIG PREFIX A1A1A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	4	1N4446	80131	93332
CR2	DIODE	8	MPN3401	04713	
CR3	Same as CR2				
CR4	Same as CR1				
CR5 Thru CR10	Same as CR2				
CR11	Same as CR1				
CR12	Same as CR1				
C1	CAPACITOR, ELECTROLYTIC, TANTALUM: 0.47 $\mu$ F, 10%, 35 V	4	CS13BF474K	81349	56289
C2	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	2	8131M100-651-104M	72982	
C3	Same as C2				
C4	Same as C1				
C5	CAPACITOR, MICA, DIPPED: 91 pF, 2%, 500 V	1	CM05FD910G03	81349	72136
C6	CAPACITOR, MICA, DIPPED: 560 pF, 5%, 300 V	1	DM15-561J	72136	
C7	CAPACITOR, MICA, DIPPED: 270 pF, 2%, 500 V	2	CM05FD271G03	81349	72136
C8	CAPACITOR, MICA, DIPPED: 360 pF, 2%, 500 V	2	CM05FD361G03	81349	72136
C9	CAPACITOR, MICA, DIPPED: 15 pF, 5%, 500 V	1	CM05CD150J03	81349	72136
C10	CAPACITOR, MICA, DIPPED: 160 pF, 2%, 500 V	1	CM05FD161G03	81349	72136
C11	CAPACITOR, MICA, DIPPED: 910 pF, 5%, 100 V	3	DM15-911J	72136	
C12	CAPACITOR, MICA, DIPPED: 510 pF, 5%, 500 V	3	DM15-511J	72136	
C13	CAPACITOR, MICA, DIPPED: 620 pF, 5%, 300 V	3	DM15-621J	72136	
C14	Same as C8				
C15	Same as C12				
C16	Same as R7				
C17	NOT USED				
C18	CAPACITOR, MICA, DIPPED: 1800 pF, 5%, 500 V	1	CM06FD182J03	81349	72136
C19	Same as C13				
C20	Same as C11				
C21	CAPACITOR, MICA, DIPPED: 500 pF, 5%, 500 V	1	DM15-501J	72136	
C22	CAPACITOR, MICA, DIPPED: 300 pF, 2%, 500 V	2	CM05FD301G03	81349	72136
C23	CAPACITOR, MICA, DIPPED: 110 pF, 2%, 500 V	1	CM05FD111G03	81349	72136
C24	CAPACITOR, MICA, DIPPED: 3000 pF, 2%, 500 V	1	CM06FD302G03	81349	72136
C25	CAPACITOR, MICA, DIPPED: 470 pF, 5%, 500 V	2	DM15-471J	72136	
C26	Same as C13				
C27	Same as C11				

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A1A1A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C28	Same as C22				
C29	Same as C25				
C30	CAPACITOR, MICA, DIPPED: 750 pF, 5%, 300 V	2	DM15-751J	72136	
C31	CAPACITOR, MICA, DIPPED: 1000 pF, 5%, 100 V	1	DM15-102J	72136	
C32	CAPACITOR, MICA, DIPPED: 1600 pF, 5%, 500 V	1	CM06FD162J03	81349	72136
C33	Same as C12				
C34	Same as C30				
C35	Same as C1				
C36	Same as C1				
L1	COIL, FIXED: 47 $\mu$ H	6	1537-60	99800	
L2	COIL, FIXED: 68 $\mu$ H	6	553-3635-23	71279	
L3	Same as L1				
L4	Same as L1				
L5	Same as L2				
L6	Same as L2				
L7	COIL, TOROIDAL	1	20681-98	14632	
L8	COIL, TOROIDAL	1	20681-126	14632	
L9	COIL, TOROIDAL	1	20681-68	14632	
L10	COIL, TOROIDAL	1	20681-137	14632	
L11	COIL, TOROIDAL	1	20681-100	14632	
L12	COIL, TOROIDAL	1	20681-101	14632	
L13	COIL, TOROIDAL	1	20681-97	14632	
L14	POT CORE ASSEMBLY	1	30312-171	14632	
L15	COIL, TOROIDAL	1	20681-102	14632	
L16	COIL, TOROIDAL	1	20681-138	14632	
L17	POT CORE ASSEMBLY	1	30312-177	14632	
L18	POT CORE ASSEMBLY	1	30312-159	14632	
L19	Same as L1				
L20	Same as L1				
L21	Same as L2				
L22	Same as L2				
L23	Same as L1				
L24	Same as L2				
R1	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	4	RCR07G153JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 18 $\Omega$ , 5%, 1/4W	4	RCR07G180JS	81349	01121
R3	RESISTOR, FIXED, COMPOSITION: 24 $\Omega$ , 5%, 1W	4	RCR32G240JS	81349	01121

REF DESIG PREFIX A1A1A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R4	Same as R3				
R5	Same as R1				
R6	Same as R2				
R7	Same as R2				
R8	Same as R1				
R9	Same as R3				
R10	Same as R3				
R11	Same as R1				
R12	Same as R2				
U1	INTEGRATED CIRCUIT	1	SN75453P	01295	

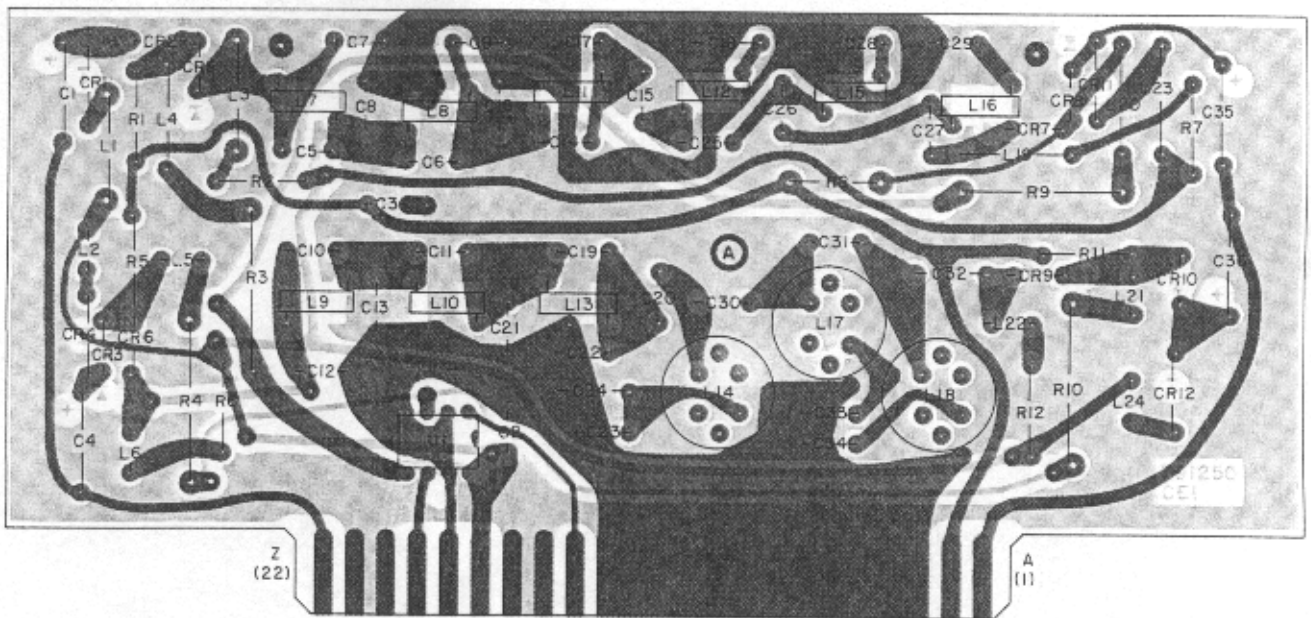


Figure 6-8. Type 791250 3.4-6/6-10 MHz Filter (A1A1A2), Location of Components

## REPLACEMENT PARTS LIST

WJ-8888

6.4.2.1.3 Type 791249 1.2-2.0/2.0-3.4 MHz Filter

REF DESIG PREFIX A1A1A3

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	4	1N4446	80131	93332
CR2	DIODE	8	MPN3401	04713	
CR3	Same as CR2				
CR4	Same as CR1				
CR5	Same as CR2				
CR6	Same as CR2				
CR7	Same as CR1				
CR8	Same as CR2				
CR9	Same as CR2				
CR10	Same as CR1				
CR11	Same as CR2				
CR12	Same as CR2				
C1	CAPACITOR, ELECTROLYTIC, TANTALUM: 1.0 $\mu$ F, 10%, 35 V	4	CS13BF105K	81349	56289
C2	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	2	8131M100-651-104M	72982	
C3	Same as C2				
C4	Same as C1				
C5	CAPACITOR, MICA, DIPPED: 270 pF, 2%, 500 V	1	CM05FD271G03	81349	72136
C6	CAPACITOR, MICA, DIPPED: 910 pF, 5%, 100 V	3	DM15-911J	72136	
C7	CAPACITOR, MICA, DIPPED: 470 pF, 5%, 500 V	1	DM15-471J	72136	
C8	CAPACITOR, MICA, DIPPED: 1600 pF, 5%, 500 V	3	CM06FD162J03	81349	72136
C9	Same as C8				
C10	CAPACITOR, MICA, DIPPED: 1100 pF, 2%, 500 V	2	CM06FD112G03	81349	72136
C11	Same as C10				
C12	CAPACITOR, MICA, DIPPED: 820 pF, 5%, 300 V	1	DM15-821J	72136	
C13	CAPACITOR, MICA, DIPPED: 120 pF, 5%, 500 V	2	CM05FD121J03	81349	72136
C14	CAPACITOR, MICA, DIPPED: 2700 pF, 2%, 500 V	3	CM06FD272G03	81349	72136
C15	CAPACITOR, MICA, DIPPED: 2000 pF, 2%, 500 V	1	CM06FD202G03	81349	72136
C16	CAPACITOR, MICA, DIPPED: 1800 pF, 5%, 500 V	2	CM05FD182J03	81349	72136
C17	CAPACITOR, MICA, DIPPED: 100 pF, 2%, 500 V	1	CM05FD101G03	81349	72136
C18	CAPACITOR, MICA, DIPPED: 1500 pF, 2%, 500 V	2	CM06FD152G03	81349	72136
C19	Same as C18				
C20	CAPACITOR, MICA, DIPPED: 1300 pF, 2%, 500 V	2	CM06FD132G03	81349	72136
C21	CAPACITOR, MICA, DIPPED: 560 pF, 5%, 300 V	1	DM15-561J	72136	
C22	CAPACITOR, MICA, DIPPED: 680 pF, 2%, 300 V	1	DM15-681G	72136	
C23	CAPACITOR, MICA, DIPPED: 4700 pF, 2%, 500 V	2	CM06FD472G03	81349	72136

REF DESIG PREFIX A1A1A3

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C24	Same as C14				
C25	CAPACITOR, MICA, DIPPED: 2400 pF, 2%, 500 V	2	CM06FD242G03	81349	72136
C26	Same as C6				
C27	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 10%, 100 V	1	8141-100C0G0-103K	72982	
C28	Same as C16				
C29	Same as C14				
C30	Same as C6				
C31	Same as C20				
C32	Same as C13				
C33	CAPACITOR, MICA, DIPPED: 3000 pF, 2%, 500 V	1	CM06FD302G03	81349	72136
C34	Same as C23				
C35	Same as C8				
C36	Same as C25				
C37	Same as C1				
C38	Same as C1				
L1	COIL, FIXED: 220 $\mu$ H	6	553-3635-29	71279	
L2	Same as L1				
L3	COIL, FIXED: 560 $\mu$ H	6	553-3635-34	71279	
L4	Same as L3				
L5	Same as L1				
L6	TOROID	1	20681-138	14632	
L7	POT CORE ASSEMBLY	1	30312-159	14632	
L8	Same as L3				
L9	COIL, FIXED	1	20681-101	14632	
L10	COIL, FIXED	1	20681-95	14632	
L11	COIL, VARIABLE	1	30312-170	14632	
L12	COIL, VARIABLE	1	30312-171	14632	
L13	COIL, VARIABLE	1	30312-174	14632	
L14	COIL, VARIABLE	1	30312-164	14632	
L15	COIL, VARIABLE	1	30312-175	14632	
L16	COIL, VARIABLE	1	30312-176	14632	
L17	COIL, VARIABLE	1	30312-172	14632	
L18	COIL, VARIABLE	1	30312-173	14632	
L19	Same as L1				
L20	Same as L1				
L21	Same as L3				

REF DESIG PREFIX A1A1A3

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
L22	Same as L3				
L23	Same as L1				
L24	Same as L3				
R1	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	4	RCR07G153JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 24 $\Omega$ , 5%, 1W	4	RCR32G240JS	81349	01121
R3	Same as R2				
R4	Same as R1				
R5	RESISTOR, FIXED, COMPOSITION: 18 $\Omega$ , 5%, 1/4W	4	RCR07G180JS	81349	01121
R6	Same as R5				
R7	Same as R5				
R8	Same as R1				
R9	Same as R2				
R10	Same as R2				
R11	Same as R1				
R12	Same as R5				
U1	INTEGRATED CIRCUIT	1	SN75453P	01295	

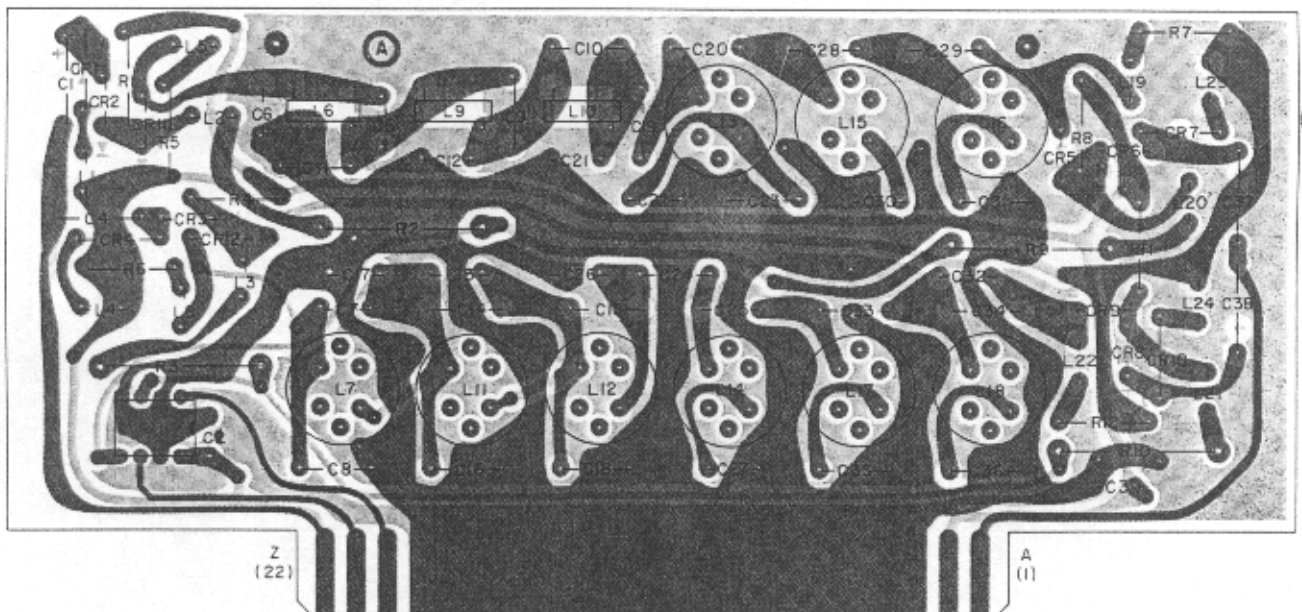


Figure 6-9. Type 791249 1.2-2.0/2.0-3.4 MHz Filter (A1A1A3), Location of Components



6.4.2.1.4 Type 791248 0.5-0.8/0.8-1.2 MHz Filter

REF DESIG PREFIX A1A1A4

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	4	1N4446	80131	98332
CR2	DIODE	8	MPN3401	04713	
CR3 Thru CR5	Same as CR2				
CR6	Same as CR1				
CR7	Same as CR2				
CR8	Same as CR2				
CR9	Same as CR1				
CR10	Same as CR2				
CR11	Same as CR2				
CR12	Same as CR1				
C1	CAPACITOR, ELECTROLYTIC, TANTALUM: 1.0 $\mu$ F, 10%, 35 V	4	CS13BF105K	81349	56289
C2	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	2	8131M100-651-104M	72982	
C3	Same as C2				
C4	Same as C1				
C5	CAPACITOR, MICA, DIPPED: 750 pF, 5%, 300 V	1	DM15-751J	72136	
C6	CAPACITOR, MICA, DIPPED: 180 pF, 2%, 500 V	2	CM05FD181G03	81349	72136
C7	CAPACITOR, MICA, DIPPED: 2400 pF, 2%, 500 V	2	CM06FD242G03	81349	72136
C8	CAPACITOR, MICA, DIPPED: 3000 pF, 2%, 500 V	2	CM06FD302G03	81349	72136
C9	CAPACITOR, MICA, DIPPED: 1100 pF, 2%, 500 V	1	CM06FD112G03	81349	72136
C10	CAPACITOR, MICA, DIPPED: 3900 pF, 2%, 500 V	6	CM06FD392G03	81349	72136
C11	Same as C10				
C12	CAPACITOR, MICA, DIPPED: 470 pF, 5%, 500 V	1	DM15-471J	72136	
C13	Same as C10				
C14	Same as C8				
C15	CAPACITOR, MICA, DIPPED: 2200 pF, 2%, 500 V	1	CM06FD222G03	81349	72136
C16	CAPACITOR, MICA, DIPPED: 1500 pF, 2%, 500 V	1	CM06FD152G03	81349	72136
C17	CAPACITOR, MICA, DIPPED: 6800 pF, 5%, 100 V	3	DM19-682J	72136	
C18	CAPACITOR, MICA, DIPPED: 4700 pF, 2%, 500 V	2	CM06FD472G03	81349	72136
C19	CAPACITOR, MICA, DIPPED: 620 pF, 5%, 300 V	1	DM15-621J	72136	
C20	CAPACITOR, MICA, DIPPED: 3600 pF, 2%, 500 V	2	CM06FD362G03	81349	72136
C21	CAPACITOR, MICA, DIPPED: 2000 pF, 2%, 500 V	1	CM06FD202G03	81349	72136
C22	CAPACITOR, MICA, DIPPED: 150 pF, 2%, 500 V	1	CM06FD151G03	81349	72136
C23	Same as C10				
C24	Same as C20				

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A1A1A4

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C25	Same as C18				
C26	Same as C10				
C27	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 10%, 100 V	1	8141-100C0G0-103K	72982	
C28	Same as C7				
C29	CAPACITOR, MICA, DIPPED: 910 pF, 5%, 100 V	1	DM15-911J	72136	
C30	CAPACITOR, MICA, DIPPED: 510 pF, 5%, 500 V	1	DM15-511J	72136	
C31	CAPACITOR, MICA, DIPPED: 5600 pF, 2%, 300 V	5	DM19-562G	72136	
C32	Same as C31				
C33	Same as C17				
C34	CAPACITOR, CERAMIC, DISC: 0.022 $\mu$ F, 5%, 500 V	1	8151M100C0G223J	72982	
C35	Same as C10				
C36	CAPACITOR, MICA, DIPPED: 330 pF, 2%, 500 V	1	CM05FD331G03	81349	72136
C37	Same as C17				
C38	CAPACITOR, MICA, DIPPED: 3300 pF, 2%, 500 V	1	CM06FD332G03	81349	72136
C39	Same as C6				
C40 Thru C42	Same as C31				
C43	Same as C1				
C44	Same as C1				
L1	COIL, FIXED: 1.2 mH	12	553-3635-36	71279	
L2 Thru L5	Same as L1				
L6	COIL, VARIABLE	1	30312-164	14632	
L7	COIL, VARIABLE	1	30312-158	14632	
L8	Same as L1				
L9	COIL, VARIABLE	1	30312-165	14632	
L10	COIL, VARIABLE	1	30312-166	14632	
L11	COIL, VARIABLE	1	30312-159	14632	
L12	COIL, VARIABLE	1	30312-160	14632	
L13	COIL, VARIABLE	1	30312-167	14632	
L14	COIL, VARIABLE	1	30312-168	14632	
L15	COIL, VARIABLE	1	30312-161	14632	
L16	COIL, VARIABLE	1	30312-162	14632	
L17	COIL, VARIABLE	1	30312-169	14632	
L18	Same as L1				

REF DESIG PREFIX A1A1A4

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
L19	COIL, VARIABLE	1	30312-163	14632	
L20 Thru L24	Same as L1				
R1	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	4	RCR07G153JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 16 $\Omega$ , 5%, 1/2W	4	RCR20G160JS	81349	01121
R2	Same as R3				
R4	Same as R1				
R5	RESISTOR, FIXED, COMPOSITION: 18 $\Omega$ , 5%, 1/4W	4	RCR07G180JS	81349	01121
R6 Thru R8	Same as R5				
R9	Same as R1				
R10	Same as R2				
R11	Same as R2				
R12	Same as R1				
U1	INTEGRATED CIRCUIT	1	SN75453P	01295	

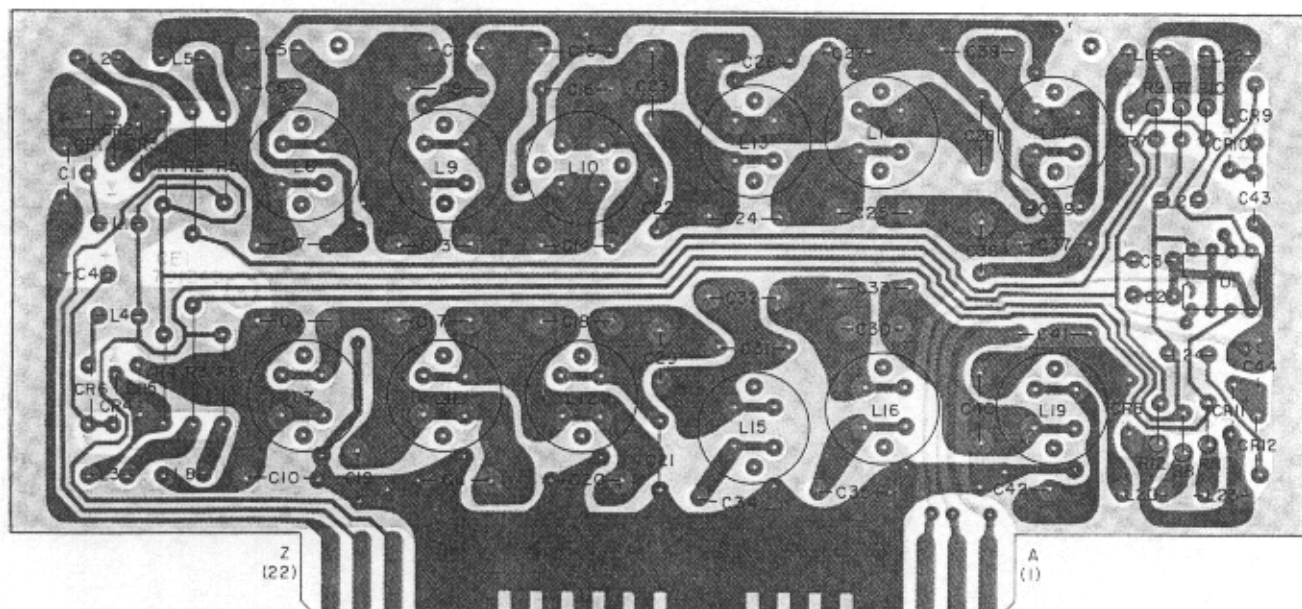


Figure 6-10. Type 791248 0.5-0.8/0.8-1.2 MHz Filter (A1A1A4), Location of Components

## REPLACEMENT PARTS LIST

WJ-8888

## 6.4.3 TYPE 791166 INPUT CONVERTER

REF DESIG PREFIX A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
A1	ATTENUATOR SHAPER	1	17059	14632	
A2	FILTER BOARD	1	17600	14632	
A3	LO AMPLIFIER	1	17397	14632	
CR1	DIODE	3	1N4446	80131	93332
CR2	Same as CR1				
CR3	DIODE	3	5082-3080	28480	
CR4	DIODE	1	1N462A	80131	93332
CR5	Same as CR3				
CR6	Same as CR3				
CR7	Same as CR1				
C1	CAPACITOR, CERAMIC, FEEDTHRU: 1000 pF, GMV, 500 V	12	54-794-001-102W	33095	
C2	Same as C1				
C3	CAPACITOR, CERAMIC, STANDOFF: 1000 pF, GMV, 500 V	12	54-803-003-102W	33095	
C4 Thru C7	Same as C1				
C8	Same as C3				
C9	CAPACITOR, ELECTROLYTIC, TANTALUM: 100 $\mu$ F, 20%, 35 V	7	MTP107M035P1C	76055	
C10	CAPACITOR, MICA, DIPPED: 82 pF, 2%, 500 V	2	CM05ED820G03	81349	72136
C11	Same as C10				
C12	CAPACITOR, CERAMIC, DISC: 0.47 $\mu$ F, 20%, 100 V	3	8131M100-651-474M	72982	
C13	Same as C12				
C14	Same as C12				
C15	CAPACITOR, CERAMIC, DISC: 1000 pF, GMV, 500 V	11	SM(1000pF, P)	91418	
C16	Same as C15				
C17	Same as C15				
C18	Same as C9				
C19	Same as C9				
C20	Same as C3				
C21	Same as C3				
C22*	CAPACITOR, CERAMIC, TUBULAR: 4.7 pF, $\pm$ 0.1 pF, 500 V	1	301-000C0H0-479B	72982	
C23	CAPACITOR, VARIABLE, AIR: 0.8-10.0 pF, 250 V	4	5202	91293	
C24	Same as C23				
C25	Same as C9				

\* Nominal value; final value factory selected.

## REF DESIG PREFIX A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C26*	CAPACITOR, CERAMIC, TUBULAR: 6.2 pF, $\pm 0.5$ pF, 500 V	1	301-000C0H0-629D	72982	
C27	Same as C9				
C28	CAPACITOR, CERAMIC, TUBULAR: 15 pF, 5%, 500 V	1	301-000C0G0-150J	72982	
C29	Same as C3				
C30	CAPACITOR, CERAMIC, TUBULAR: 6.8 pF, $\pm 0.25$ pF, 500 V	2	301-000C0H0-689C	72982	
C31	Same as C23				
C32	Same as C1				
C33 Thru C36	Same as C15				
C37	Same as C3				
C38	Same as C30				
C39	Same as C23				
C40	Same as C15				
C41 Thru C43	Same as C1				
C44	CAPACITOR, MICA, DIPPED: 1200 pF, 2%, 100 V	2	DM15-122G	72136	
C45	CAPACITOR, MICA, DIPPED: 470 pF, 5%, 500 V	3	DM15-471J	72136	
C46	Same as C1				
C47	Same as C45				
C48	Same as C44				
C49	Same as C9				
C50	Same as C9				
C51	Same as C3				
C52	Same as C3				
C53	CAPACITOR, CERAMIC, TUBULAR: 2.7 pF, $\pm 0.25$ pF, 500 V	3	301-000C0J0-279C	72982	
C54	Same as C15				
C55	Same as C53				
C56	Same as C53				
C57	Same as C3				
C58	CAPACITOR, COMPOSITION, TUBULAR: 0.68 pF, 10%, 500 V	1	QC(0.68pF,K)	95121	
C59	Same as C15				
C60	CAPACITOR, MICA, DIPPED: 47 pF, 2%, 500 V	2	CM05ED470G03	81349	72136

\* Nominal value; final value factory selected.

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C61	Same as C60				
C62	CAPACITOR, MICA, DIPPED: 330 pF, 2%, 500 V	1	CM05FD331G03	81349	72136
C63	Same as C3				
C64	Same as C3				
C65	Same as C45				
C66	CAPACITOR, MICA, DIPPED: 33 pF, 2%, 500 V	1	CM05ED330G03	81349	72136
C67	Same as C3				
C68	Same as C15				
C69	CAPACITOR, MICA, DIPPED: 100 pF, 2%, 500 V	1	CM05FD101G03	81349	72136
C70	Same as C1				
E1	TERMINAL, FEEDTHRU, INSULATED	1	SFU16Y	04013	
FB1	FERRITE BEAD	5	56-590-65-4A	02114	
FB2 Thru FB5	Same as FB1				
FL1	FILTER	1	92065	14632	
FL2	FILTER	1	92066	14632	
FL3	FILTER, LOWPASS	2	9051-100-0000	72982	
FL4	Same as FL3				
J1	CONNECTOR, RECEPTACLE, SMC SERIES	4	10-0104-002	19505	
J2 Thru J4	Same as J1				
L1	INDUCTOR	1	21210-18	14632	
L2	COIL, FIXED: 47 $\mu$ H	2	1537-60	99800	
L3	COIL, FIXED: 4.7 mH	1	3635-45	71279	
L4	COIL, FIXED: 0.82 $\mu$ H	1	1537-10	99800	
L5	COIL, FIXED: 2.2 $\mu$ H	11	1025-28	99800	
L6	COIL, VARIABLE: 0.612-0.748 $\mu$ H	4	558-7107-11	71279	
L7	Same as L6				
L8	Same as L5				
L9	INDUCTOR	2	17416-1	14632	
L10	Same as L9				
L11 Thru L15	Same as L5				
L16	Same as L2				
L17	Same as L5				

REF DESIG PREFIX A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
L18	Same as L5				
L19	Same as L6				
L20	Same as L6				
L21	Same as L5				
L22	Same as L5				
L23	COIL, FIXED, MOLD: 1.5 $\mu$ H	2	1537-16	99800	
L24	COIL, VARIABLE: 0.198-0.242 $\mu$ H	1	558-7107-05	71279	
L25	COIL, FIXED: 1.00 $\mu$ H	1	1537-12	99800	
L26	COIL, VARIABLE: 0.135-0.165 $\mu$ H	1	558-7107-03	71279	
L27	Same as L23				
P1	CONNECTOR, PLUG, MULTIPIN	1	M7PLSH19C	81312	
Q1	TRANSISTOR	3	2N2222A	80131	04713
Q2	TRANSISTOR	3	U320	17856	
Q3	TRANSISTOR	2	2N3478	80131	34156
Q4	Same as Q1				
Q5	Same as Q2				
Q6	Same as Q1				
Q7	Same as Q2				
Q8	Same as Q3				
Q9	TRANSISTOR	1	2N5109	80131	02735
RA1	HEATSINK	5	TXP1808B	98978	
RA2	HEATSINK	3	TXB2P032-037B	98978	
RA3	Same as RA1				
RA4	Same as RA2				
RA5	Same as RA1				
RA6	Same as RA2				
RA7	Same as RA1				
RA8	Same as RA1				
RA9	HEATSINK	1	TXP0508B	98978	
R1*	RESISTOR, FIXED, COMPOSITION: 3.3 $\Omega$ , 5%, 1/4W	1	RCR07G3R3JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 2.2 k $\Omega$ , 5%, 1/4W	4	RCR07G222JS	81349	01121
R3	RESISTOR, FIXED, COMPOSITION: 91 $\Omega$ , 5%, 1/4W	3	RCR07G910JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 10 $\Omega$ , 5%, 1/4W	5	RCR07G100JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 430 $\Omega$ , 5%, 1/4W	1	RCR07G431JS	81349	01121
R6	RESISTOR, FIXED, COMPOSITION: 820 $\Omega$ , 5%, 1/4W	2	RCR07G821JS	81349	01121
R7	Same as R4				

\* Nominal value; final value factory selected.

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R8	RESISTOR, FIXED, COMPOSITION: 300 $\Omega$ , 5%, 1/4W	2	RCR07G30LJS	81349	01121
R9	RESISTOR, FIXED, COMPOSITION: 18 $\Omega$ , 5%, 1/4W	1	RCR07G180JS	81349	01121
R10	Same as R8				
R11	Same as R				
R12	Same as R3				
R13	Same as R4				
R14	RESISTOR, FIXED, COMPOSITION: 5.1 k $\Omega$ , 5%, 1/4W	2	RCR07G512JS	81349	01121
R15	RESISTOR, FIXED, COMPOSITION: 4.7 $\Omega$ , 5%, 1/4W	1	RCR07G4R7JS	81349	01121
R16	Same as R14				
R17	Same as R2				
R18	Same as R3				
R19	Same as R4				
R20	RESISTOR, FIXED, COMPOSITION: 150 $\Omega$ , 5%, 1/4W	3	RCR07G15LJS	81349	01121
R21	RESISTOR, FIXED, COMPOSITION: 56 $\Omega$ , 5%, 1/4W	1	RCR07G560JS	81349	01121
R22	RESISTOR, FIXED, COMPOSITION: 3.9 k $\Omega$ , 5%, 1/4W	1	RCR07G392JS	81349	01121
R23	RESISTOR, FIXED, COMPOSITION: 27 $\Omega$ , 5%, 1/4W	1	RCR07G270JS	81349	01121
R24	RESISTOR, FIXED, COMPOSITION: 22 $\Omega$ , 5%, 1/4W	4	RCR07G220JS	81349	01121
R25	RESISTOR, FIXED, COMPOSITION: 82 $\Omega$ , 5%, 1/4W	1	RCR07G820JS	81349	01121
R26	Same as R20				
R27	RESISTOR, FIXED, COMPOSITION: 8.2 k $\Omega$ , 5%, 1/4W	1	RCR07G822JS	81349	01121
R28	Same as R20				
R29	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	2	RCR07G101JS	81349	01121
R30	Same as R24				
R31	RESISTOR, FIXED, COMPOSITION: 1.8 k $\Omega$ , 5%, 1/4W	1	RCR07G182JS	81349	01121
R32	RESISTOR, FIXED, COMPOSITION: 15 $\Omega$ , 5%, 1/4W	1	RCR07G150JS	81349	01121
R33	Same as R29				
R34	RESISTOR, FIXED, COMPOSITION: 6.8 $\Omega$ , 5%, 1/4W	1	RCR07G6R7JS	81349	01121
R35	Same as R2				
R36	Same as R24				
R37	Same as R4				
R38	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	2	RCR07G331JS	81349	01121
R39	Same as R24				
R40	Same as R6				
R41	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	1	RCR07G470JS	81349	01121
R42	Same as R38				
R43	RESISTOR, FIXED, COMPOSITION: 2.7 $\Omega$ , 5%, 1/4W	1	RCR07G2R7JS	81349	01121



REF DESIG PREFIX A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
T1	TRANSFORMER, TOROIDAL	1	21278-15	14632	
T2	INDUCTOR, TAPPED	2	11464-88	14632	
T3	Same as T2				
U1	MIXER, BALANCED	1	M9E	27956	
U2	MIXER, BALANCED	1	M9D	27956	

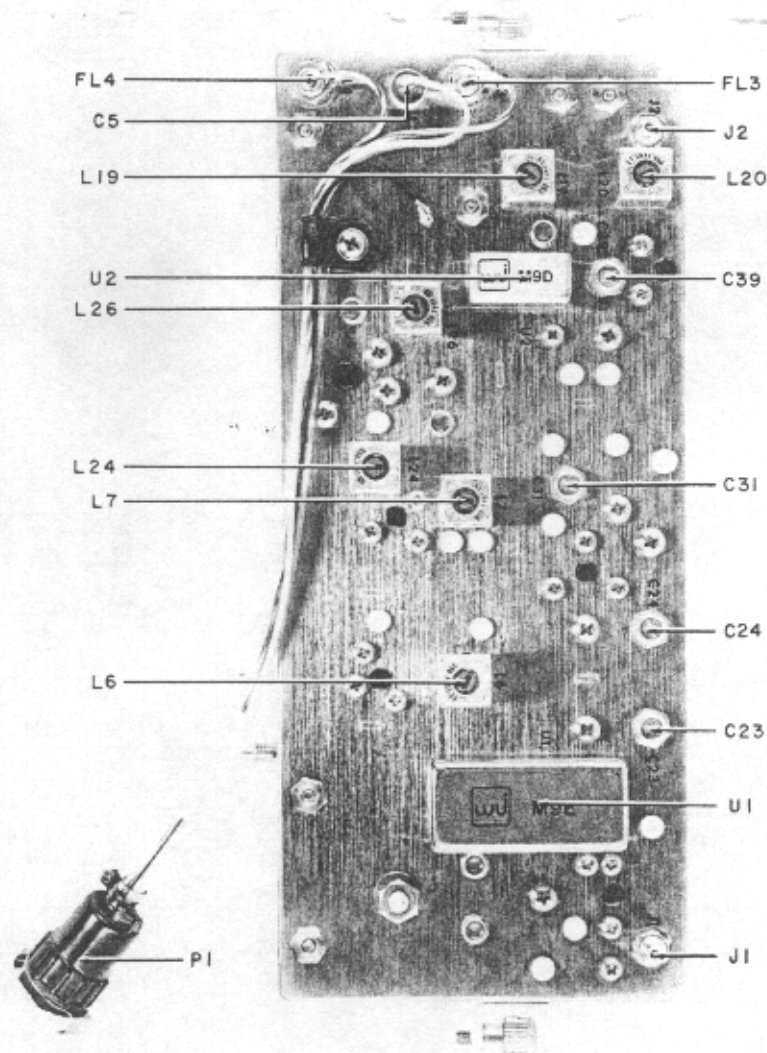
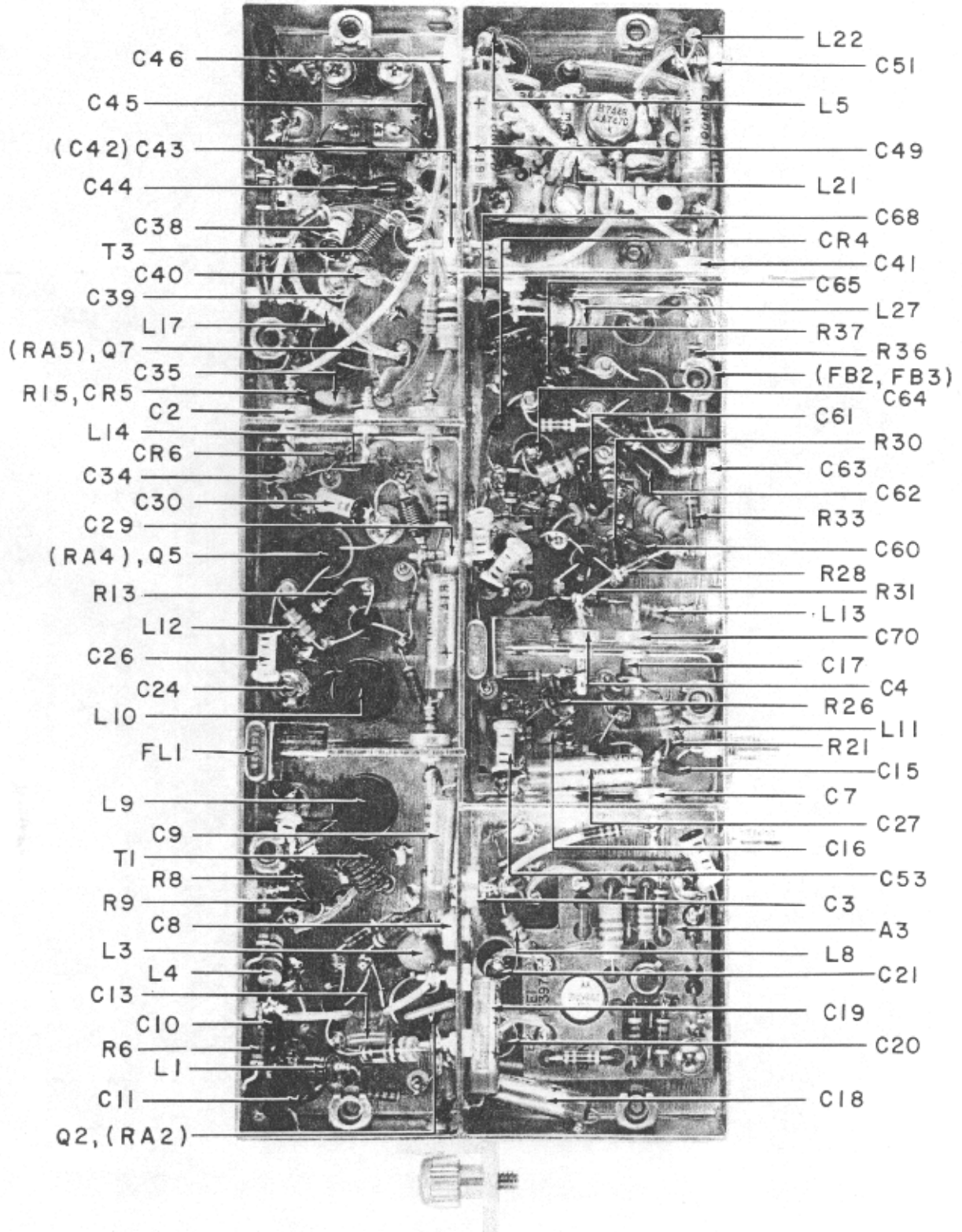


Figure 6-11. Type 791166 Input Converter, Top View (A2), Location of Components



- C46
- C45
- (C42) C43
- C44
- C38
- T3
- C40
- C39
- L17
- (RA5), Q7
- R15, CR5
- C2
- L14
- CR6
- C34
- C30
- C29
- (RA4), Q5
- R13
- L12
- C26
- C24
- L10
- FL1
- L9
- C9
- T1
- R8
- R9
- C8
- L3
- L4
- C13
- C10
- R6
- L1
- C11
- Q2, (RA2)
- L22
- C51
- L5
- C49
- L21
- C68
- CR4
- C41
- C65
- L27
- R37
- R36
- (FB2, FB3)
- C64
- C61
- R30
- C63
- C62
- R33
- C60
- R28
- R31
- L13
- C70
- C17
- C4
- R26
- L11
- R21
- C15
- C7
- C27
- C16
- C53
- C3
- A3
- L8
- C21
- C19
- C20
- C18

Figure 6-12a. Type 791166 Input Converter (A2), Bottom View, Location of Components

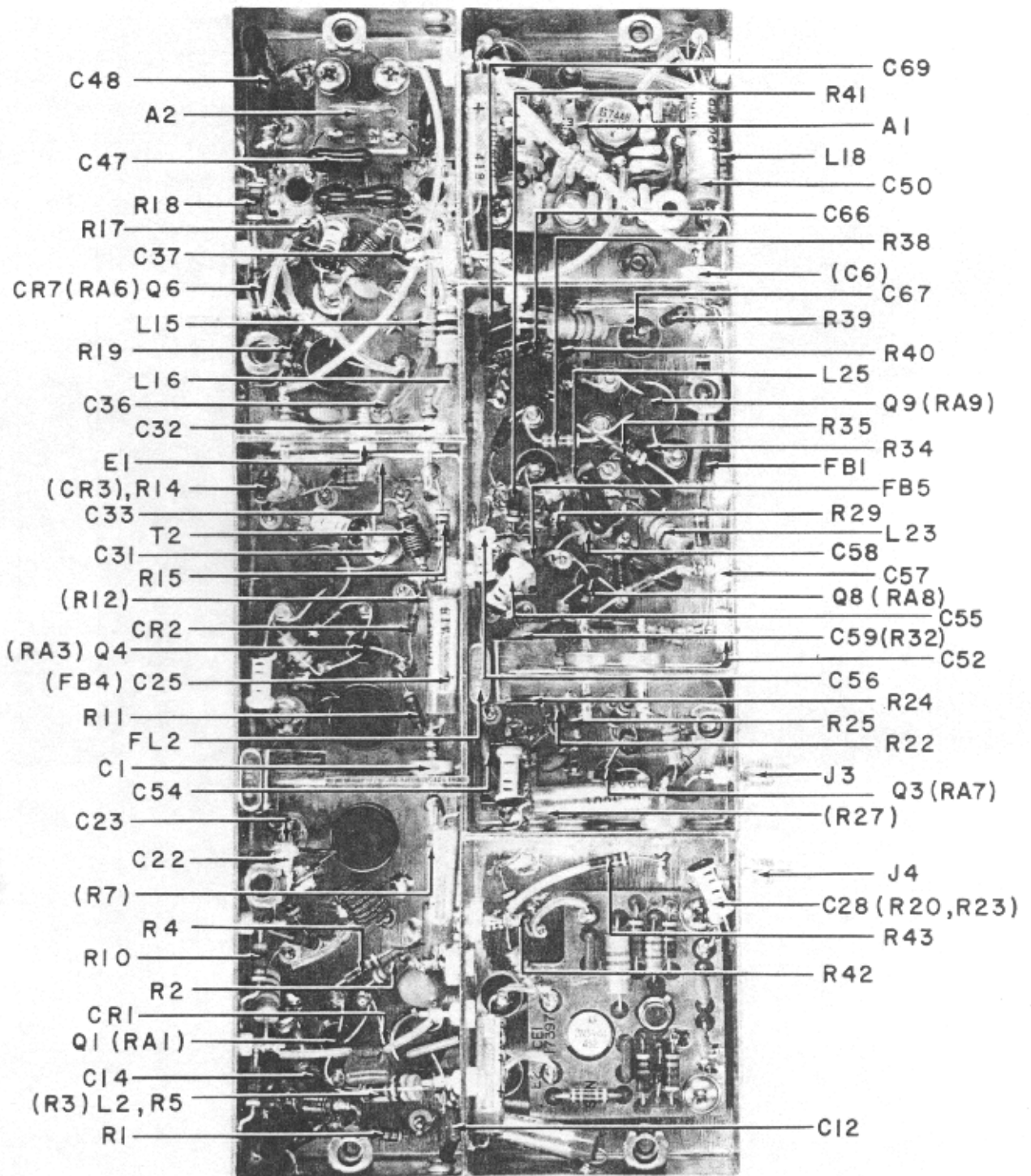


Figure 6-12b. Type 791166 Input Converter (A2), Bottom View, Location of Components

## REPLACEMENT PARTS LIST

WJ-8888

## 6.4.3.1 Part 17059 Attenuator Shaper

REF DESIG PREFIX A2A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	3	5082-2800	28480	
CR2	Same as CR1				
CR3	Same as CR1				
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 200 V	2	8131A200Z5U103M	72982	
C2	Same as C1				
RT1	THERMISTOR: 3.9 k $\Omega$ , 5%, 1/8W	1	DG125-392J	15454	
R1	RESISTOR, FIXED, FILM: 1.0 k $\Omega$ , 1%, 1/10W	1	RN55C1001F	81349	75042
R2	RESISTOR, FIXED, FILM: 412 k $\Omega$ , 1%, 1/4W	1	CC4123F	01121	
R3	RESISTOR, FIXED, FILM: 38.3 k $\Omega$ , 1%, 1/10W	1	RN55C3832F	81349	75042
R4	RESISTOR, FIXED, FILM: 100 k $\Omega$ , 1%, 1/10W	5	RN55C1003F	81349	75042
R5	RESISTOR, FIXED, FILM: 261 k $\Omega$ , 1%, 1/4W	1	MF4C/261K/F	80031	
R6	RESISTOR, VARIABLE, FILM: 100 k $\Omega$ , 10%, 1/2W	1	62PR100K	73138	
R7	RESISTOR, FIXED, FILM: 121 k $\Omega$ , 1%, 1/4W	1	MF4C/121K/F	80031	
R8	RESISTOR, FIXED, FILM: 475 k $\Omega$ , 1%, 1/4W	1	CC4753F	01121	
R9	NOT USED				
R10	RESISTOR, FIXED, FILM: 9.09 k $\Omega$ , 1%, 1/10W	1	RN55C9091F	81349	75042
R11	Same as R4				
R12	RESISTOR, FIXED, FILM: 309 k $\Omega$ , 1%, 1/4W	1	CC3093F	01121	
R13 Thru R15	Same as R4				
R16	RESISTOR, VARIABLE, FILM: 20 k $\Omega$ , 10%, 1/2W	1	62PR20K	73138	
R17	RESISTOR, FIXED, FILM: 34.8 k $\Omega$ , 1%, 1/10W	1	RN55C3482F	81349	75042
R18	RESISTOR, FIXED, FILM: 42.2 k $\Omega$ , 1%, 1/10W	1	RN55C4222F	81349	75042
R19	RESISTOR, FIXED, FILM: 619 k $\Omega$ , 1%, 1/4W	1	CC6193F	01121	
R20	RESISTOR, FIXED, FILM: 21.4 k $\Omega$ , 1%, 1/10W	1	RN55C2152F	81349	75042
R21	RESISTOR, FIXED, FILM: 68.1 k $\Omega$ , 1%, 1/10W	1	RN55C6812F	81349	75042
R22	RESISTOR, FIXED, FILM: 6.19 k $\Omega$ , 1%, 1/10W	1	RN55C6191F	81349	75042
U1	INTEGRATED CIRCUIT	1	747HC	07263	
VR1	DIODE, ZENER: 6.3 V	1	.4M6.3AZ2	04713	

6.4.3.2 Part 17600 Filter Board

REF DESIG PREFIX A2A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
FL1	FILTER, CERAMIC	1	FM4 GREEN	06961	

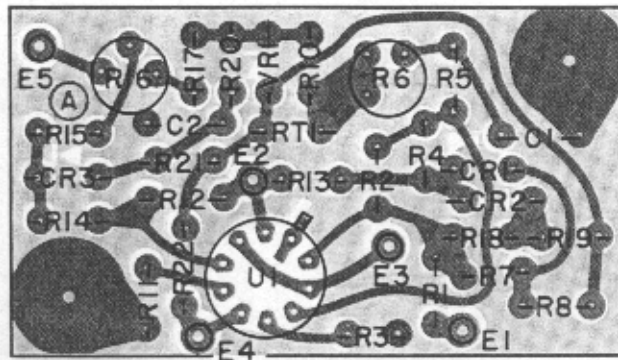


Figure 6-13. Part 17059 Attenuator Shaper (A2A1), Location of Components

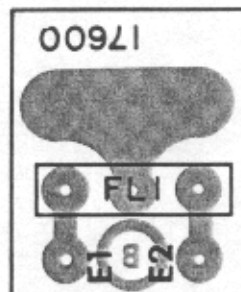


Figure 6-14. Part 17600 Filter Board (A2A2), Location of Components



6.4.3.3 Part 17397 LO Amplifier

REF DESIG PREFIX A2A3

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	1	1N4446	80131	93332
C1	CAPACITOR, CERAMIC, DISC: 1000 pF, GMV, 500 V	2	SM(1000pF, P)	91418	
C2	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	2	8131M100-651-104M	72982	
C3	Same as C1				
C4	Same as C2				
L1	COIL, FIXED: 0.33 $\mu$ H	1	1537-04	99800	
L2	COIL, FIXED: 2.2 $\mu$ H	1	1025-28	99800	
Q1	TRANSISTOR	1	2N3251	80131	04713
Q2	TRANSISTOR, MODIFIED	1	17407-1	14632	
R1	RESISTOR, FIXED, COMPOSITION: 470 $\Omega$ , 5%, 1/4W	1	RCR07G471JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 12 k $\Omega$ , 5%, 1/4W	1	RCR07G123JS	81349	01121
R3	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	1	RCR07G331JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 180 $\Omega$ , 5%, 1/4W	1	RCR07G181JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 2.7 $\Omega$ , 5%, 1/4W	1	RCR07G2R7JS	81349	01121

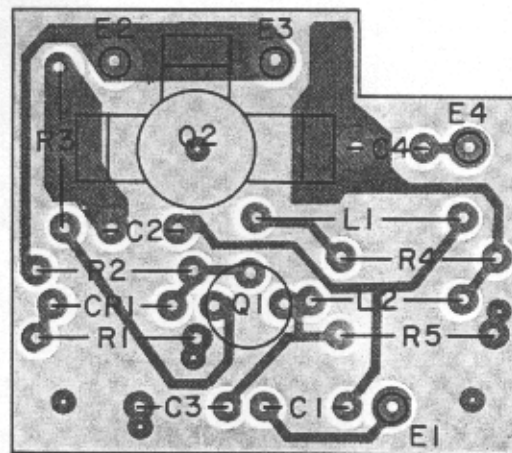


Figure 6-15. Part 17397 LO Amplifier (A2A3), Location of Components

## 6.4.4 TYPE 791198 10.7/455 kHz CONVERTER

REF DESIG PREFIX A3

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	1	1N462A	80131	93332
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 100 V	9	C023B101F103M	56289	
C2	CAPACITOR, CERAMIC, DISC: 5000 pF, 20%, 100 V	1	C023B101E502M	56289	
C3	CAPACITOR, CERAMIC, DISC: 0.02 $\mu$ F, 20%, 100 V	4	C023B101H203M	56289	
C4 Thru C6	Same as C1				
C7	CAPACITOR, MICA, DIPPED: 300 pF, 2%, 500 V	2	CM05FD301G03	81349	72136
C8	CAPACITOR, MICA, DIPPED: 390 pF, 2%, 500 V	1	CM05FD391G03	81349	72136
C9	Same as C7				
C10	CAPACITOR, MICA, DIPPED: 750 pF, 5%, 300 V	1	DM15-751J	72136	
C11	Same as C3				
C12	CAPACITOR, MICA, DIPPED: 3900 pF, 2%, 500 V	2	CM06FD392G03	81349	72136
C13	CAPACITOR, MICA, DIPPED: 6800 pF, 5%, 100 V	1	DM19-682J	72136	
C14	Same as C12				
C15	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	4	8131M100-651-104M	72982	
C16	Same as C15				
C17	Same as C15				
C18	CAPACITOR, ELECTROLYTIC, TANTALUM: 1.0 $\mu$ F, 10%, 35 V	2	CS13BF105K	81349	56289
C19	Same as C18				
C20	Same as C1				
C21	Same as C3				
C22	Same as C1				
C23	Same as C1				
C24	Same as C3				
C25	Same as C1				
C26	Same as C1				
C27	CAPACITOR, MICA, DIPPED: 180 pF, 2%, 500 V	1	CM05FD181G03	81349	72136
C28	CAPACITOR, MICA, DIPPED: 680 pF, 5%, 300 V	1	DM15-681J	72136	
C29	CAPACITOR, VARIABLE, CERAMIC: 7-25 pF, 350 V, N300	1	538-001B7-25	72982	
C30	CAPACITOR, MICA, DIPPED: 12 pF, 5%, 500 V	1	CM05CD120J03	81349	72136
C31	Same as C15				
FL1	FILTER, CERAMIC	1	FM4 GREEN	06961	
L1	COIL, FIXED: 47 $\mu$ H	4	1527-60	99800	
L2	Same as L1				

## REPLACEMENT PARTS LIST

WJ-8688

REF DESIG PREFIX A3

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
L3	COIL, VARIABLE: 1.35-1.65 $\mu$ H	2	558-7107-15	71279	
L4	COIL, VARIABLE: 0.9-1.1 $\mu$ H	1	558-7107-13	71279	
L5	COIL, FIXED: 12 $\mu$ H	2	1537-38	99800	
L6	Same as L5				
L7	COIL, TOROIDAL	1	21428-46	14632	
L8	COIL, FIXED: 1.2 mH	1	553-3635-38	71279	
L9	Same as L1				
L10	COIL, FIXED: 18 $\mu$ H	1	1537-42	99800	
L11	Same as L1				
L12	Same as L3				
Q1	TRANSISTOR	2	2N5109	80131	02735
Q2	Same as Q1				
Q3	TRANSISTOR	1	2N2222A	80131	04713
Q4	TRANSISTOR	1	CP643	12498	
Q5	TRANSISTOR	1	2N3478	80131	34156
Q6	TRANSISTOR	1	2N2857	80131	02735
RA1	HEATSINK	1	2220B	13103	
R1	RESISTOR, FIXED, COMPOSITION: 390 $\Omega$ , 5%, 1/4W	1	RCR07G391JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 6.8 k $\Omega$ , 5%, 1/4W	1	RCR07G682JS	81349	01121
R3	RESISTOR, FIXED, COMPOSITION: 3.3 k $\Omega$ , 5%, 1/4W	2	RCR07G332JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 2.7 $\Omega$ , 5%, 1/4W	1	RCR07G27RJS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 270 $\Omega$ , 5%, 1/4W	1	RCR07G271JS	81349	01121
R6	RESISTOR, FIXED, COMPOSITION: 27 $\Omega$ , 5%, 1/4W	4	RCR07G470JS	81349	01121
R7	RESISTOR, FIXED, COMPOSITION: 910 $\Omega$ , 5%, 1/4W	1	RCR07G911JS	81349	01121
R8	RESISTOR, FIXED, COMPOSITION: 560 $\Omega$ , 5%, 1/4W	1	RCR07G561JS	81349	01121
R9	RESISTOR, FIXED, COMPOSITION: 22 $\Omega$ , 5%, 1/4W	2	RCR07G220JS	81349	01121
R10	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	2	RCR07G221JS	81349	01121
R11	RESISTOR, FIXED, COMPOSITION: 5.6 k $\Omega$ , 5%, 1/4W	1	RCR07G562JS	81349	01121
R12	RESISTOR, FIXED, COMPOSITION: 39 $\Omega$ , 5%, 1/4W	1	RCR07G390JS	81349	01121
R13	RESISTOR, FIXED, COMPOSITION: 56 $\Omega$ , 5%, 1/4W	1	RCR07G560JS	81349	01121
R14	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	1	RCR07G103JS	81349	01121
R15	Same as R3				
R16	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	2	RCR07G331JS	81349	01121
R17	Same as R16				
R18	RESISTOR, FIXED, COMPOSITION: 68 $\Omega$ , 5%, 1/4W	2	RCR07G680JS	81349	01121
R19	Same as R6				



REF DESIG PREFIX A3

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R20	RESISTOR, FIXED, COMPOSITION: 8.2 k $\Omega$ , 5%, 1/4W	1	RCR07G822JS	81349	01121
R21	RESISTOR, FIXED, COMPOSITION: 2.2 k $\Omega$ , 5%, 1/4W	1	RCR07G222JS	81349	01121
R22	Same as R6				
R23	Same as R9				
R24	Same as R10				
R25	Same as R18				
R26	RESISTOR, FIXED, COMPOSITION: 300 $\Omega$ , 5%, 1/4W	1	RCR07G301JS	81349	01121
R27	RESISTOR, FIXED, COMPOSITION: 18 $\Omega$ , 5%, 1/4W	1	RCR07G180JS	81349	01121
R28	Same as R26				
R29	Same as R6				
U1	MIXER, BALANCED	1	M9A	27956	
Y1	CRYSTAL, QUARTZ	1	CR64/U(11.155MHZ)	81349	74306

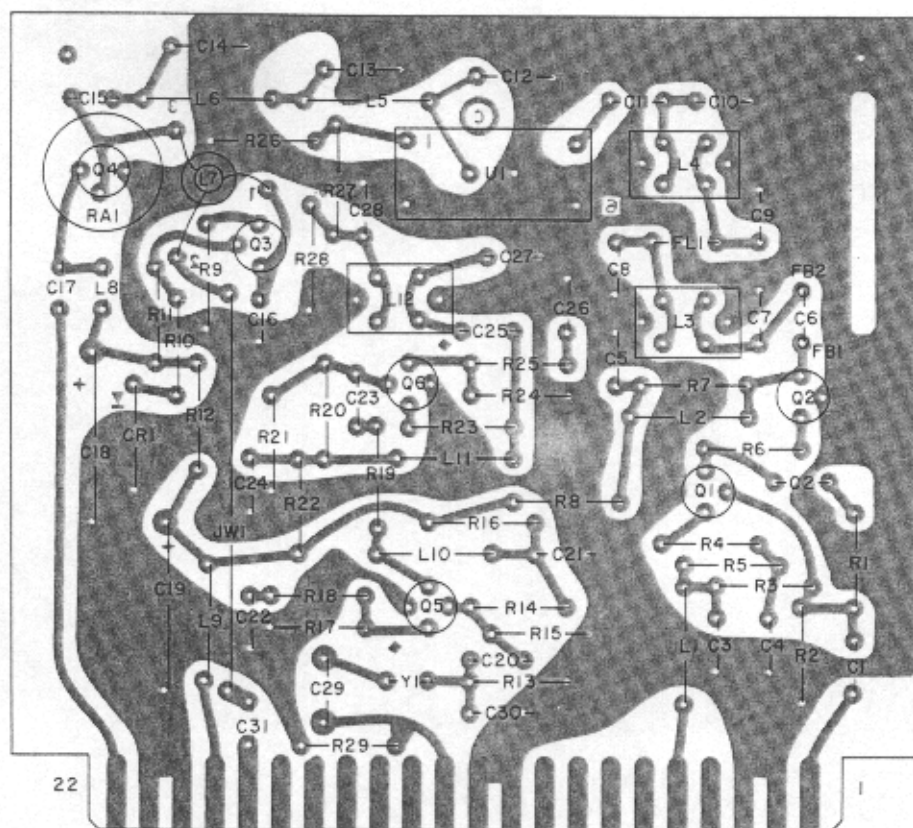


Figure 6-16. Type 791198 10.7/455 kHz Converter (A3), Location of Components

REPLACEMENT PARTS LIST

WJ-8888

6.4.5 TYPE 72399-X IF FILTER ASSEMBLY

REF DESIG PREFIX A4, A6

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	6	1N462A	80131	93332
CR2 Thru CR6	Same as CR1				
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 100 V	5	C023B101F103M	56289	
C2	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	8	8131M100-651-104M	72982	
C3	Same as C2				
C4	NOT USED (Type 72399-1 Only)				
C4	CAPACITOR, MICA, DIPPED: 470 pF, 5%, 500 V (Types 72399-2, -4, and -6 Only)	2	DM15-471J	72136	
C4	CAPACITOR, MICA, DIPPED: 30 pF, 2%, 500 V (Type 72399-3 Only)	2	CM05ED300G03	81349	72136
C4	CAPACITOR, MICA, DIPPED: 51 pF, 2%, 500 V (Type 72399-5 Only)	2	CM05ED510G03	81349	72136
C5	Same as C2				
C6	Same as C1				
C7	NOT USED (Type 72399-1 Only)				
C7	Same as C4 (Types 72399-2, -4, and -6 Only)				
C7	Same as C4 (Type 72399-3 Only)				
C7	Same as C4 (Type 72399-5 Only)				
C8	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 200 V	3	8131A200Z5U103M	72982	
C9	Same as C2				
C10	NOT USED				
C11	Same as C2				
C12	CAPACITOR, MICA, DIPPED: 200 pF, 2%, 500 V (Types 72399-1, -3, and -5 Only)	2	CM05FD201G03	81349	72136
C12	CAPACITOR, MICA, DIPPED: 680 pF, 5%, 300 V (Types 72399-2, -4, and -6 Only)	2	DM15-681J	72136	
C13	Same as C2				
C14	Same as C1				
C15	Same as C12 (Types 72399-1, -3, and -5 Only)				
C15	Same as C12 (Types 72399-2, -4, and -6 Only)				
C16	Same as C8				
C17	CAPACITOR, CERAMIC, DISC: 0.02 $\mu$ F, 20%, 200 V	1	C023B101H203M	56289	
C18	Same as C2				
C19	CAPACITOR, MICA, DIPPED: 150 pF, 2%, 500 V (Types 72399-1, -3, and -5 Only)	2	CM05FD151G03	81349	72136
C19	NOT USED (Type 72399-2 Only)				

REF DESIG PREFIX A4, A6

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C19	CAPACITOR, MICA, DIPPED: 1100 pF, 2%, 500 V (Type 72399-4 Only)	2	CM06FD112G03	81349	72136
C19	CAPACITOR, MICA, DIPPED: 100 pF, 2%, 500 V (Type 72399-6 Only)	2	CM05FD101G05	81349	72136
C20	Same as C2				
C21	Same as C1				
C22	Same as C19 (Types 72399-1, -3, and -5 Only)				
C22	NOT USED (Type 72399-2 Only)				
C22	Same as C19 (Type 72399-4 Only)				
C22	Same as C19 (Type 72399-6 Only)				
C23	Same as C8				
C24	Same as C1				
FL1	NOT USED (Type 72399-1 Only)				
FL1	FILTER, BANDPASS (4 kHz) (Types 72399-2, -4, and -6 Only)	1	92062-6	14632	
FL1	FILTER, BANDPASS (6 kHz) (Type 72399-3 Only)	1	92062-7	14632	
FL1	FILTER, BANDPASS (200 Hz) (Type 72399-5 Only)	1	92062-1	14632	
FL2	FILTER, BANDPASS (500 Hz) (Types 72399-1, -3, and -5 Only)	1	96062-2	14632	
FL2	FILTER, BANDPASS (8 kHz) (Types 72399-2, -4, and -6 Only)	1	92062-8	14632	
FL3	FILTER, BANDPASS (2 kHz) (Types 72399-1, -3, and -5 Only)	1	92062-4	14632	
FL3	NOT USED (Type 72399-2 Only)				
FL3	FILTER, BANDPASS (16 kHz) (Type 72399-4 Only)	1	92062-10	14632	
FL3	FILTER, BANDPASS (1 kHz) (Type 72399-6 Only)	1	92062-3	14632	
K1	RELAY	3	PRMEIA005	71482	
K2	Same as K1				
K3	Same as K1				
L1	COIL, FIXED: 1.2 mH	1	553-3635-38	71279	
Q1	TRANSISTOR	3	2N2222A	80131	04713
Q2	TRANSISTOR	3	2N2907/JAN	81350	04713
Q3	TRANSISTOR	3	3N187	80131	02735
Q4	Same as Q1				
Q5	Same as Q2				

REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A4, A6

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
Q6	Same as Q8				
Q7	Same as Q1				
Q8	Same as Q2				
Q9	Same as Q3				
R1	RESISTOR, FIXED, COMPOSITION: 68 k $\Omega$ , 5%, 1/4W	3	RCR07G688JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 22 k $\Omega$ , 5%, 1/4W	6	RCR07G223JS	81349	01121
R3	Same as R2				
R4	RESISTOR, FIXED, COMPOSITION: 10 $\Omega$ , 5%, 1/4W	5	RCR07G100JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 750 $\Omega$ , 5%, 1/4W	3	RCR07G751JS	81349	01121
R6	RESISTOR, FIXED, COMPOSITION: 1 k $\Omega$ , 5%, 1/4W	3	RCR07G102JS	81349	01121
R7	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	3	RCR07G472JS	81349	01121
R8	RESISTOR, FIXED, COMPOSITION: 470 $\Omega$ , 5%, 1/4W	3	RCR07G471JS	81349	01121
R9	RESISTOR, FIXED, COMPOSITION: 56 k $\Omega$ , 5%, 1/4W	3	RCR07G563JS	81349	01121
R10	RESISTOR, FIXED, COMPOSITION: 5.6 k $\Omega$ , 5%, 1/4W	3	RCR07G562JS	81349	01121
R11	RESISTOR, FIXED, COMPOSITION: 100 k $\Omega$ , 5%, 1/4W	3	RCR07G104JS	81349	01121
R12	RESISTOR, VARIABLE, FILM: 10 k $\Omega$ , 10%, 1/2W	3	62PAR10K	73138	
R13	RESISTOR, FIXED, COMPOSITION: 12 k $\Omega$ , 5%, 1/4W	3	RCR07G123JS	81349	01121
R14	RESISTOR, FIXED, COMPOSITION: 390 $\Omega$ , 5%, 1/4W	1	RCR07G391JS	81349	01121
R15	RESISTOR, FIXED, COMPOSITION: 47 k $\Omega$ , 5%, 1/4W	3	RCR07G473JS	81349	01121
R16	Same as R15				
R17	Same as R1				
R18	Same as R2				
R19	Same as R2				
R20	Same as R4				
R21	Same as R5				
R22	Same as R6				
R23	Same as R7				
R24	Same as R8				
R25	Same as R9				
R26	Same as R10				
R27	Same as R11				
R28	Same as R12				
R29	Same as R13				
R30	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	1	RCR07G331JS	81349	01121
R31	Same as R15				
R32	Same as R1				

REF DESIG PREFIX A4, A6

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R33	Same as R2				
R34	Same as R3				
R35	Same as R4				
R36	Same as R5				
R37	Same as R6				
R38	Same as R7				
R39	Same as R8				
R40	Same as R9				
R41	Same as R10				
R42	Same as R11				
R43	Same as R12				
R44	Same as R13				
R45	Same as R4				
R46	Same as R4				
R47	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	2	RCR07G470JS	81349	01121
R48	Same as R47				

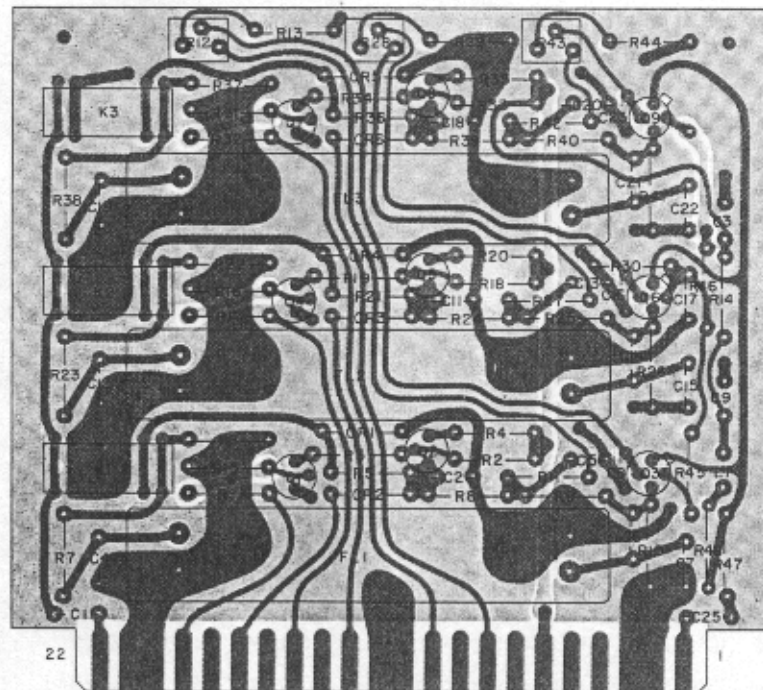


Figure 6-17. Type 72399-X IF Filter Assembly (A4, A6), Location of Components

## REPLACEMENT PARTS LIST

WJ-8888

## 6.4.6 TYPE 791451 IF LOG AMPLIFIER

REF DESIG PREFIX A7

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C1	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	6	8131M100-651-104M	72982	
C2	Same as C1				
C3	CAPACITOR, CERAMIC, DISC: 0.47 $\mu$ F, 20%, 100 V	9	8131M100-651-474M	72982	
C4	CAPACITOR, MICA, DIPPED: 8200 pF, 5%, 100 V	1	DM19-822J	72136	
C5 Thru C7	Same as C3				
C8	Same as C1				
C9	Same as C3				
C10	Same as C3				
C11	Same as C1				
C12	Same as C1				
C13	CAPACITOR, CERAMIC, DISC: 1000 pF, GMV, 500 V	1	SM(1000pF, P)	91418	
C14	Same as C3				
C15	NOT USED				
C16	Same as C3				
C17	Same as C1				
C18	Same as C3				
CR1	DIODE	1	5082-2800	28480	
L1	COIL, VARIABLE	1	558-7107-27	71279	
L2	COIL, FIXED: 3300 $\mu$ H	1	2500-52	99800	
Q1	TRANSISTOR	4	2N2222A	80131	04713
Q2 Thru Q4	Same as Q1				
R1	RESISTOR, FIXED, COMPOSITION: 39 k $\Omega$ , 5%, 1/4W	2	RCR07G393JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	5	RCR07G101JS	81349	01121
R3	Same as R1				
R4	RESISTOR, FIXED, COMPOSITION: 1 k $\Omega$ , 5%, 1/4W	4	RCR07G102JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	6	RCR07G470JS	81349	01121
R6	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	2	RCR07G472JS	81349	01121
R7	RESISTOR, FIXED, COMPOSITION: 560 $\Omega$ , 5%, 1/4W	1	RCR07G561JS	81349	01121
R8	RESISTOR, FIXED, COMPOSITION: 3.9 k $\Omega$ , 5%, 1/4W	2	RCR07G392JS	81349	01121
R9	RESISTOR, FIXED, COMPOSITION: 270 $\Omega$ , 5%, 1/4W	1	RCR07G271JS	81349	01121
R10	RESISTOR, FIXED, COMPOSITION: 68 $\Omega$ , 5%, 1/4W	1	RCR07G680JS	81349	01121
R11	Same as R8				
R12	Same as R6				

REF DESIG PREFIX A7

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R13	Same as R5				
R14	RESISTOR, FIXED, COMPOSITION: 33 $\Omega$ , 5%, 1/4W	1	RCR07G330JS	81349	01121
R15	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	1	RCR07G221JS	81349	01121
R16	Same as R4				
R17	Same as R2				
R18	Same as R2				
R19	Same as R4				
R20	RESISTOR, FIXED, COMPOSITION: 16 k $\Omega$ , 5%, 1/4W	1	RCR07G163JS	81349	01121
R21	Same as R2				
R22	RESISTOR, FIXED, COMPOSITION: 240 $\Omega$ , 5%, 1/4W	1	RCR07G241JS	81349	01121
R23	RESISTOR, FIXED, COMPOSITION: 22 k $\Omega$ , 5%, 1/4W	2	RCR07G223JS	81349	01121
R24	Same as R23				
R25	Same as R4				
R26	Same as R5				
R27	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	1	RCR07G103JS	81349	01121
R28	RESISTOR, FIXED, COMPOSITION: 270 k $\Omega$ , 5%, 1/4W	1	RCR07G274JS	81349	01121
R29	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	1	RCR07G153JS	81349	01121
R30	RESISTOR, FIXED, COMPOSITION: 47 k $\Omega$ , 5%, 1/4W	1	RCR07G473JS	81349	01121
R31	RESISTOR, FIXED, COMPOSITION: 18 k $\Omega$ , 5%, 1/4W	1	RCR07G183JS	81349	01121
R32	Same as R5				
R33	RESISTOR, FIXED, COMPOSITION: 100 k $\Omega$ , 5%, 1/4W	1	RCR07G104JS	81349	01121
R34	RESISTOR, VARIABLE, FILM: 10 k $\Omega$ , 10%, 1/2W	1	62PAR10K	73138	
R35	RESISTOR, FIXED, COMPOSITION: 56 k $\Omega$ , 5%, 1/4W	1	RCR07G563JS	81349	01121
R36	Same as R5				
R37	Same as R2				
R38	Same as R5				
R39	RESISTOR, FIXED, COMPOSITION: 470 $\Omega$ , 5%, 1/4W	1	RCR07G471JS	81349	01121
T1	TRANSFORMER	1	70-148	06978	
U1	INTEGRATED CIRCUIT	1	N5733K	18324	
U2	INTEGRATED CIRCUIT	1	SN56502J	01295	
U3	INTEGRATED CIRCUIT	1	741HC	07263	
VR1	DIODE, ZENER: 6.2 V	2	1N753A	80131	
VR2	Same as VR1				

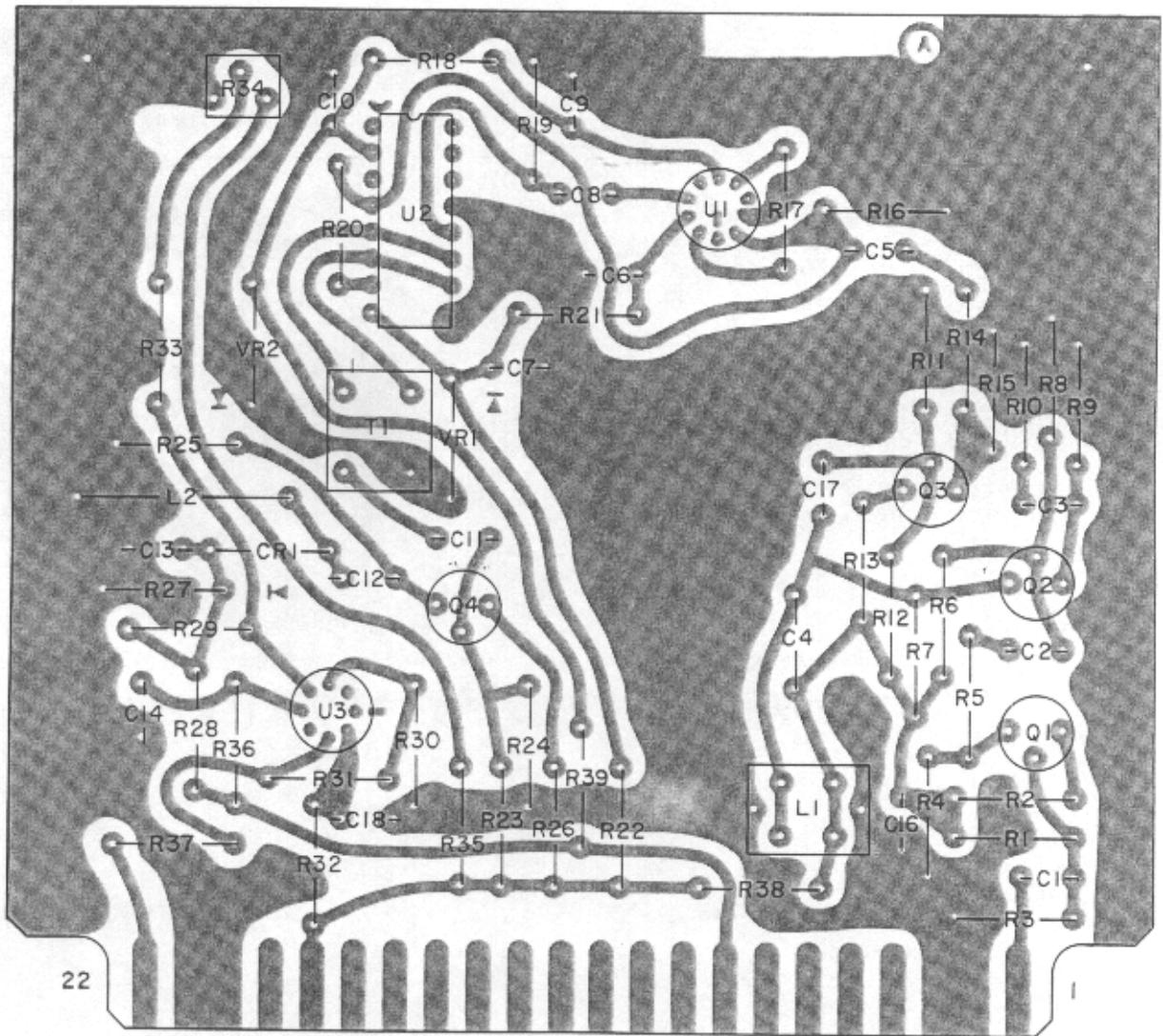


Figure 6-18. Type 791451 IF Log Amplifier (A7), Location of Components



## 6.4.7 TYPE 72409 455 kHz IF AMPLIFIER

REF DESIG PREFIX A8

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	2	1N462A	80131	93332
CR2	Same as CR1				
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 100 V	6	C023B101F103M	56289	
C2	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	13	8131M100-651-104M	72982	
C3	Same as C1				
C4	Same as C2				
C5	Same as C2				
C6	Same as C1				
C7	Same as C1				
C8	Same as C2				
C9	Same as C2				
C10	Same as C1				
C11	Same as C2				
C12	CAPACITOR, MICA, DIPPED: 3900 pF, 2%, 500 V	1	CM06FD392G03	81349	72136
C13	CAPACITOR, MICA, DIPPED: 22 pF, 5%, 500 V	1	CM05ED220J03	81349	72136
C14	Same as C2				
C15	Same as C2				
C16	CAPACITOR, MICA, DIPPED: 4700 pF, 2%, 500 V	1	CM06FD472G03	81349	72136
C17	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 10%, 100 V	2	8141-100C0G0-103K	72982	
C18	Same as C17				
C19	Same as C2				
C20	Same as C1				
C21	Same as C2				
C22	CAPACITOR, MICA, DIPPED: 5100 pF, 2%, 300 V	1	DM19-512G	72136	
C23	Same as C2				
C24	Same as C2				
C25	CAPACITOR, MICA, DIPPED: 270 pF, 2%, 500 V	1	CM05FD271G03	81349	72136
C26	CAPACITOR, MICA, DIPPED: 6200 pF, 2%, 300 V	1	DM19-622G	72136	
C27	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 10%, 200 V	2	CK06BX103K	81349	56289
C28	Same as C27				
C29	Same as C2				
L1	COIL, FIXED: 1.2 mH	2	553-3635-38	71279	
L2	Same as L1				
L3	POT CORE ASSEMBLY	2	30312-128	14632	
L4	Same as L3				
L5	COIL, VARIABLE: 24.3-29.7 $\mu$ H	2	558-7107-30	71279	

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A8

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
L6	Same as L5				
Q1	TRANSISTOR	2	3N187	80131	02735
Q2	Same as Q1				
Q3	TRANSISTOR	2	2N3478	80131	34156
Q4	Same as Q3				
Q5	TRANSISTOR	2	2N2222A	80131	04713
Q6	Same as Q5				
R1	RESISTOR, FIXED, COMPOSITION: 33 k $\Omega$ , 5%, 1/4W	4	RCR07G333JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 2.2 k $\Omega$ , 5%, 1/4W	2	RCR07G222JS	81349	01121
R3	RESISTOR, FIXED, COMPOSITION: 150 k $\Omega$ , 5%, 1/4W	2	RCR07G154JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	4	RCR07G472JS	81349	01121
R5	Same as R1				
R6	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	2	RCR07G331JS	81349	01121
R7	RESISTOR, FIXED, COMPOSITION: 390 $\Omega$ , 5%, 1/4W	2	RCR07G391JS	81349	01121
R8	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	5	RCR07G101JS	81349	01121
R9	Same as R1				
R10	Same as R2				
R11	Same as R3				
R12	Same as R4				
R13	Same as R1				
R14	Same as R6				
R15	Same as R7				
R16	RESISTOR, VARIABLE, FILM: 1 k $\Omega$ , 10%, 1/2W	1	62PAR1K	73138	
R17	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	3	RCR07G470JS	81349	01121
R18	Same as R8				
R19	RESISTOR, FIXED, COMPOSITION: 18 k $\Omega$ , 5%, 1/4W	2	RCR07G183JS	81349	01121
R20	Same as R4				
R21	RESISTOR, FIXED, COMPOSITION: 820 $\Omega$ , 5%, 1/4W	2	RCR07G821JS	81349	01121
R22	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	2	RCR07G102JS	81349	01121
R23	Same as R17				
R24	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	2	RCR07G221JS	81349	01121
R25	RESISTOR, FIXED, COMPOSITION: 22 k $\Omega$ , 5%, 1/4W	2	RCR07G223JS	81349	01121
R26	RESISTOR, FIXED, COMPOSITION: 6.8 k $\Omega$ , 5%, 1/4W	2	RCR07G682JS	81349	01121
R27	Same as R8				
R28	Same as R8				
R29	Same as R19				

REF DESIG PREFIX A8

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R30	Same as R4				
R31	Same as R21				
R32	RESISTOR, FIXED, COMPOSITION: 39 $\Omega$ , 5%, 1/4W	2	RCR07G390JS	81349	01121
R33	RESISTOR, FIXED, COMPOSITION: 33 $\Omega$ , 5%, 1/4W	1	RCR07G330JS	81349	01121
R34	Same as R17				
R35	Same as R24				
R36	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	1	RCR07G153JS	81349	01121
R37	Same as R25				
R38	Same as R26				
R39	Same as R8				
R40	Same as R22				
R41	Same as R32				

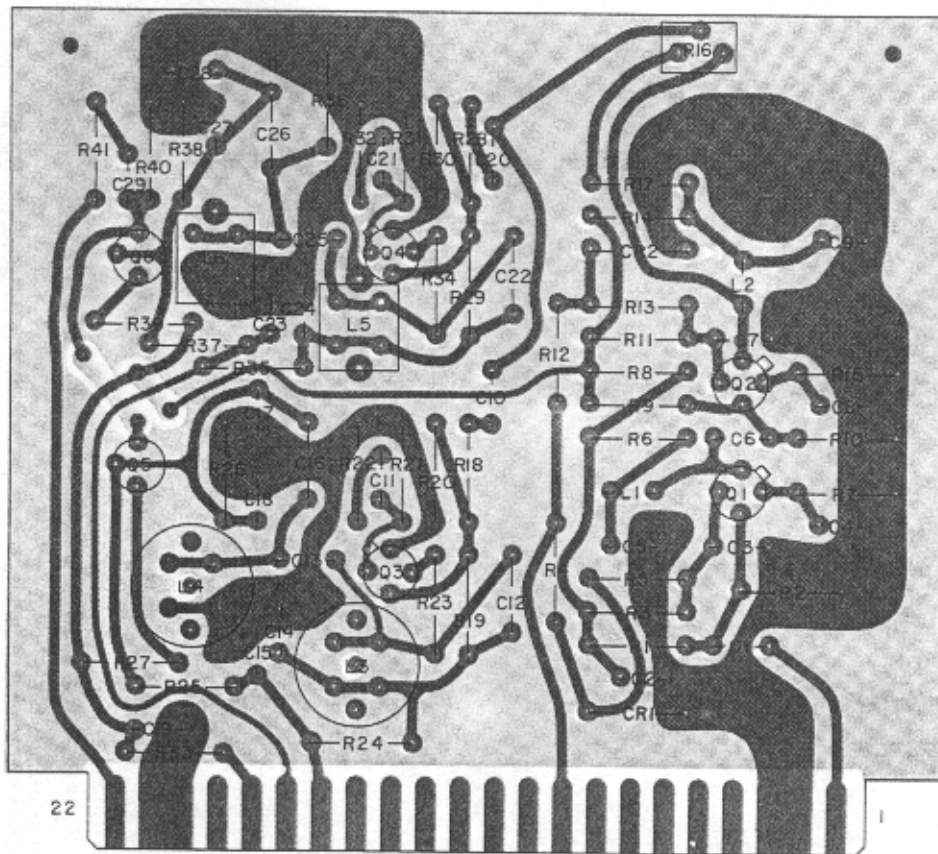


Figure 6-19. Type 72409 455 kHz IF Amplifier (A8), Location of Components

## REPLACEMENT PARTS LIST

WJ-8888

## 6.4.8 TYPE 791113 AM DEMODULATOR

REF DESIG PREFIX A9

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	3	1N462A	80131	93332
CR2	Same as CR1				
CR3	DIODE	3	1N4446	80131	93332
CR4	Same as CR3				
CR5	Same as CR3				
CR6	Same as CR1				
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 100 V	4	C023B101F103M	56289	
C2	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	12	8131M100-651-104M	72982	
C3 Thru C5	Same as C2				
C6 Thru C8	Same as C1				
C9 Thru C12	Same as C2				
C13	CAPACITOR, ELECTROLYTIC, TANTALUM: 15 $\mu$ F, 10%, 20 V	3	CS13BE156K	81349	56289
C14	CAPACITOR, MICA, DIPPED: 180 pF, 2%, 500 V	1	CM05FD181G03	81349	72136
C15 Thru C17	Same as C2				
C18	Same as C13				
C19	Same as C13				
C20	CAPACITOR, CERAMIC, DISC: 5000 pF, 20%, 100 V	2	C023B101E502M	56289	
C21	Same as C20				
C22	CAPACITOR, MICA, DIPPED: 750 pF, 2%, 500 V	1	CM06FD751G03	81349	72136
C23	Same as C2				
C24	CAPACITOR, MICA, DIPPED: 91 pF, 2%, 500 V	1	CM04FD910G03	81349	72136
L1	COIL, FIXED: 1.2 mH	2	553-3635-38	71279	
L2	Same as L1				
Q1	TRANSISTOR	1	3N187	80131	02735
Q2	TRANSISTOR	4	2N2222A	80131	04713
Q3	TRANSISTOR	1	2N3478	80131	34156
Q4	Same as Q2				
Q5	TRANSISTOR	1	2N930	80131	04713
Q6	Same as Q2				
Q7	TRANSISTOR	1	2N3251	80131	04713

REF DESIG PREFIX A9

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
Q8	Same as Q2				
R1	RESISTOR, FIXED, COMPOSITION: 12 k $\Omega$ , 5%, 1/4W	2	RCR07G123JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	4	RCR07G102JS	81349	01121
R3	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	5	RCR07G472JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 120 k $\Omega$ , 5%, 1/4W	1	RCR07G124JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 33 k $\Omega$ , 5%, 1/4W	2	RCR07G333JS	81349	01121
R6	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	2	RCR07G331JS	81349	01121
R7	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	4	RCR07G470JS	81349	01121
R8	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	2	RCR07G221JS	81349	01121
R9	Same as R3				
R10	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	2	RCR07G103JS	81349	01121
R11	Same as R3				
R12	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	3	RCR07G101JS	81349	01121
R13	RESISTOR, FIXED, COMPOSITION: 470 $\Omega$ , 5%, 1/4W	1	RCR07G471JS	81349	01121
R14	Same as R2				
R15	RESISTOR, FIXED, COMPOSITION: 27 k $\Omega$ , 5%, 1/4W	1	RCR07G273JS	81349	01121
R16	Same as R3				
R17	Same as R13				
R18	RESISTOR, FIXED, COMPOSITION: 6.8 k $\Omega$ , 5%, 1/4W	1	RCR07G682JS	81349	01121
R19	RESISTOR, FIXED, COMPOSITION: 3.9 k $\Omega$ , 5%, 1/4W	1	RCR07G392JS	81349	01121
R20	Same as R8				
R21	Same as R7				
R22	RESISTOR, FIXED, COMPOSITION: 120 $\Omega$ , 5%, 1/4W	2	RCR07G121JS	81349	01121
R23	RESISTOR, FIXED, COMPOSITION: 470 $\Omega$ , 5%, 1/4W	1	RCR07G471JS	81349	01121
R24	RESISTOR, FIXED, COMPOSITION: 390 $\Omega$ , 5%, 1/4W	1	RCR07G391JS	81349	01121
R25	Same as R6				
R26	Same as R3				
R27	RESISTOR, FIXED, COMPOSITION: 22 k $\Omega$ , 5%, 1/4W	3	RCR07G223JS	81349	01121
R28	RESISTOR, FIXED, COMPOSITION: 100 k $\Omega$ , 5%, 1/4W	2	RCR07G104JS	81349	01121
R29	Same as R7				
R30	RESISTOR, FIXED, COMPOSITION: 47 k $\Omega$ , 5%, 1/4W	3	RCR07G473JS	81349	01121
R31	Same as R28				
R32	RESISTOR, FIXED, COMPOSITION: 8.2 k $\Omega$ , 5%, 1/4W	1	RCR07G822JS	81349	01121
R33	Same as R1				
R34	Same as R30				
R35	Same as R12				

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A9

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R36	Same as R27				
R37	Same as R10				
R38	RESISTOR, FIXED, COMPOSITION: 68 k $\Omega$ , 5%, 1/4W	1	RCR07G683JS	81349	01121
R39	Same as R2				
R40	Same as R2				
R41	Same as R12				
R42	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	1	RCR07G331JS	81349	01121
R43	Same as R27				
R44	RESISTOR, FIXED, COMPOSITION: 150 k $\Omega$ , 5%, 1/4W	1	RCR07G154JS	81349	01121
R45	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	1	RCR07G153JS	81349	01121
R46	Same as R30				
R47	Same as R7				
R48	RESISTOR, FIXED, COMPOSITION: 2.2 M $\Omega$ , 5%, 1/4W	1	RCR07G225JS	81349	01121
R49	Same as R5				
R50	Same as R22				
T1	POT CORE ASSEMBLY	1	30312-225	14632	
T2	XFMR/COUPLING WIDEBAND	1	70-130	06978	
U1	INTEGRATED CIRCUIT	1	741HC	07263	

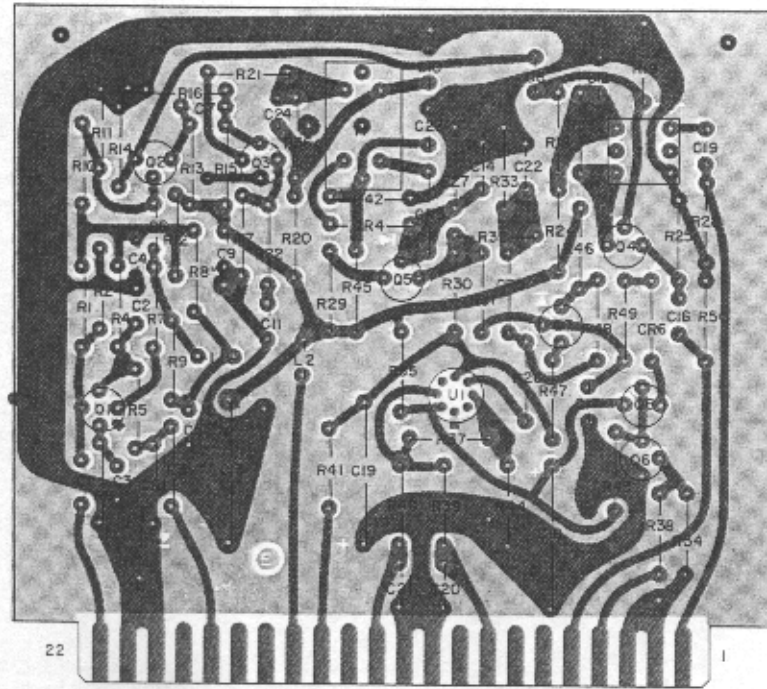


Figure 6-20. Type 791113 AM Demodulator (A9), Location of Components

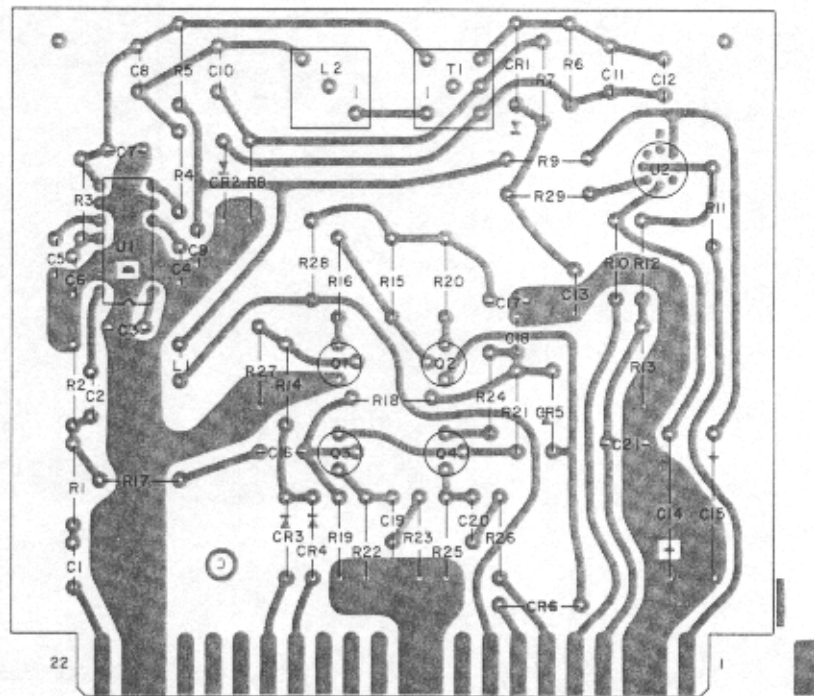


Figure 6-21. Type 791162 FM Demodulator (A10), Location of Components

## REPLACEMENT PARTS LIST

WJ-8888

## 6.4.9 TYPE 791162 FM DEMODULATOR

REF DESIG PREFIX A10

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	2	1N4446	80131	93332
CR2	Same as CR1				
CR3	DIODE	4	1N462A	80131	93332
CR4 Thru CR6	Same as CR3				
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 100 V	4	C023B101F103M	56289	
C2	Same as C1				
C3	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	8	8131M100-651-104M	72982	
C4 Thru C7	Same as C3				
C8	CAPACITOR, MICA, DIPPED: 470 pF, 5%, 500 V	1	DM15-471J	72136	
C9	Same as C3				
C10	CAPACITOR, MICA, DIPPED: 330 pF, 2%, 500 V	1	CM05FD331G03	81349	72136
C11	CAPACITOR, MICA, DIPPED: 390 pF, 2%, 500 V	1	CM05FD391G03	81349	72136
C12	CAPACITOR, CERAMIC, DISC: 150 pF, 5%, 50 V	1	1U150RJ	93958	
C13	CAPACITOR, MICA, DIPPED: 150 pF, 2%, 500 V	1	CM05FD151G03	81349	72136
C14	CAPACITOR, ELECTROLYTIC, TANTALUM: 6.8 $\mu$ F, 10%, 35 V	2	CS13BF685K	81349	56289
C15	Same as C14				
C16	Same as C1				
C17	Same as C3				
C18	Same as C3				
C19	CAPACITOR, CERAMIC, DISC: 0.02 $\mu$ F, 20%, 100 V	1	C023B101H203M	56289	
C20	Same as C1				
C21	CAPACITOR, CERAMIC, DISC: 0.015 $\mu$ F, 10%, 100 V	1	CK06BX153K	81349	56289
L1	COIL, FIXED: 1.2 mH	1	553-3635-38	71279	
L2	POT CORE ASSEMBLY	1	30705-12	71279	
L3	NOT USED				
Q1	TRANSISTOR	3	2N2222A	80131	04713
Q2	TRANSISTOR	1	2N2907/JAN	81350	04713
Q3	Same as Q1				
Q4	Same as Q1				
R1	RESISTOR, FIXED, COMPOSITION: 820 $\Omega$ , 5%, 1/4W	3	RCR07G821JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	2	RCR07G221JS	81349	01121
R3	Same as R1				



REF DESIG PREFIX A10

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R4	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	2	RCR07G470JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 150 $\Omega$ , 5%, 1/4W	1	RCR07G151JS	81349	01121
R6	RESISTOR, FIXED, COMPOSITION: 12 k $\Omega$ , 5%, 1/4W	1	RCR07G123JS	81349	01121
R7	RESISTOR, FIXED, COMPOSITION: 39 k $\Omega$ , 5%, 1/4W	1	RCR07G393JS	81349	01121
R8	RESISTOR, FIXED, COMPOSITION: 56 k $\Omega$ , 5%, 1/4W	1	RCR07G563JS	81349	01121
R9	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	6	RCR07G101JS	81349	01121
R10	Same as R9				
R11	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	2	RCR07G102JS	81349	01121
R12	RESISTOR, FIXED, COMPOSITION: 6.8 k $\Omega$ , 5%, 1/4W	1	RCR07G682JS	81349	01121
R13	RESISTOR, FIXED, COMPOSITION: 2.2 k $\Omega$ , 5%, 1/4W	2	RCR07G222JS	81349	01121
R14	RESISTOR, FIXED, COMPOSITION: 68 k $\Omega$ , 5%, 1/4W	1	RCR07G683JS	81349	01121
R15	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	3	RCR07G153JS	81349	01121
R16	Same as R15				
R17	Same as R9				
R18	Same as R15				
R19	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	1	RCR07G472JS	81349	01121
R20	RESISTOR, FIXED, COMPOSITION: 8.2 $\Omega$ , 5%, 1/4W	1	RCR07G82R2JS	81349	01121
R21	Same as R11				
R22	Same as R1				
R23	Same as R9				
R24	Same as R9				
R25	Same as R13				
R26	Same as R9				
R27	RESISTOR, FIXED, COMPOSITION: 47 k $\Omega$ , 5%, 1/4W	1	RCR07G473JS	81349	01121
R28	Same as R4				
R29	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	1	RCR07G221JS	81349	01121
T1	POT CORE ASSEMBLY	1	30705-14	14632	
U1	INTEGRATED CIRCUIT	1	MC1355P	04713	
U2	INTEGRATED CIRCUIT	1	741HC	07263	

## REPLACEMENT PARTS LIST

WJ-8886

## 6.4.10 TYPE 791180-1 SSB DEMODULATOR

REF DESIG PREFIX A11

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	4	1N462A	80131	93332
CR2 Thru CR4	Same as CR1				
CR5	DIODE	2	1N4449	80131	93332
CR6	Same as CR5				
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 100 V	7	C023B101F103M	56289	
C2	Same as C1				
C3	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	11	8131M100-651-104M	72982	
C4	Same as C3				
C5	Same as C1				
C6 Thru C8	Same as C3				
C9	Same as C1				
C10	CAPACITOR, MICA, DIPPED: 27 pF, 2%, 500 V	2	CM05ED270G03	81349	72136
C11	Same as C1				
C12	Same as C10				
C13	Same as C3				
C14	Same as C1				
C15	Same as C1				
C16	Same as C3				
C17	CAPACITOR, CERAMIC, DISC: 5000 pF, 20%, 100 V	1	C023B101E502M	56289	
C18	CAPACITOR, ELECTROLYTIC, TANTALUM: 47 $\mu$ F, 10%, 20 V	3	CS13BE476K	81349	56289
C19	CAPACITOR, CERAMIC, DISC: 1500 pF, 10%, 1000 V	1	DD152	71590	
C20	Same as C3				
C21	CAPACITOR, MICA, DIPPED: 24 pF, 5%, 500 V	1	CM05ED240J03	81349	72136
C22	Same as C18				
C23	Same as C18				
C24	CAPACITOR, ELECTROLYTIC, TANTALUM: 0.47 $\mu$ F, 10%, 35 V	1	CS13BF474K	81349	56289
C25	Same as C3				
C26	CAPACITOR, ELECTROLYTIC, TANTALUM: 2.2 $\mu$ F, 20%, 35 V	1	196D225X0035JE3	56289	
C27	Same as C3				
C28	Same as C3				
FL1	FILTER	1	526-9665-010	95104	

REF DESIG PREFIX A11

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
L1	COIL, FIXED: 1.2 mH	2	553-3635-38	71279	
L2	Same as L1				
Q1	TRANSISTOR	1	3N187	80131	02735
Q2	TRANSISTOR	4	2N2222A	80131	04713
Q3	Same as Q2				
Q4	Same as Q2				
Q5	TRANSISTOR	2	2N3251	80131	04713
Q6	Same as Q5				
Q7	TRANSISTOR	1	2N4416	80131	
Q8	Same as Q2				
R1	RESISTOR, FIXED, COMPOSITION: 2.2 k $\Omega$ , 5%, 1/4W	6	RCR07G222JS	81349	01121
R2	Same as R1				
R3	RESISTOR, FIXED, COMPOSITION: 150 k $\Omega$ , 5%, 1/4W	1	RCR07G154JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	6	RCR07G103JS	81349	01121
R5	Same as R1				
R6	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	2	RCR07G33LJS	81349	01121
R7	Same as R6				
R8	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	7	RCR07G153JS	81349	01121
R9	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	5	RCR07G472JS	81349	01121
R10	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	2	RCR07G221JS	81349	01121
R11	Same as R1				
R12	RESISTOR, FIXED, COMPOSITION: 820 $\Omega$ , 5%, 1/4W	2	RCR07G821JS	81349	01121
R13	RESISTOR, FIXED, COMPOSITION: 56 $\Omega$ , 5%, 1/4W	1	RCR07G560JS	81349	01121
R14	RESISTOR, VARIABLE, FILM: 500 $\Omega$ , 10%, 1/2W	1	62PAR500	73138	
R15	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	4	RCR07G101JS	81349	01121
R16	Same as R15				
R17	RESISTOR, FIXED, COMPOSITION: 22 k $\Omega$ , 5%, 1/4W	2	RCR07G223JS	81349	01121
R18	Same as R9				
R19	Same as R10				
R20	Same as R1				
R21	Same as R12				
R22	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	2	RCR07G102JS	81349	01121
R23	RESISTOR, FIXED, COMPOSITION: 2.4 k $\Omega$ , 5%, 1/4W	1	RCR07G242JS	81349	01121
R24 Thru R27	Same as R8				

REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A11

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R28	Same as R22				
R29	RESISTOR, FIXED, COMPOSITION: 6.8 kΩ, 5%, 1/4W	3	RCR07G682JS	81349	01121
R30	RESISTOR, FIXED, COMPOSITION: 3.9 kΩ, 5%, 1/4W	2	RCR07G392JS	81349	01121
R31	Same as R1				
R32	Same as R30				
R33	Same as R17				
R34	RESISTOR, FIXED, COMPOSITION: 18 kΩ, 5%, 1/4W	1	RCR07G183JS	81349	01121
R35	RESISTOR, FIXED, COMPOSITION: 220 kΩ, 5%, 1/4W	1	RCR07G224JS	81349	01121
R36	RESISTOR, FIXED, COMPOSITION: 33 Ω, 5%, 1/4W	2	RCR07G330JS	81349	01121
R37	Same as R9				
R38	RESISTOR, FIXED, COMPOSITION: 620 Ω, 5%, 1/4W	1	RCR07G621JS	81349	01121
R39	RESISTOR, VARIABLE, FILM: 10 kΩ, 10%, 1/2W	1	62PR10K	73138	
R40	Same as R36				
R41	RESISTOR, FIXED, COMPOSITION: 68 kΩ, 5%, 1/4W	1	RCR07G683JS	81349	01121
R42	RESISTOR, FIXED, COMPOSITION: 47 kΩ, 5%, 1/4W	1	RCR07G473JS	81349	01121
R43	RESISTOR, FIXED, COMPOSITION: 27 kΩ, 5%, 1/4W	2	RCR07G273JS	81349	01121
R44	Same as R8				
R45	RESISTOR, FIXED, COMPOSITION: 10 Ω, 5%, 1/4W	1	RCR07G100JS	81349	01121
R46	Same as R4				
R47	Same as R29				
R48	Same as R4				
R49	RESISTOR, FIXED, COMPOSITION: 100 kΩ, 5%, 1/4W	1	RCR07G104JS	81349	01121
R50	Same as R4				
R51	RESISTOR, FIXED, COMPOSITION: 560 kΩ, 5%, 1/4W	1	RCR07G564JS	81349	01121
R52	Same as R4				
R53	RESISTOR, FIXED, COMPOSITION: 1.5 kΩ, 5%, 1/4W	1	RCR07G152JS	81349	01121
R54	Same as R9				
R55	RESISTOR, FIXED, COMPOSITION: 33 kΩ, 5%, 1/4W	1	RCR07G333JS	81349	01121
R56	RESISTOR, FIXED, COMPOSITION: 3.3 kΩ, 5%, 1/4W	1	RCR07G332JS	81349	01121
R57	Same as R15				
R58	Same as R9				
R59	RESISTOR, FIXED, COMPOSITION: 5.6 MΩ, 5%, 1/4W	1	RCR07G565JS	81349	01121
R60	RESISTOR, FIXED, COMPOSITION: 680 Ω, 5%, 1/4W	1	RCR07G681JS	81349	01121
R61	Same as R15				
R62	Same as R43				
R63	Same as R4				

REF DESIG PREFIX A11

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R64	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	1	RCR07G470JS	81349	01121
R65	Same as R8				
R66	Same as R29				
T1	TRANSFORMER	1	LL010	07388	
U1	INTEGRATED CIRCUIT	1	796HC	07263	
U2	INTEGRATED CIRCUIT	2	741HC	07263	
U3	Same as U2				
VR1	DIODE, ZENER: 6.8 V	1	1N754A	80131	04713

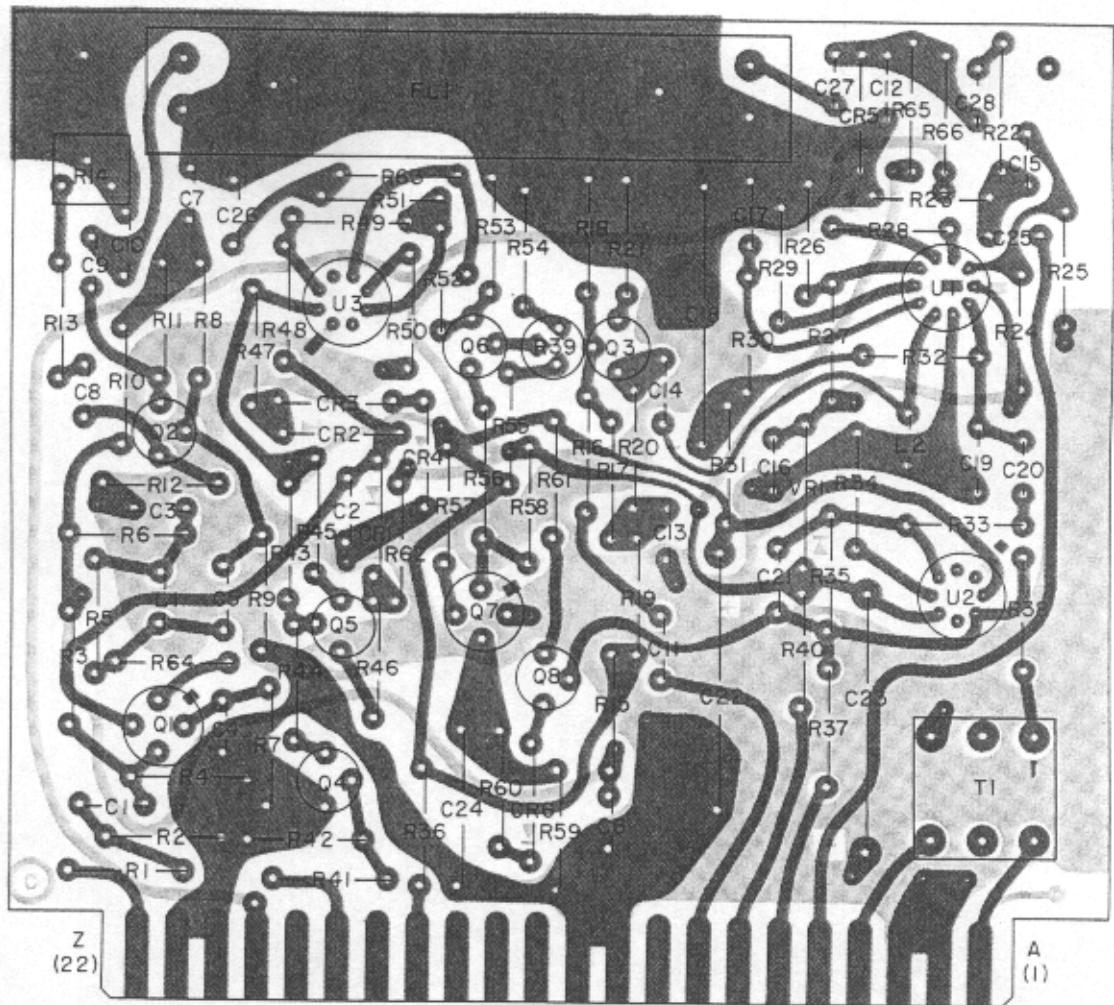


Figure 6-22. Types 791180-1 and -2 SSB Demodulators (A11, A12), Location of Components

## REPLACEMENT PARTS LIST

WJ-8888

## 6.4.11 TYPE 791180-2 SSB DEMODULATOR

REF DESIG PREFIX A12

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	4	1N462A	80131	93332
CR2 Thru CR4	Same as CR1				
CR5	DIODE	2	1N4449	80131	93332
CR6	Same as CR5				
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 100 V	7	C023B101F103M	56289	
C2	Same as C1				
C3	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	11	8131M100-651-104M	72982	
C4	Same as C3				
C5	Same as C1				
C6 Thru C8	Same as C3				
C9	Same as C1				
C10	CAPACITOR, MICA, DIPPED: 27 pF, 2%, 500 V	2	CM05ED270G03	81239	72136
C11	Same as C1				
C12	Same as C10				
C13	Same as C3				
C14	Same as C1				
C15	Same as C1				
C16	Same as C3				
C17	CAPACITOR, CERAMIC, DISC: 5000 pF, 20%, 100 V	1	C023B101E502M	56289	
C18	CAPACITOR, ELECTROLYTIC, TANTALUM: 47 $\mu$ F, 10%, 20 V	3	CS13BE476K	81349	56289
C19	CAPACITOR, CERAMIC, DISC: 1500 pF, 10%, 1000 V	1	DD152	71590	
C20	Same as C3				
C21	CAPACITOR, MICA, DIPPED: 24 pF, 5%, 500 V	1	CM05ED240J03	81349	72136
C22	Same as C18				
C23	Same as C18				
C24	CAPACITOR, ELECTROLYTIC, TANTALUM: 0.47 $\mu$ F, 10%, 35 V	1	CS13BF474K	81349	56289
C25	Same as C3				
C26	CAPACITOR, ELECTROLYTIC, TANTALUM: 2.2 $\mu$ F, 20%, 35 V	1	I96D225X0035JE3	56289	
C27	Same as C3				
C28	Same as C3				
FL1	FILTER	1	526-9666-010	95104	

REF DESIG PREFIX A12

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
L1	COIL, FIXED: 1.2 mH	2	553-3635-38	71279	
L2	Same as L1				
Q1	TRANSISTOR	1	3N187	80131	02735
Q2	TRANSISTOR	4	2N2222A	80131	04713
Q3	Same as Q2				
Q4	Same as Q2				
Q5	TRANSISTOR	2	2N3251	80131	04713
Q6	Same as Q5				
Q7	TRANSISTOR	1	2N4416	80131	04713
Q8	Same as Q2				
R1	RESISTOR, FIXED, COMPOSITION: 2.2 k $\Omega$ , 5%, 1/4W	6	RCR07G222JS	81349	01121
R2	Same as R1				
R3	RESISTOR, FIXED, COMPOSITION: 150 k $\Omega$ , 5%, 1/4W	1	RCR07G154JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	6	RCR07G103JS	81349	01121
R5	Same as R1				
R6	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	2	RCR07G331JS	81349	01121
R7	Same as R6				
R8	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	7	RCR07G153JS	81349	01121
R9	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	5	RCR07G472JS	81349	01121
R10	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	2	RCR07G221JS	81349	01121
R11	Same as R1				
R12	RESISTOR, FIXED, COMPOSITION: 820 $\Omega$ , 5%, 1/4W	2	RCR07G821JS	81349	01121
R13	RESISTOR, FIXED, COMPOSITION: 56 $\Omega$ , 5%, 1/4W	1	RCR07G560JS	81349	01121
R14	RESISTOR, VARIABLE, FILM: 500 $\Omega$ , 10%, 1/2W	1	62PAR500	73138	
R15	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	4	RCR07G101JS	81349	01121
R16	Same as R15				
R17	RESISTOR, FIXED, COMPOSITION: 22 k $\Omega$ , 5%, 1/4W	2	RCR07G223JS	81349	01121
R18	Same as R9				
R19	Same as R10				
R20	Same as R1				
R21	Same as R12				
R22	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	2	RCR07G102JS	81349	01121
R23	RESISTOR, FIXED, COMPOSITION: 1.2 k $\Omega$ , 5%, 1/4W	1	RCR07G122JS	81349	01121
R24 Thru R27	Same as R8				

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A12

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R28	Same as R22				
R29	RESISTOR, FIXED, COMPOSITION: 6.8 k $\Omega$ , 5%, 1/4W	3	RCR07G682JS	81349	01121
R30	RESISTOR, FIXED, COMPOSITION: 3.9 k $\Omega$ , 5%, 1/4W	2	RCR07G392JS	81349	01121
R31	Same as R1				
R32	Same as R30				
R33	Same as R17				
R34	RESISTOR, FIXED, COMPOSITION: 18 k $\Omega$ , 5%, 1/4W	1	RCR07G183JS	81349	01121
R35	RESISTOR, FIXED, COMPOSITION: 220 k $\Omega$ , 5%, 1/4W	1	RCR07G224JS	81349	01121
R36	RESISTOR, FIXED, COMPOSITION: 33 $\Omega$ , 5%, 1/4W	2	RCR07G330JS	81349	01121
R37	Same as R9				
R38	RESISTOR, FIXED, COMPOSITION: 620 $\Omega$ , 5%, 1/4W	1	RCR07G621JS	81349	01121
R39	RESISTOR, VARIABLE, FILM: 10 k $\Omega$ , 10%, 1/2W	1	62PR10K	73138	
R40	Same as R36				
R41	RESISTOR, FIXED, COMPOSITION: 68 k $\Omega$ , 5%, 1/4W	1	RCR07G683JS	81349	01121
R42	RESISTOR, FIXED, COMPOSITION: 47 k $\Omega$ , 5%, 1/4W	1	RCR07G473JS	81349	01121
R43	RESISTOR, FIXED, COMPOSITION: 27 k $\Omega$ , 5%, 1/4W	2	RCR07G273JS	81349	01121
R44	Same as R8				
R45	RESISTOR, FIXED, COMPOSITION: 10 $\Omega$ , 5%, 1/4W	1	RCR07G100JS	81349	01121
R46	Same as R4				
R47	Same as R29				
R48	Same as R4				
R49	RESISTOR, FIXED, COMPOSITION: 100 k $\Omega$ , 5%, 1/4W	1	RCR07G104JS	81349	01121
R50	Same as R4				
R51	RESISTOR, FIXED, COMPOSITION: 560 k $\Omega$ , 5%, 1/4W	1	RCR07G564JS	81349	01121
R52	Same as R4				
R53	RESISTOR, FIXED, COMPOSITION: 1.5 k $\Omega$ , 5%, 1/4W	1	RCR07G152JS	81349	01121
R54	Same as R9				
R55	RESISTOR, FIXED, COMPOSITION: 33 k $\Omega$ , 5%, 1/4W	1	RCR07G333JS	81349	01121
R56	RESISTOR, FIXED, COMPOSITION: 3.3 k $\Omega$ , 5%, 1/4W	1	RCR07G332JS	81349	01121
R57	Same as R15				
R58	Same as R9				
R59	RESISTOR, FIXED, COMPOSITION: 5.6 M $\Omega$ , 5%, 1/4W	1	RCR07G565JS	81349	01121
R60	RESISTOR, FIXED, COMPOSITION: 680 $\Omega$ , 5%, 1/4W	1	RCR07G681JS	81349	01121
R61	Same as R15				
R62	Same as R43				
R63	Same as R4				



REF DESIG PREFIX A12

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R64	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	1	RCR07G470JS	81349	01121
R65	Same as R8				
R66	Same as R29				
T1	TRANSFORMER	1	LL010	07388	
U1	INTEGRATED CIRCUIT	1	796HC	07263	
U2	INTEGRATED CIRCUIT	2	741HC	07263	
U3	Same as U2				
VR1	DIODE, ZENER: 6.8 V	1	1N754A	80131	04713

## REPLACEMENT PARTS LIST

WJ-8888

## 6.4.12 TYPE 7453 AUDIO AMPLIFIER

REF DESIG PREFIX A13

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	2	1N462A	80131	93332
CR2	Same as CR1				
CR3	DIODE	1	1N458A	80131	93332
CR4	DIODE	2	1N198A	80131	93332
CR5	Same as CR4				
C1	CAPACITOR, ELECTROLYTIC, TANTALUM: 2.2 $\mu$ F, 10%, 35V	6	CS13BF225K	81349	56289
C2 Thru C6	Same as C1				
C7	CAPACITOR, MICA, DIPPED: 680 pF, 5%, 500 V	1	CM06FD681J03	81349	72136
C8	CAPACITOR, ELECTROLYTIC, TANTALUM: 47 $\mu$ F, 10%, 20 V	2	CS13BE476K	81349	56289
C9	Same as C8				
C10	CAPACITOR, ELECTROLYTIC, TANTALUM: 22 $\mu$ F, 10%, 15 V	2	CS13BD226K	81349	56289
C11	CAPACITOR, ELECTROLYTIC, TANTALUM: 15 $\mu$ F, 10%, 20 V	1	CS13BE156K	81349	56289
C12	CAPACITOR, ELECTROLYTIC, TANTALUM: 4.7 $\mu$ F, 10%, 35 V	1	CS13BF475K	81349	56289
C13	Same as C10				
C14	CAPACITOR, CERAMIC, DISC: 5000 pF, 20%, 100 V	1	C023B101E502M	56289	
Q1	TRANSISTOR	6	2N2222A	80131	04713
Q2 Thru Q6	Same as Q1				
Q7	TRANSISTOR	1	U1899E	15818	
Q8	TRANSISTOR	2	2N3251	80131	04713
Q9	Same as Q8				
R1	RESISTOR, FIXED, COMPOSITION: 68 k $\Omega$ , 5%, 1/4W	2	RCR07G683JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 47 k $\Omega$ , 5%, 1/4W	4	RCR07G473JS	81349	01121
R3	Same as R1				
R4	Same as R2				
R5	RESISTOR, FIXED, COMPOSITION: 22 k $\Omega$ , 5%, 1/4W	8	RCR07G223JS	81349	01121
R6	Same as R5				
R7	Same as R2				
R8	Same as R2				
R9	Same as R5				
R10	Same as R5				

REF DESIG PREFIX A13

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R11	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	3	RCR07G153JS	81349	01121
R12	RESISTOR, FIXED, COMPOSITION: 18 k $\Omega$ , 5%, 1/4W	2	RCR07G183JS	81349	01121
R13	Same as R5				
R14	RESISTOR, FIXED, COMPOSITION: 82 k $\Omega$ , 5%, 1/4W	2	RCR07G823JS	81349	01121
R15	Same as R11				
R16	Same as R5				
R17	Same as R12				
R18	Same as R14				
R19	RESISTOR, FIXED, COMPOSITION: 100 k $\Omega$ , 5%, 1/4W	1	RCR07G104JS	81349	01121
R20	RESISTOR, FIXED, COMPOSITION: 180 k $\Omega$ , 5%, 1/4W	1	RCR07G184JS	81349	01121
R21	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	1	RCR07G102JS	81349	01121
R22	RESISTOR, FIXED, COMPOSITION: 330 k $\Omega$ , 5%, 1/4W	1	RCR07G334JS	81349	01121
R23	RESISTOR, FIXED, COMPOSITION: 2.2 M $\Omega$ , 5%, 1/4W	1	RCR07G225JS	81349	01121
R24	RESISTOR, FIXED, COMPOSITION: 680 k $\Omega$ , 5%, 1/4W	1	RCR07G684JS	81349	01121
R25	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	4	RCR07G103JS	81349	01121
R26	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	3	RCR07G101JS	81349	01121
R27	Same as R5				
R28	Same as R11				
R29	Same as R26				
R30	RESISTOR, FIXED, COMPOSITION: 620 $\Omega$ , 5%, 1/4W	1	RCR07G621JS	81349	01121
R31	RESISTOR, FIXED, COMPOSITION: 39 k $\Omega$ , 5%, 1/4W	3	RCR07G393JS	81349	01121
R32	Same as R26				
R33	RESISTOR, FIXED, COMPOSITION: 2.2 k $\Omega$ , 5%, 1/4W	1	RCR07G222JS	81349	01121
R34	Same as R5				
R35	RESISTOR, FIXED, FILM: 14.7 k $\Omega$ , 1%, 1/10W	2	RN55C1472F	81349	75042
R36	Same as R35				
R37	Same as R31				
R38	Same as R31				
R39	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	1	RCR07G472JS	81349	01121
R40	Same as R25				
R41	RESISTOR, FIXED, COMPOSITION: 3.3 M $\Omega$ , 5%, 1/4W	1	RCR07G335JS	81349	01121
R42	RESISTOR, FIXED, COMPOSITION: 390 $\Omega$ , 5%, 1/4W	1	RCR07G391JS	81349	01121
R43	Same as R25				
R44	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	1	RCR07G221JS	81349	01121
R45	Same as R25				
T1	TRANSFORMER	1	LL101	07368	

REF DESIG PREFIX A13

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
U1	INTEGRATED CIRCUIT	2	741HC	07263	
U2	Same as U1				
U3	INTEGRATED CIRCUIT	1	MC1439G	04713	
VR1	DIODE, ZENER: 5.1 V	1	1N751A	80131	04713

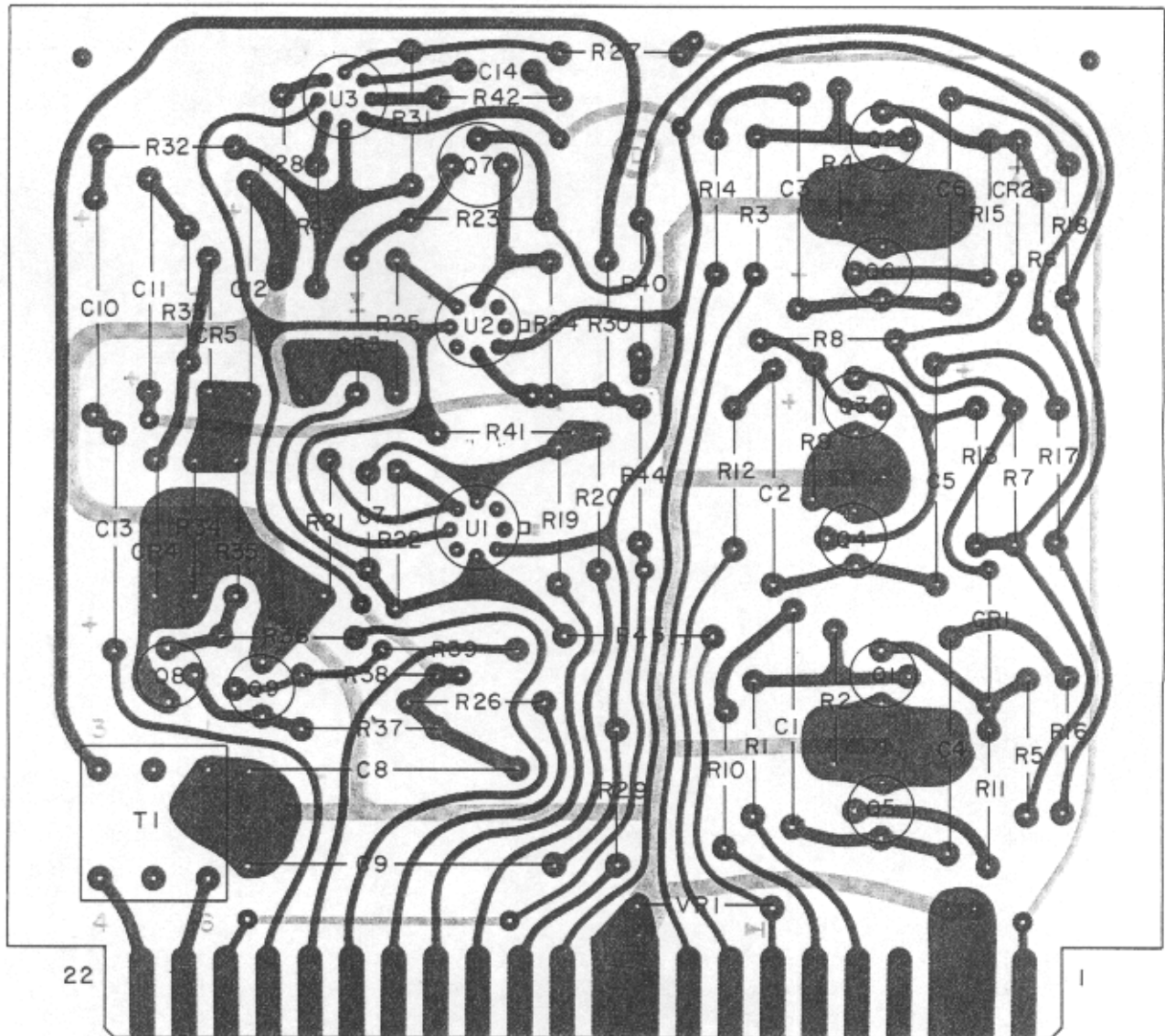


Figure 6-23. Type 7453 Audio Amplifier (A13), Location of Components

## 6.4.13 TYPE 7899 GAIN CONTROL AMPLIFIER

REF DESIG PREFIX A14

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	12	1N462A	80131	93332
CR2 Thru CR12	Same as CR1				
C1	CAPACITOR, ELECTROLYTIC, TANTALUM: 1.0 $\mu$ F, 10%, 35 V	2	CS13BF105K	81349	56289
C2	CAPACITOR, ELECTROLYTIC, TANTALUM: 4.7 $\mu$ F, 20%, 35 V	2	196D475X0035JE3	56289	
C3	CAPACITOR, ELECTROLYTIC, TANTALUM: 22 $\mu$ F, 10%, 35 V	3	CS13BF226K	81349	56289
C4	Same as C1				
C5	Same as C2				
C6	Same as C3				
C7	Same as C3				
C8	NOT USED				
C9	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	1	8131M100-651-104M	72982	
Q1	TRANSISTOR	12	2N2222A	80131	04713
Q2	Same as Q1				
Q3	Same as Q1				
Q4	TRANSISTOR	3	2N3251	80131	04713
Q5 Thru Q10	Same as Q1				
Q11	Same as Q4				
Q12	Same as Q4				
Q13 Thru Q15	Same as Q1				
R1	RESISTOR, FIXED, COMPOSITION: 100 k $\Omega$ , 5%, 1/4W	2	RCR07G104JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 3.9 k $\Omega$ , 5%, 1/4W	5	RCR07G392JS	81349	01121
R3	Same as R2				
R4	RESISTOR, FIXED, COMPOSITION: 82 k $\Omega$ , 5%, 1/4W	2	RCR07G823JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 6.8 k $\Omega$ , 5%, 1/4W	2	RCR07G682JS	81349	01121
R6	Same as R2				
R7	RESISTOR, FIXED, COMPOSITION: 1.0 M $\Omega$ , 5%, 1/4W	3	RCR07G105JS	81349	01121
R8	RESISTOR, FIXED, COMPOSITION: 68 k $\Omega$ , 5%, 1/4W	5	RCR07G683JS	81349	01121
R9	RESISTOR, FIXED, COMPOSITION: 47 k $\Omega$ , 5%, 1/4W	11	RCR07G473JS	81349	01121
R10	Same as R8				
R11	Same as R5				

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A14

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R12	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	7	RCR07G103JS	81349	01121
R13	RESISTOR, FIXED, COMPOSITION: 820 $\Omega$ , 5%, 1/4W	1	RCR07G821JS	81349	01121
R14	Same as R8				
R15	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	4	RCR07G153JS	81349	01121
R16	Same as R9				
R17	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	4	RCR07G101JS	81349	01121
R18	RESISTOR, FIXED, COMPOSITION: 3.3 k $\Omega$ , 5%, 1/4W	2	RCR07G332JS	81349	01121
R19	RESISTOR, FIXED, COMPOSITION: 33 k $\Omega$ , 5%, 1/4W	6	RCR07G333JS	81349	01121
R20	Same as R12				
R21	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	1	RCR07G472JS	81349	01121
R22	RESISTOR, FIXED, COMPOSITION: 2.2 k $\Omega$ , 5%, 1/4W	3	RCR07G222JS	81349	01121
R23	Same as R19				
R24	Same as R8				
R25	Same as R9				
R26	Same as R12				
R27	Same as R19				
R28	Same as R9				
R29	Same as R19				
R30	Same as R7				
R31	RESISTOR, FIXED, COMPOSITION: 5.6 k $\Omega$ , 5%, 1/4W	1	RCR07G562JS	81349	01121
R32	Same as R19				
R33	Same as R9				
R34	Same as R9				
R35	Same as R8				
R36	RESISTOR, FIXED, COMPOSITION: 27 k $\Omega$ , 5%, 1/4W	2	RCR07G273JS	81349	01121
R37	RESISTOR, FIXED, COMPOSITION: 330 k $\Omega$ , 5%, 1/4W	1	RCR07G334JS	81349	01121
R38	Same as R12				
R39	RESISTOR, FIXED, COMPOSITION: 16 k $\Omega$ , 5%, 1/4W	2	RCR07G163JS	81349	01121
R40	Same as R19				
R41	Same as R9				
R42	Same as R39				
R43	Same as R2				
R44	Same as R9				
R45	Same as R15				
R46	Same as R22				
R47	RESISTOR, FIXED, COMPOSITION: 220 k $\Omega$ , 5%, 1/4W	1	RCR07G224JS	81349	01121

REF DESIG PREFIX A14

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R48	Same as R22				
R49	RESISTOR, FIXED, COMPOSITION: 1.5 k $\Omega$ , 5%, 1/4W	2	RCR07G152JS	81349	01121
R50	Same as R36				
R51	Same as R49				
R52	Same as R15				
R53	Same as R12				
R54	Same as R17				
R55	Same as R17				
R56	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	1	RCR07G102JS	81349	01121
R57	Same as R15				
R58	RESISTOR, FIXED, COMPOSITION: 680 $\Omega$ , 5%, 1/4W	1	RCR07G681JS	81349	01121
R59	Same as R18				
R60	Same as R9				
R61	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	2	RCR07G470JS	81349	01121
R62	Same as R17				
R63	RESISTOR, FIXED, COMPOSITION: 820 k $\Omega$ , 5%, 1/4W	1	RCR07G824JS	81349	01121
R64	Same as R1				
R65	Same as R61				
R66	Same as R9				
R67	RESISTOR, FIXED, COMPOSITION: 560 k $\Omega$ , 5%, 1/4W	1	RCR07G564JS	81349	01121
R68	Same as R9				
R69	RESISTOR, FIXED, COMPOSITION: 1.2 k $\Omega$ , 5%, 1/4W	1	RCR07G122JS	81349	01121
R70	Same as R7				
R71	Same as R2				
R72	Same as R12				
R73	Same as R12				
R74	RESISTOR, VARIABLE, FILM: 2 k $\Omega$ , 10%, 1/2W	1	62PR2K	73138	
R75	Same as R4				
R76	Same as R74				
U1	INTEGRATED CIRCUIT	1	CD4053AE	02735	
U2	INTEGRATED CIRCUIT	3	MC1458V	18324	
U3	Same as U2				
U4	Same as U2				
VR1	DIODE, ZENER: 5.1 V	2	1N751A	80131	04713
VR2	Same as VR1				

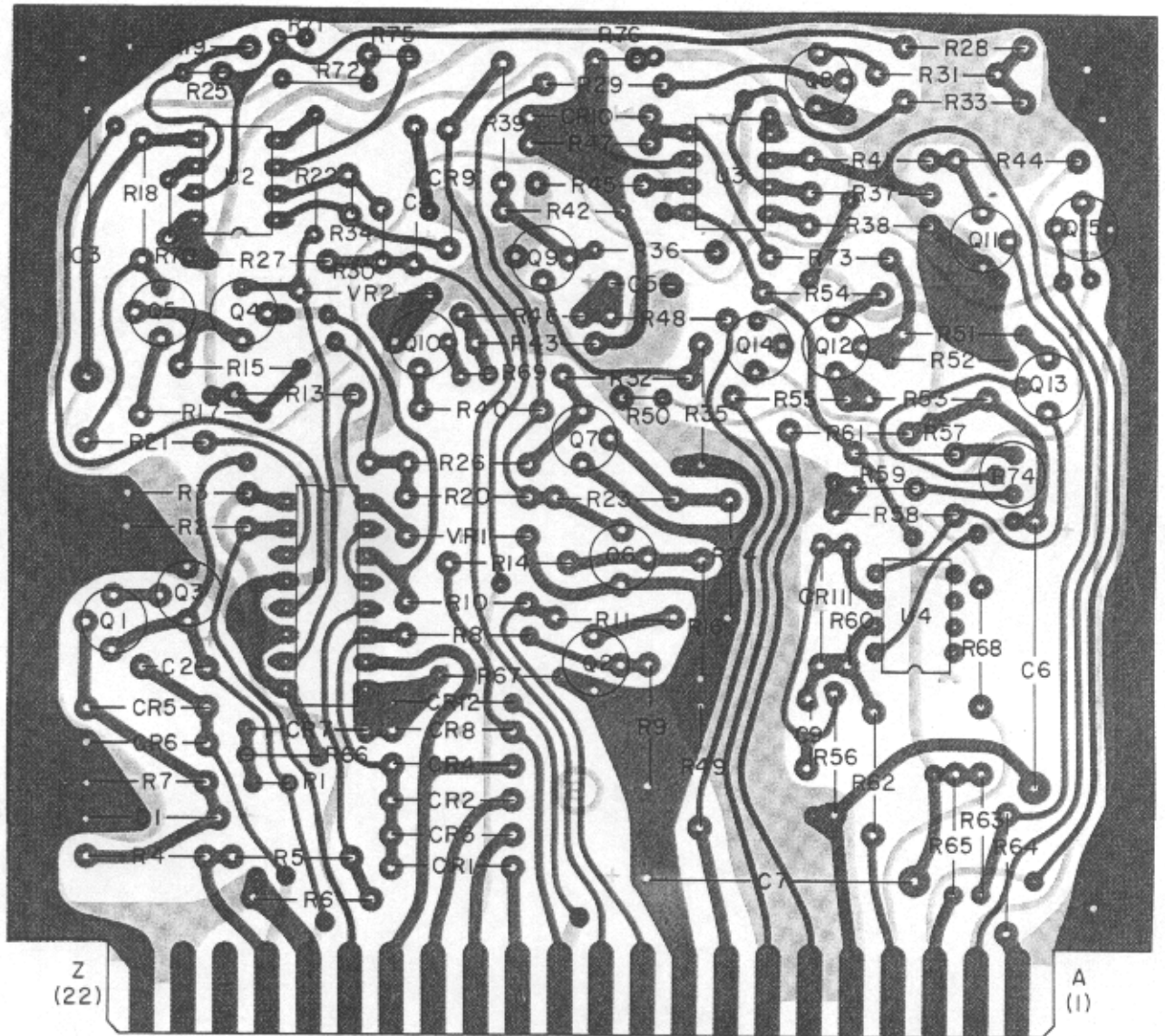


Figure 6-24. Type 7899 Gain Control Amplifier (A14), Location of Components



## 6.4.14 TYPE 791271 VOLTAGE CONTROLLED OSCILLATOR

REF DESIG PREFIX A15

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
A1	VCO MODULE	1	17414	14632	
C1	CAPACITOR, ELECTROLYTIC, TANTALUM: 2.2 $\mu$ F, 20%, 35 V	1	196D225X0035JE3	56289	
C2	CAPACITOR, ELECTROLYTIC, TANTALUM: 100 $\mu$ F, 20%, 20 V	3	196D107X0020MA3	56289	
C3	CAPACITOR, ELECTROLYTIC, TANTALUM: 220 $\mu$ F, 20%, 10 V	1	196D227X0010MA3	56289	
C4	Same as C2				
C5	Same as C2				
FB1	FERRITE BEAD	4	56-590-65-4A	02114	
FB2 Thru FB4	Same as FB1				
Q1	TRANSISTOR	1	2N2222A	80131	04713
Q2	TRANSISTOR	1	2N2907	80131	04713
R1	RESISTOR, FIXED, COMPOSITION: 22 $\Omega$ , 5%, 1/4W	2	RCR07G220JS	81349	01121
R2	RESISTOR, FIXED, FILM: 22.1 k $\Omega$ , 1%, 1/10W	1	RN55C2212F	81349	75042
R3	Same as R1				
R4	RESISTOR, FIXED, COMPOSITION: 33 $\Omega$ , 5%, 1/4W	1	RCR07G330JS	81349	01121
R5	RESISTOR, FIXED, FILM: 6.81 k $\Omega$ , 1%, 1/10W	1	RN55C6811F	81349	75042
R6	RESISTOR, FIXED, COMPOSITION: 470 $\Omega$ , 5%, 1/4W	2	RCR07G471JS	81349	01121
R7	RESISTOR, FIXED, FILM: 3.32 k $\Omega$ , 1%, 1/10W	1	RN55C3321F	81349	75042
R8	RESISTOR, FIXED, FILM: 3.92 k $\Omega$ , 1%, 1/10W	1	RN55C3921F	81349	75042
R9	Same as R6				

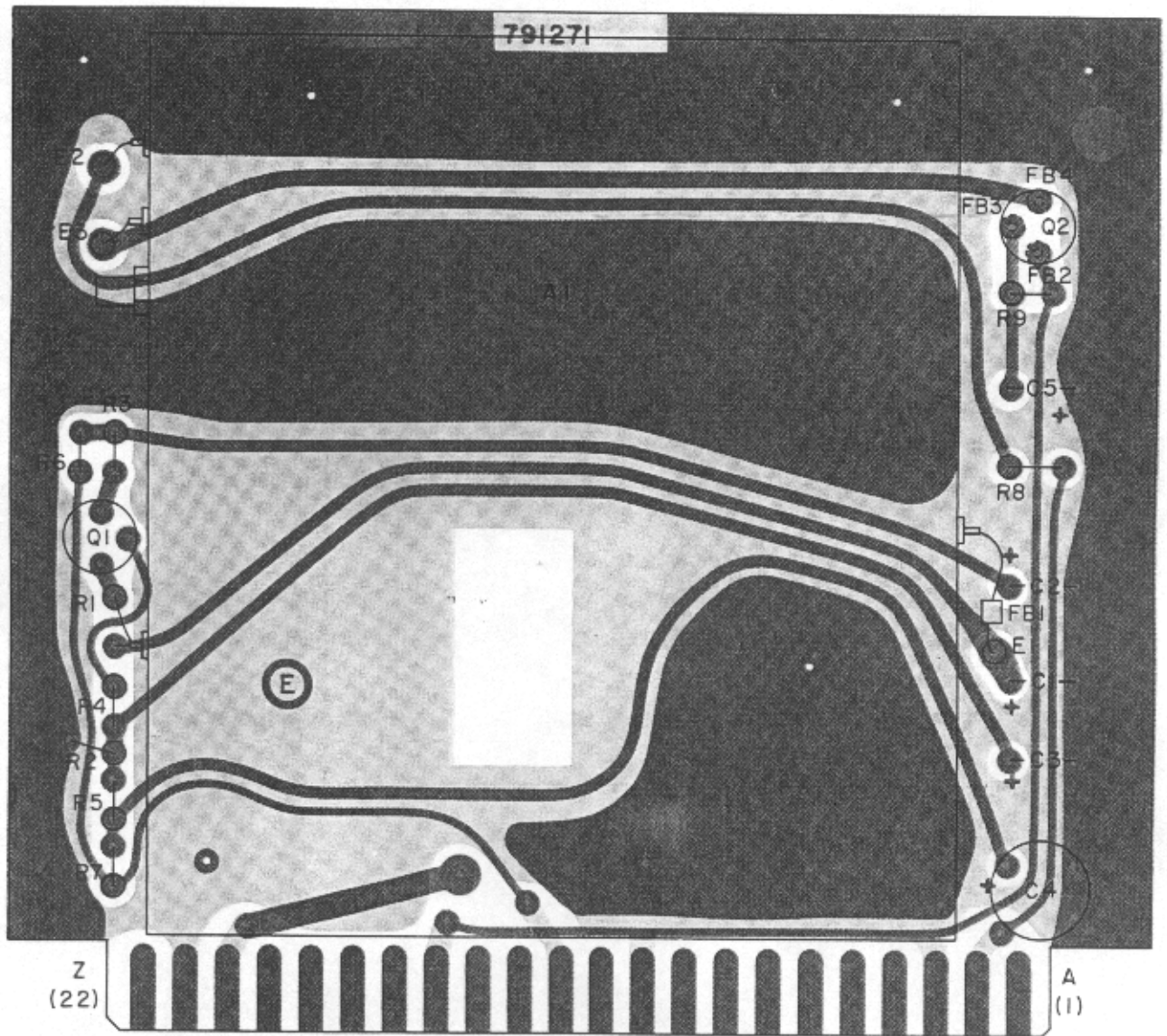


Figure 6-25. Type 791271 Voltage Controlled Oscillator (A15), Location of Components

## 6.4.14.1 Part 17414 VCO Assembly

REF DESIG PREFIX A15A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE, VARICAP	4	BB109	25088	
CR2 Thru CR4	Same as CR1				
CR5	DIODE	1	1N198A	80131	93332
C2	CAPACITOR, CERAMIC, TUBULAR: 10 pF $\pm$ 0.5 pF, 500 V	1	301-000C0H0-100D	72982	
C3	CAPACITOR, CERAMIC, DISC: 0.47 $\mu$ F, 20%, 100 V	1	8131M100-651-474M	72982	
C4	CAPACITOR, MICA, DIPPED: 91 pF, 2%, 500 V	1	CM05FD910G03	81349	72136
C5	CAPACITOR, MICA, DIPPED: 24 pF, 5%, 500 V	1	CM04ED240J03	81349	72136
C6	CAPACITOR, CERAMIC, DISC: 1000 pF, GMV, 500 V	14	SM(1000pF, P)	91418	
C7	Same as C6				
C8	CAPACITOR, CERAMIC, FEEDTHRU: 1000 pF, GMV, 500 V	3	54-794-001-102W	33095	
C9	CAPACITOR, CERAMIC, TUBULAR: 2.2 pF $\pm$ 0.1 pF, 500 V	1	301-000C0J0-229B	72982	
C10	Same as C6				
C11	CAPACITOR, CERAMIC, FEEDTHRU: 470 pF, 20%, 500 V	2	54-794-001-4712	33095	
C12 Thru C17	Same as C6				
C18	CAPACITOR, MICA, DIPPED: 27 pF, 2%, 500 V	2	CM05ED270G03	81349	72136
C19	CAPACITOR, MICA, DIPPED: 18 pF, 5%, 500 V	1	CM05CD180J03	81349	72136
C20	CAPACITOR, CERAMIC, STANDOFF: 1000 pF, GMV, 500 V	1	54-803-003-102W	33095	
C21	Same as C6				
C22	Same as C18				
C23 Thru C25	Same as C6				
C26	CAPACITOR, MICA, DIPPED: 2700 pF, 2%, 500 V	1	CM06FD272G03	81349	72136
C27	Same as C8				
C28	CAPACITOR, ELECTROLYTIC, TANTALUM: 2.2 $\mu$ F, 20%, 35 V	1	196D225X0035JE3	56289	
C29	Same as C11				
C30	Same as C8				
C31	Same as C6				
C32	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 200 V	1	8131A200Z5U103M	72982	
E1	TERMINAL, FEEDTHRU, INSULATED	6	SFU16Y	04013	

## REPLACEMENT PARTS LIST

WJ-8886

REF DESIG PREFIX A15A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
E2 Thru E6	Same as E1				
FB1	FERRITE BEAD	3	56-590-65-4A	02114	
FB2	Same as FB1				
FB3	Same as FB1				
J1	CONNECTOR, RECEPTACLE, SMC SERIES	1	10-0104-002	19505	
L1	INDUCTOR	1	21210-83	14632	
L2	INDUCTOR	2	1131-72	14632	
L3	Same as L2				
L4	COIL, FIXED: 0.56 $\mu$ H	1	202-11	99848	
L5	COIL, FIXED: 47 mH	1	553-3635-57	71279	
L6	COIL, FIXED: 100 mH	1	553-3635-61	71279	
Q1	TRANSISTOR	1	2N5397	80131	04713
Q2	TRANSISTOR	3	2N2857	80131	02735
Q3	Same as Q2				
Q4	TRANSISTOR	1	2N5109	80131	02735
Q5	Same as Q2				
R1	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	1	RCR07G470JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 1.8 k $\Omega$ , 5%, 1/4W	1	RCR07G182JS	81349	01121
R3	RESISTOR, FIXED, COMPOSITION: 100 k $\Omega$ , 5%, 1/4W	2	RCR07G104JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 68 $\Omega$ , 5%, 1/4W	1	RCR07G680JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 2.7 k $\Omega$ , 5%, 1/4W	3	RCR07G272JS	81349	01121
R6	RESISTOR, FIXED, COMPOSITION: 1.5 k $\Omega$ , 5%, 1/4W	3	RCR07G152JS	81349	01121
R7	RESISTOR, FIXED, FILM: 6.19 k $\Omega$ , 1%, 1/10W	1	RN55C6191F	81349	75042
R8	RESISTOR, FIXED, COMPOSITION: 47 k $\Omega$ , 5%, 1/4W	3	RCR07G473JS	81349	01121
R9	Same as R8				
R10	Same as R8				
R11	RESISTOR, FIXED, FILM: 42.2 k $\Omega$ , 1%, 1/10W	1	RN55C4222F	81349	75042
R12	RESISTOR, FIXED, COMPOSITION: 150 $\Omega$ , 5%, 1/4W	6	RCR07G151JS	81349	01121
R13	RESISTOR, FIXED, COMPOSITION: 22 $\Omega$ , 5%, 1/4W	6	RCR07G220JS	81349	01121
R14	Same as R12				
R15	Same as R5				
R16	RESISTOR, FIXED, FILM: 10 $\Omega$ , 5%, 1/4W	1	RN55C4751F	81349	75042
R17	RESISTOR, FIXED, COMPOSITION: 10 $\Omega$ , 5%, 1/4W	7	RCR07G100JS	81349	01121
R18	RESISTOR, FIXED, COMPOSITION: 16 $\Omega$ , 5%, 1/4W	2	RCR07G160JS	81349	01121
R19	RESISTOR, FIXED, COMPOSITION: 300 $\Omega$ , 5%, 1/4W	4	RCR07G301JS	81349	01121

REF DESIG PREFIX A15A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R20	Same as R19				
R21	Same as R17				
R22	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	1	RCR07G221JS	81349	01121
R23	Same as R13				
R24	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	1	RCR07G102JS	81349	01121
R25	RESISTOR, FIXED, COMPOSITION: 470 $\Omega$ , 5%, 1/4W	3	RCR07G471JS	81349	01121
R26	Same as R18				
R27	Same as R19				
R28	Same as R19				
R29	Same as R13				
R30	Same as R17				
R31	Same as R6				
R32	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	3	RCR07G331JS	81349	01121
R33	Same as R13				
R34	Same as R25				
R35	Same as R32				
R36	Same as R17				
R37	RESISTOR, FIXED, COMPOSITION: 5.6 $\Omega$ , 5%, 1/4W	1	RCR07G5R6JS	81349	01121
R38	RESISTOR, FIXED, COMPOSITION: 82 $\Omega$ , 5%, 1/4W	2	RCR07G820JS	81349	01121
R39	Same as R12				
R40	Same as R12				
R41*	RESISTOR, FIXED, COMPOSITION: 39 $\Omega$ , 5%, 1/4W	1	RCR07G390JS	81349	01121
R42	Same as R13				
R43	Same as R17				
R44	RESISTOR, FIXED, COMPOSITION: 36 $\Omega$ , 5%, 1/4W	1	RCR07G360JS	81349	01121
R45	Same as R25				
R46	Same as R13				
R47	Same as R12				
R48	Same as R12				
R49	Same as R38				
R50	Same as R5				
R51	Same as R17				
R52	Same as R6				
R53	Same as R32				
R54	Same as R17				
R55	Same as R3				

\* Nominal value; final value factory selected.

Figure 6-26a

WJ-8888

REF DESIG PREFIX A15A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R56	RESISTOR, FIXED, COMPOSITION: 2.0 kΩ, 5%, 1/4W	1	RCR07G202JS	81349	01121
T1	TRANSFORMER	2	21428-47	14632	
T2	Same as T1				
T3	TRANSFORMER, TOROIDAL	2	21092-5	14632	
T4	Same as T3				
U1	DIVIDER, POWER	1	PSC2-1	14632	
VR1	DIODE, ZENER: 5.6 V	1	1N752A	80131	04713

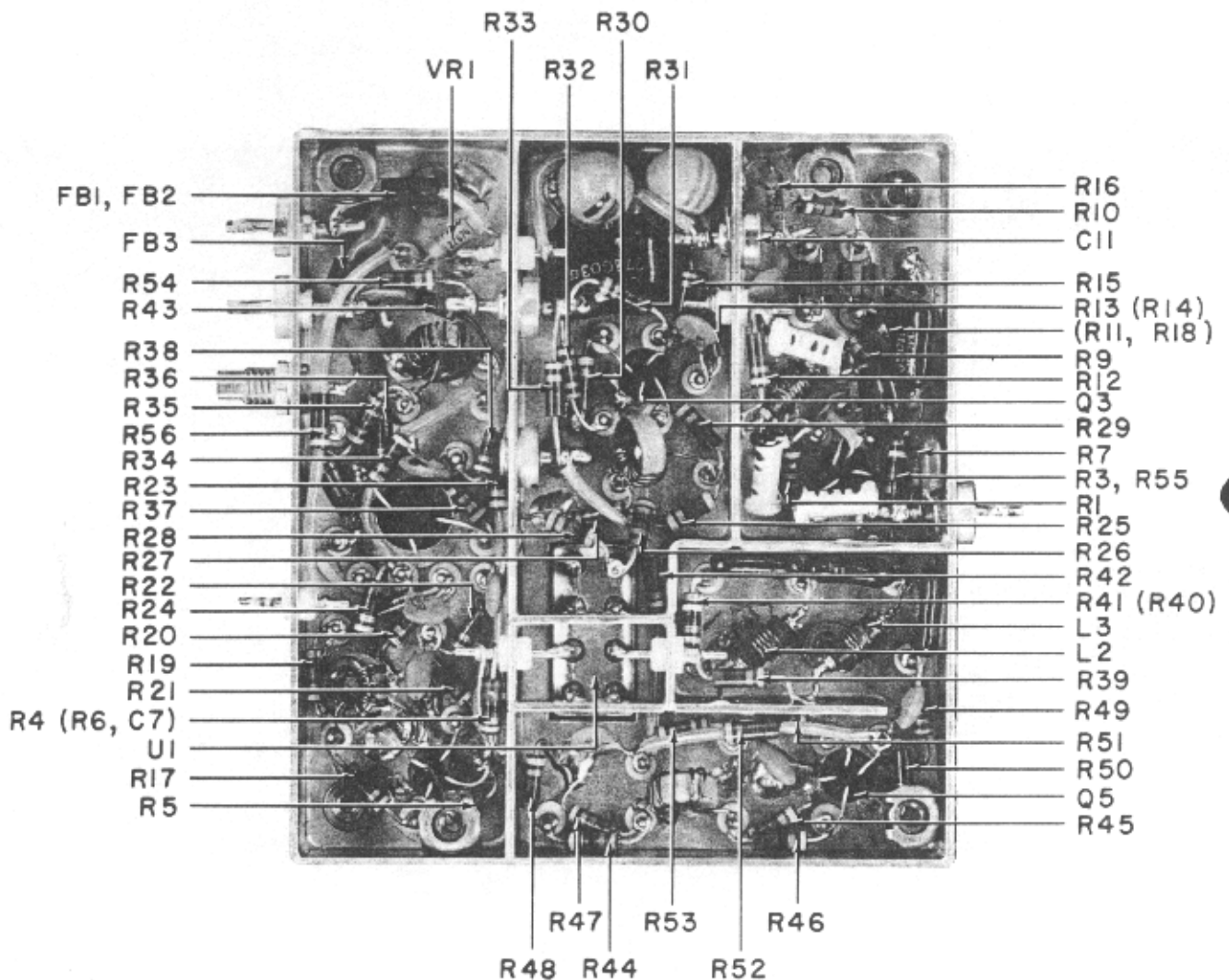


Figure 6-26a. Part 17414 VCO Assembly (A15A1), Location of Components

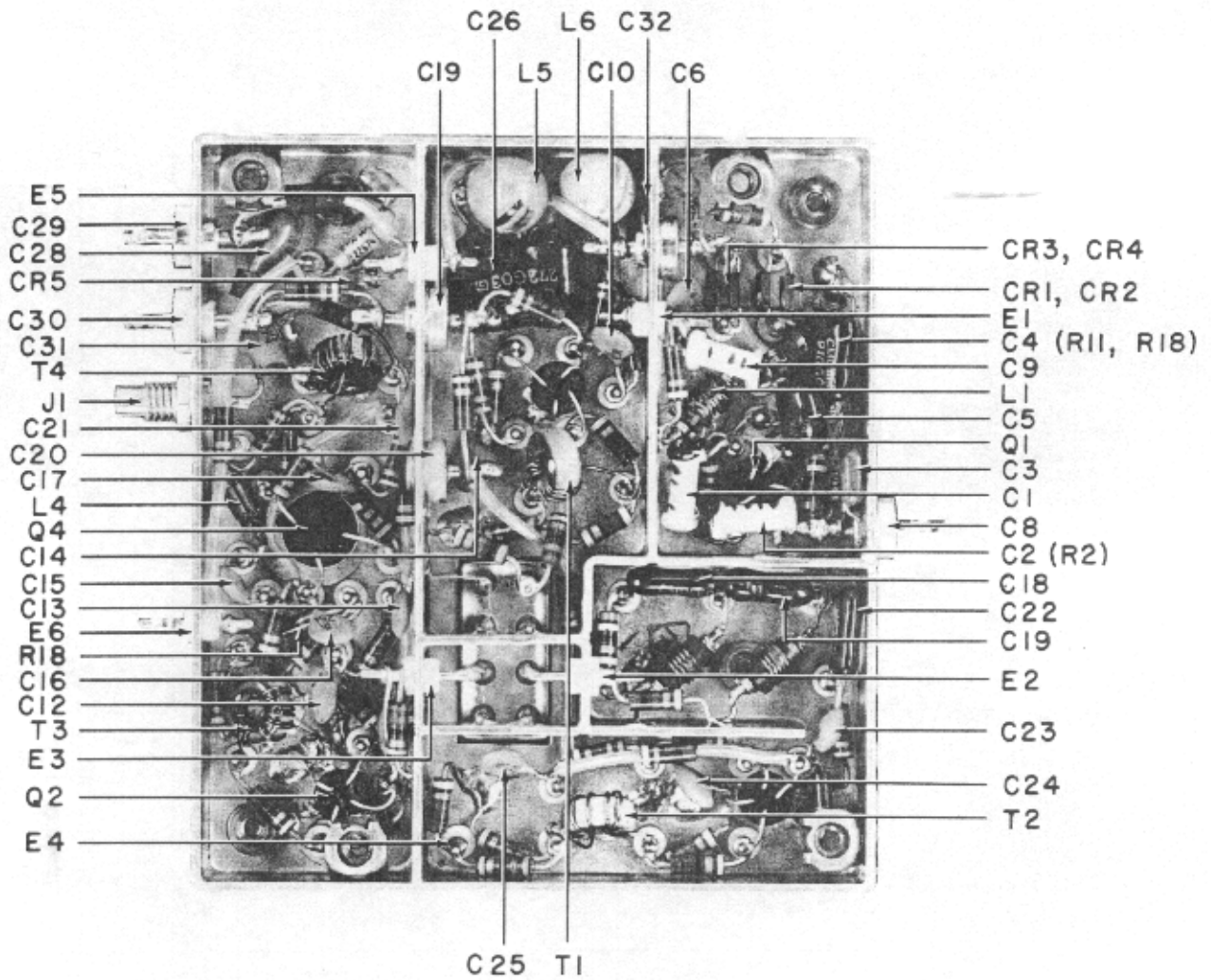


Figure 6-26b. Part 17414 VCO Assembly (A15A1), Location of Components

## REPLACEMENT PARTS LIST

WJ-8888

G.4.15 TYPE 791200 SYNCHRONOUS I/O

REF DESIG PREFIX A16

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 200 V	3	8131A200Z5U103M	72982	
C2	Same as C1				
C3	Same as C1				
C4	CAPACITOR, ELECTROLYTIC, TANTALUM: 47 $\mu$ F, 20%, 35 V	1	196D476X0035TE4	56289	
C5	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	5	8131M100-651-104M	72982	
C6 Thru C9	Same as C5				
C10	CAPACITOR, ELECTROLYTIC, TANTALUM: 4.7 $\mu$ F, 20%, 35 V	1	196D475X0035JE3	56289	
R1	RESISTOR, FIXED, COMPOSITION: 5.1 k $\Omega$ , 5%, 1/4W	3	RCR07G512JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 51 k $\Omega$ , 5%, 1/4W	1	RCR07G513JS	81349	01121
R3	Same as R1				
R4	Same as R1				
R5	RESISTOR, FIXED, COMPOSITION: 180 $\Omega$ , 5%, 1/4W	6	RCR07G181JS	81349	01121
R6 Thru R10	Same as R5				
U1	INTEGRATED CIRCUIT	2	DM8820AN	27014	
U2	Same as U1				
U3	INTEGRATED CIRCUIT	1	CD4050AE	02735	
U4	INTEGRATED CIRCUIT	1	CD4013AE	02735	
U5	INTEGRATED CIRCUIT	1	CD4001AE	02735	
U6	INTEGRATED CIRCUIT	1	CD4012AE	02735	
U7	INTEGRATED CIRCUIT	1	CD4049AE	02735	
U8	INTEGRATED CIRCUIT	2	CD4049AE	02735	
U9	Same as U8				



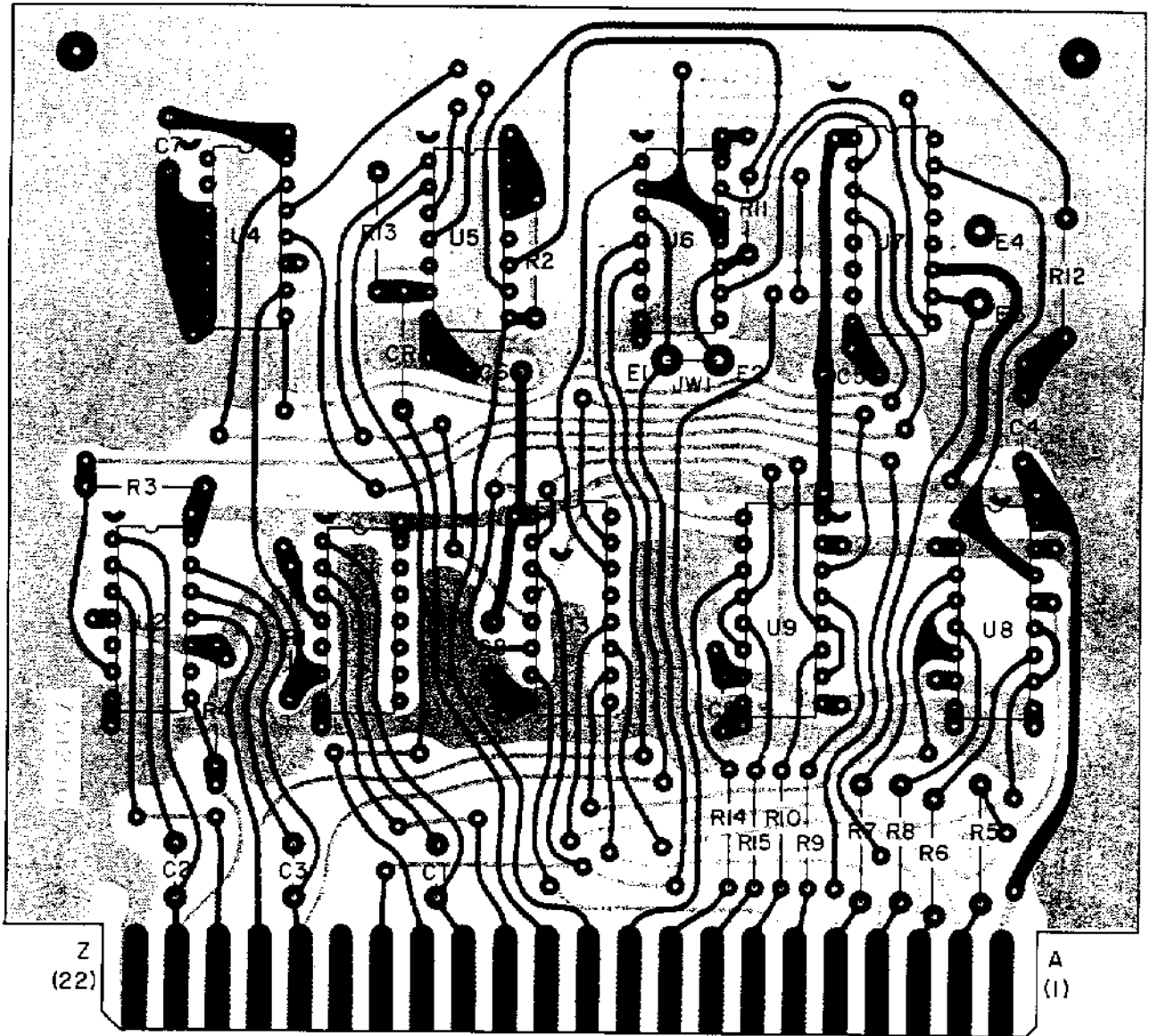


Figure 6-27. Type 791200 Synchronous I/O (A16), Location of Components

## REPLACEMENT PARTS LIST

WJ-8868

## 6.4.16 TYPE 791140 RECEIVER REGISTER

REF DESIG PREFIX A17

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	9	1N4446	80131	93332
CR2 Thru CR9	Same as CR1				
C1	CAPACITOR, MICA, DIPPED: 1000 pF, 5%, 100 V	3	DM15-102J	72136	
C2	Same as C1				
C3	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	12	8131M100-651-104M	72982	
C4	Same as C3				
C5	CAPACITOR, ELECTROLYTIC, TANTALUM: 47 $\mu$ F, 20%, 20 V	3	196D476X0020PE4	56289	
C6	Same as C5				
C7 Thru C15	Same as C3				
C16	Same as C1				
C17	Same as C3				
C18	Same as C5				
Q1	TRANSISTOR	2	U1899E	15818	
Q2	Same as Q1				
Q3	TRANSISTOR	2	2N3906	80131	04713
Q4	Same as Q3				
R1	RESISTOR, FIXED, COMPOSITION: 5.1 k $\Omega$ , 5%, 1/4W	4	RCR07G512JS	81349	01121
R2	Same as R1				
R3	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	3	RCR07G103JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	1	RCR07G102JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 51 $\Omega$ , 5%, 1/4W	2	RCR07G510JS	81349	01121
R6	Same as R5				
R7	Same as R3				
R8	RESISTOR, FIXED, FILM: 4.02 k $\Omega$ , 1%, 1/4W	1	RN60D4021F	81349	75042
R9	RESISTOR, FIXED, COMPOSITION: 2.2 k $\Omega$ , 5%, 1/4W	1	RCR07G222JS	81349	01121
R10	RESISTOR, FIXED, FILM: 2.00 k $\Omega$ , 1%, 1/4W	1	RN60D2001F	81349	75042
R11	RESISTOR, FIXED, FILM: 10.0 k $\Omega$ , 1%, 1/4W	2	RN60D1002F	81349	75042
R12	Same as R3				
R13	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	1	RCR07G472JS	81349	01121
R14	RESISTOR, VARIABLE, FILM: 1 k $\Omega$ , 10%, 1/2W	1	62PAR1K	73138	
R15	Same as R1				
R16	Same as R1				
R17	RESISTOR, FIXED, COMPOSITION: 1.0 M $\Omega$ , 5%, 1/4W	2	RCR07G105JS	81349	01121

REF DESIG PREFIX A17

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R18	Same as R11				
R19	RESISTOR, FIXED, FILM: 9.09 k $\Omega$ , 1%, 1/4W	1	RN60D9091F	81349	75042
R20	Same as R17				
R21	RESISTOR, FIXED, COMPOSITION: 6.8 k $\Omega$ , 5%, 1/4W	2	RCR07G682JS	81349	01121
R22	RESISTOR, FIXED, COMPOSITION: 20 k $\Omega$ , 5%, 1/4W	2	RCR07G203JS	81349	01121
R23	Same as R22				
R24	Same as R21				
R25	RESISTOR, FIXED, COMPOSITION: 5.1 $\Omega$ , 5%, 1/4W	1	RCR07G5R1JS	81349	01121
U1	INTEGRATED CIRCUIT	1	CD4034AD	02735	
U2	INTEGRATED CIRCUIT	6	CD4015AE	02735	
U3 Thru U7	Same as U2				
U8	INTEGRATED CIRCUIT	3	SN74L98N	01295	
U9	Same as U8				
U10	Same as U8				
U11	INTEGRATED CIRCUIT	2	CD4042AE	02735	
U12	Same as U11				
U13	INTEGRATED CIRCUIT	7	SN74L95N	01295	
U14 Thru U19	Same as U13				
U20	INTEGRATED CIRCUIT	4	868293	14632	
U21	Same as U20				
U22	INTEGRATED CIRCUIT	1	CD4025AE	02735	
U23	INTEGRATED CIRCUIT	1	CD4011AE	02735	
U24	INTEGRATED CIRCUIT	2	CD4049AE	02735	
U25	INTEGRATED CIRCUIT	2	CD4050AE	02735	
U26	Same as U25				
U27	INTEGRATED CIRCUIT	2	DAC9-8B1	50721	
U28	INTEGRATED CIRCUIT	1	86936	14632	
U29	INTEGRATED CIRCUIT	2	MC1458V	18324	
U30	Same as U29				
U31	Same as U27				
U32	INTEGRATED CIRCUIT	1	CD4014AE	02735	
U33	Same as U20				
U34	Same as U20				

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A17

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
U35	INTEGRATED CIRCUIT	2	CD4028AE	02735	
U36	Same as U35				
U37	INTEGRATED CIRCUIT	3	CD4001AE	02735	
U38	INTEGRATED CIRCUIT	1	CD4016AE	02735	
U39	INTEGRATED CIRCUIT	2	734DC	07263	
U40	Same as U37				
U41	INTEGRATED CIRCUIT	2	8693L24	14632	
U42	Same as U41				
U43	INTEGRATED CIRCUIT	1	17896	14632	
U44	INTEGRATED CIRCUIT	1	SN74193J	01295	
U45	Same as U24				
U46	Same as U39				
U47	Same as U37				

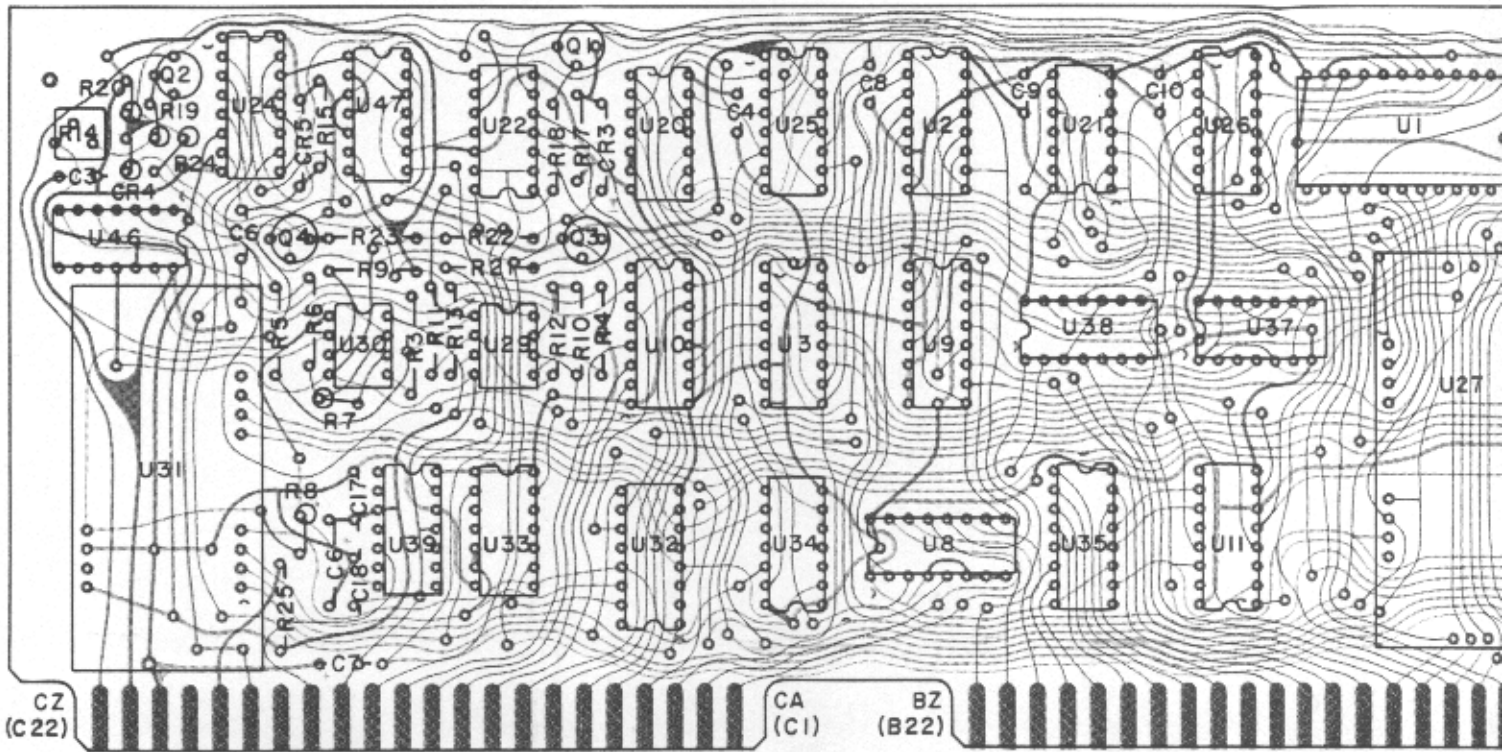


Figure 6-28. Type 791140 Receiver Register (A17), Location

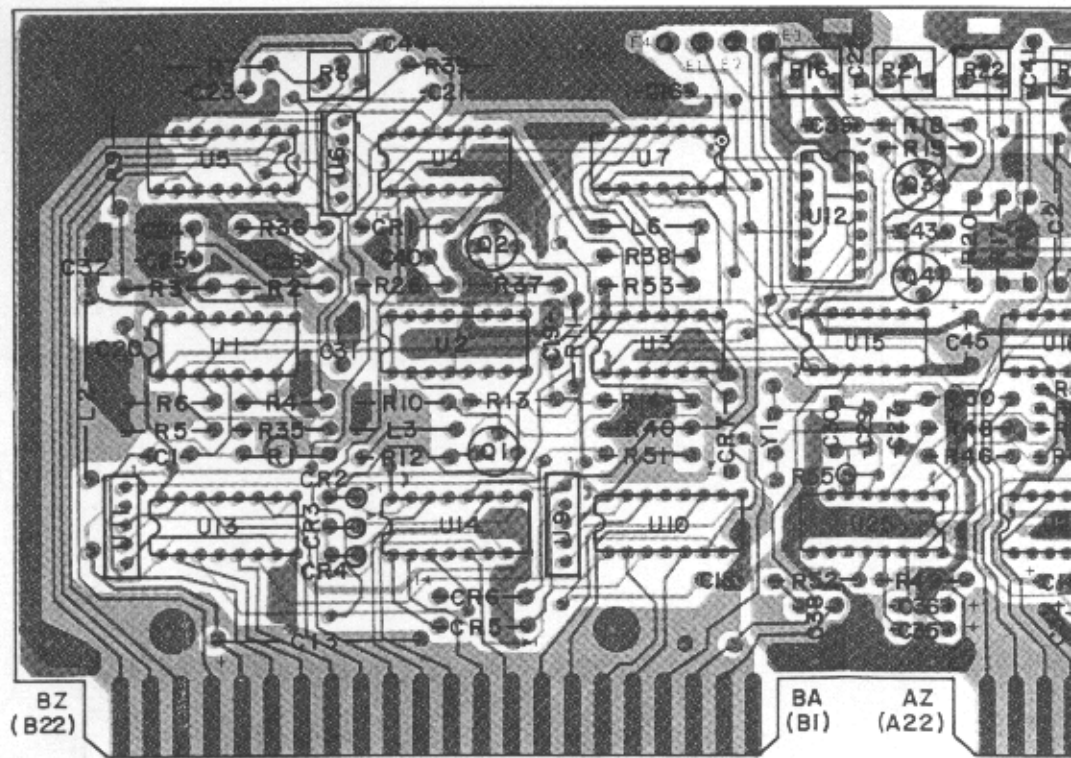
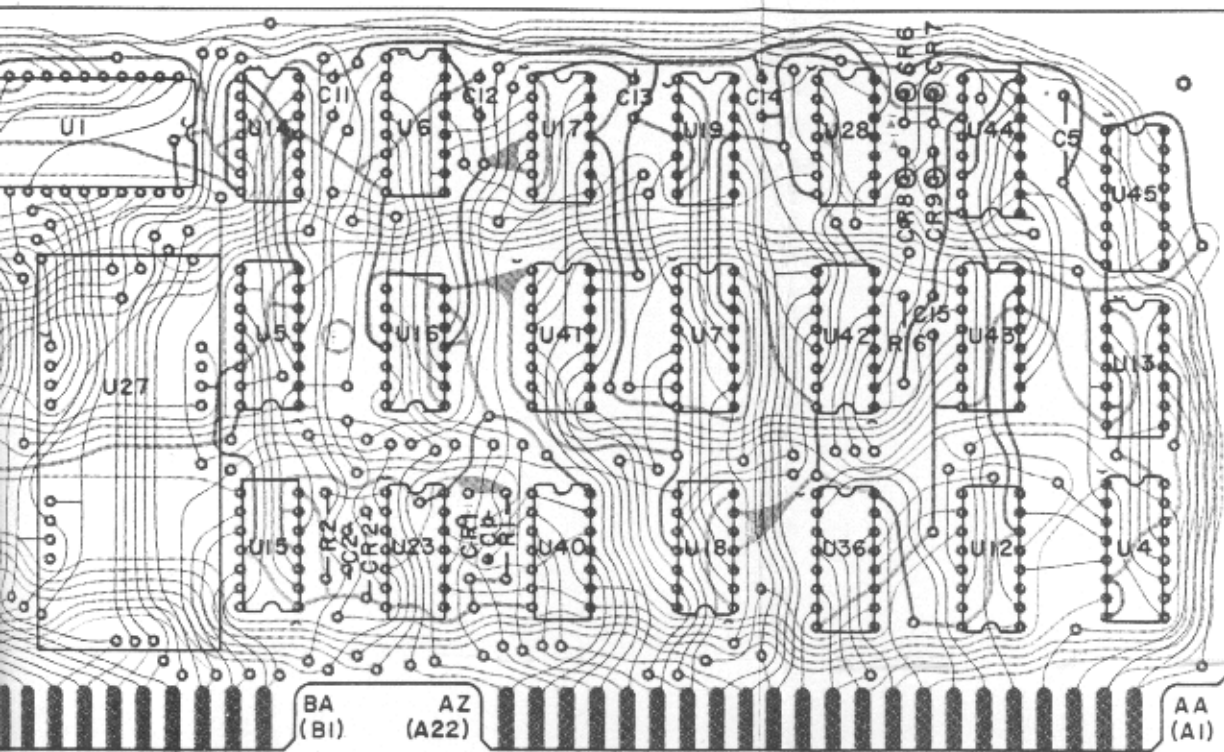
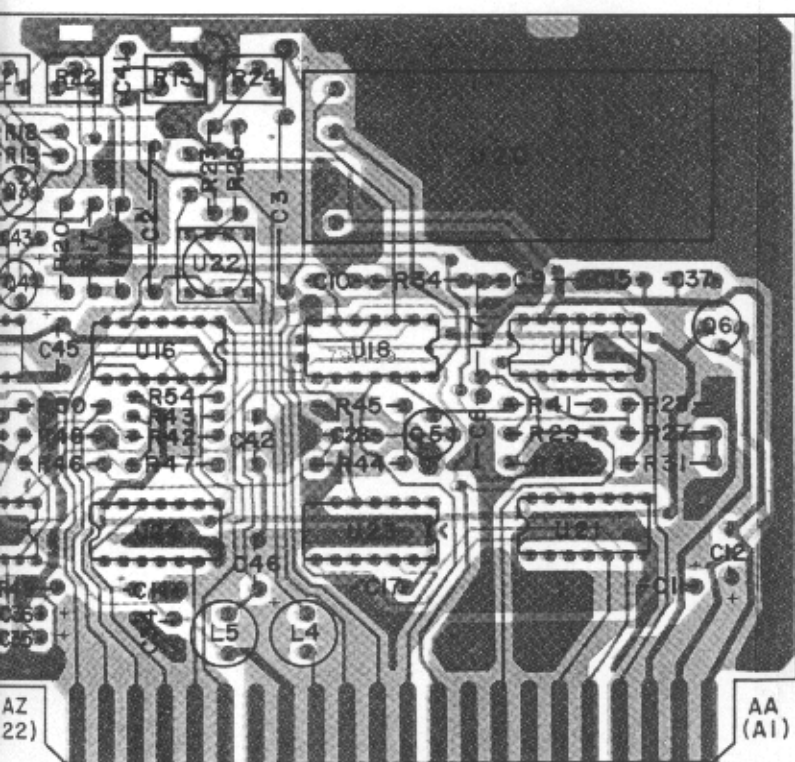


Figure 6-29. Type 791109 First LO, Third LO, and Time Base (A1)



ter (A17), Location of Components



Time Base (A18), Location of Components

## 6. 4. 17 TYPE 791109 FIRST LO, THIRD LO, AND TIME BASE

REF DESIG PREFIX A18

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	6	1N995	80131	04713
CR2 Thru CR6	Same as CR1				
CR7	DIODE	1	1N4446	80131	93332
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 200 V	5	8131A200Z5U103M	72982	
C2	CAPACITOR, PLASTIC, TUBULAR: 6800 pF, 10%, 100 V	1	61F10AA682	06001	
C3	CAPACITOR, PLASTIC, TUBULAR: 0.022 $\mu$ F, 5%, 100 V	1	663UW223-5-1W	84411	
C4 Thru C7	NOT USED				
C8	CAPACITOR, CERAMIC, DISC: 2200 pF, 20%, 1000 V	2	JF(2200pF, M)	91418	
C9	Same as C8				
C10	Same as C1				
C11	CAPACITOR, ELECTROLYTIC, TANTALUM: 150 $\mu$ F, 20%, 6 V	5	196D157X0006PE4	56289	
C12	Same as C11				
C13	CAPACITOR, ELECTROLYTIC, TANTALUM: 150 $\mu$ F,	1	CS13BD157K	81349	56289
C14	Same as C11				
C15	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	9	8131M100-651-104M	72982	
C16	Same as C15				
C17	Same as C1				
C18 Thru C21	Same as C15				
C22	Same as C11				
C23	Same as C15				
C24	CAPACITOR, CERAMIC, DISC: 470 pF, 20%, 1000 V	4	B(470pF, M)	91418	
C25	CAPACITOR, CERAMIC, DISC: 1000 pF, GMV, 500 V	2	SM(1000pF, P)	91418	
C26	Same as C24				
C27	Same as C1				
C28	Same as C25				
C29	CAPACITOR, VARIABLE, CERAMIC: 2-5 pF, 100 V	1	518-000A2-5	72982	
C30*	CAPACITOR, CERAMIC, TUBULAR: 10 pF, $\pm$ 0.5 pF, 500 V	2	301-000C0H0-100D	72982	
C31	Same as C24				
C32	Same as C15				

\* Nominal value; final value factory selected.

REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A18

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C33	NOT USED				
C34	Same as C15				
C35	CAPACITOR, ELECTROLYTIC, TANTALUM: 2.2 $\mu$ F, 20%, 35 V	1	196D225X0035JE3	56289	
C36	CAPACITOR, ELECTROLYTIC, TANTALUM: 100 $\mu$ F, 20%, 20 V	4	196D107X0020TE4	56289	
C37	CAPACITOR, CERAMIC, DISC: 0.47 $\mu$ F, 20%, 100 V	1	8131M100-651-474M	72982	
C38	Same as C1				
C39	Same as C30				
C40	CAPACITOR, MICA, DIPPED: 270 pF, 2%, 500 V	1	CM05FD271G03	81349	72136
C41	CAPACITOR, CERAMIC, TUBULAR: 1.0 pF, $\pm$ 0.1 pF, 500 V	1	301-000C0K0-109B	72982	
C42	Same as C36				
C43	Same as C36				
C44	Same as C24				
C45	Same as C11				
C46	Same as C36				
L1	NOT USED				
L2	COIL, FIXED	1	21210-112	14632	
L3	COIL, FIXED	2	16209-3	14632	
L4	COIL, FIXED: 100 mH	2	553-3635-61	71279	
L5	Same as L4				
L6	Same as L3				
L7	COIL, FIXED: 27 $\mu$ H	1	1537-48	99800	
Q1	TRANSISTOR	2	2N3639	80131	04713
Q2	Same as Q1				
Q3	TRANSISTOR	1	2N3251	80131	04713
Q4	TRANSISTOR	1	2N929	80131	04713
Q5	TRANSISTOR	1	2N709A	80131	02735
Q6	TRANSISTOR	1	2N2222A	80131	04713
RA1	HEATSINK	1	6012B	13103	
R1	RESISTOR, FIXED, COMPOSITION: 91 $\Omega$ , 5%, 1/4W	1	RCR07G910JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	2	RCR07G331JS	81349	01121
R3	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	4	RCR07G221JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 75 $\Omega$ , 5%, 1/4W	2	RCR07G750JS	81349	01121
R5	Same as R3				
R6	Same as R3				



REF DESIG PREFIX A18

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R7	RESISTOR, FIXED, COMPOSITION: 240 $\Omega$ , 5%, 1/4W	2	RCR07G241JS	81349	01121
R8	RESISTOR, VARIABLE, FILM: 500 $\Omega$ , 10%, 1/2W	1	62PAR500	73138	
R9	RESISTOR, FIXED, COMPOSITION: 470 $\Omega$ , 5%, 1/4W	4	RCR07G471JS	81349	01121
R10	Same as R9				
R11	RESISTOR, FIXED, COMPOSITION: 82 $\Omega$ , 5%, 1/4W	1	RCR07G820JS	81349	01121
R12	RESISTOR, FIXED, COMPOSITION: 200 $\Omega$ , 5%, 1/4W	4	RCR07G201JS	81349	01121
R13	Same as R7				
R14	RESISTOR, FIXED, COMPOSITION: 270 $\Omega$ , 5%, 1/4W	3	RCR07G271JS	81349	01121
R15	RESISTOR, VARIABLE, FILM: 10 k $\Omega$ , 10%, 1/2W	2	62PAR10K	73138	
R16	Same as R15				
R17	THERMISTOR: 3.9 k $\Omega$ , 5%, 1/8W	2	DG125-392J	15454	
R18	Same as R17				
R19	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	5	RCR07G102JS	81349	01121
R20	RESISTOR, FIXED, COMPOSITION: 3.6 k $\Omega$ , 5%, 1/4W	4	RCR07G362JS	81349	01121
R21	RESISTOR, VARIABLE, FILM: 20 k $\Omega$ , 10%, 1/2W	3	62PAR20K	73138	
R22	Same as R21				
R23	RESISTOR, FIXED, COMPOSITION: 15 k $\Omega$ , 5%, 1/4W	1	RCR07G153JS	81349	01121
R24	Same as R21				
R25	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	3	RCR07G103JS	81349	01121
R26	Same as R14				
R27	Same as R19				
R28	Same as R19				
R29	RESISTOR, FIXED, COMPOSITION: 51 $\Omega$ , 5%, 1/4W	2	RCR07G510JS	81349	01121
R30	Same as R29				
R31	Same as R20				
R32	NOT USED				
R33	NOT USED				
R34	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	1	RCR07G101JS	81349	01121
R35	Same as R4				
R36	Same as R19				
R37	Same as R9				
R38					
Thru R40	Same as R12				
R41	Same as R3				
R42	RESISTOR, FIXED, COMPOSITION: 51 k $\Omega$ , 5%, 1/4W	2	RCR07G513JS	81349	01121
R43	Same as R42				

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A15

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R44	RESISTOR, FIXED, COMPOSITION: 3.9 k $\Omega$ , 5%, 1/4W	1	RCR07G392JS	81349	01121
R45	RESISTOR, FIXED, COMPOSITION: 510 $\Omega$ , 5%, 1/4W	2	RCR07G511JS	81349	01121
R46	Same as R25				
R47	Same as R25				
R48	Same as R20				
R49	Same as R14				
R50	Same as R9				
R51	Same as R2				
R52	RESISTOR, FIXED, COMPOSITION: 5.1 k $\Omega$ , 5%, 1/4W	1	RCR07G512JS	81349	01121
R53	Same as R19				
R54	Same as R45				
R55	RESISTOR, FIXED, COMPOSITION: 2.7 k $\Omega$ , 5%, 1/8W	1	RCR05G272JS	81349	01121
U1	INTEGRATED CIRCUIT	1	MC1692L	04713	
U2	INTEGRATED CIRCUIT	1	95H90DC	07263	
U3	INTEGRATED CIRCUIT	1	SN74S00N	01295	
U4	INTEGRATED CIRCUIT	2	SN74S74N	01295	
U5	INTEGRATED CIRCUIT	3	MC4016P	04713	
U6	PRESET MODULE	1	31689-10	14632	
U7	INTEGRATED CIRCUIT	1	SN74S10N	01295	
U8	NOT USED				
U9	PRESET MODULE	1	31689-15	14632	
U10	Same as U5				
U11	PRESET MODULE	1	31689-17	14632	
U12	INTEGRATED CIRCUIT	1	8674H00	14632	
U13	Same as U5				
U14	INTEGRATED CIRCUIT	1	MC4018P	04713	
U15	INTEGRATED CIRCUIT	1	MC4044P	04713	
U16	INTEGRATED CIRCUIT	1	867404	14632	
U17	INTEGRATED CIRCUIT	1	SN75107AN	01295	
U18	Same as U4				
U19	NOT USED				
U20	TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR	1	92063-1	14632	
U21	INTEGRATED CIRCUIT	4	868280	14632	
U22 Thru U24	Same as U21				

WJ-8888

REPLACEMENT PARTS LIST

REF DESIG PREFIX A18

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
U25	INTEGRATED CIRCUIT	1	NE562B	18324	
VR1	DIODE, ZENER: 5.6 V	1	LVA56A	01281	
Y1	CRYSTAL, QUARTZ	1	CR64/U(11.155MHz)	81349	74306

## REPLACEMENT PARTS LIST

WJ-8888

6.4.18 TYPE 791117 2nd LO AND BFO

REF DESIG PREFIX A19

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	6	1N4446	80131	
CR2	Same as CR1				
CR3	Same as CR1				
CR4	NOT USED				
CR5	Same as CR1				
CR6	NOT USED				
CR7	DIODE, VARICAP	2	BB109	26088	
CR8	DIODE	1	5082-2900	28480	
CR9	DIODE, VARICAP	1	BB105B	25088	
CR10	Same as CR1				
CR11	Same as CR1				
CR12	Same as CR7				
CR13	DIODE	1	1N995	80131	04713
C1	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 20%, 200 V	15	8131A200Z5U103M	72982	
C2	CAPACITOR, CERAMIC, DISC: 0.47 $\mu$ F, 20%, 100 V	3	8131M100-651-474M	72982	
C3	CAPACITOR, ELECTROLYTIC, TANTALUM: 150 $\mu$ F, 20%, 6 V	12	196D157X0006PE4	56289	
C4	CAPACITOR, CERAMIC, DISC: 2200 pF, 20%, 1000 V	1	JF(2200pF, M)	91418	
C5	Same as C1				
C6	CAPACITOR, MICA, DIPPED: 1500 pF, 2%, 500 V	1	CM06FD152G03	81349	72136
C7	CAPACITOR, VARIABLE, CERAMIC: 5-25 pF, 100 V N750	1	518-000A5-25	72982	
C8	CAPACITOR, CERAMIC, DISC: 470 pF, 20%, 1000 V	13	B(470pF, M)	91418	
C9	Same as C1				
C10	CAPACITOR, MICA, DIPPED: 27 pF, 2%, 500 V	1	CM04ED270G03	81349	72136
C11	CAPACITOR, MICA, DIPPED: 300 pF, 2%, 500 V	1	CM05FD301G03	81349	72136
C12	CAPACITOR, CERAMIC, DISC: 1000 pF, GMV, 500 V	3	SM(1000pF, P)	91418	
C13	Same as C8				
C14 Thru C17	Same as C1				
C18	CAPACITOR, CERAMIC, TUBULAR: 4.7 pF $\pm$ 0.25 pF, 500 V	1	301-000C0H0-479C	72982	
C19	CAPACITOR, CERAMIC, TUBULAR: 3.9 pF $\pm$ 0.25 pF, 500 V	2	301-000C0J0-399C	72982	
C20	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	11	8131M100-651-104M	72982	
C21	CAPACITOR, MICA, DIPPED: 250 pF, 5%, 500 V	1	DM15-251J	72136	
C22	CAPACITOR, MICA, DIPPED: 91 pF, 2%, 500 V	1	CM04FD910G03	81349	72136

## REF DESIG PREFIX A19

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C23	CAPACITOR, MICA, DIPPED: 75 pF, 2%, 500 V	1	CM04ED750G03	81349	72136
C24	Same as C19				
C25	Same as C1				
C26	Same as C8				
C27	Same as C20				
C28	Same as C8				
C29	CAPACITOR, VARIABLE, CERAMIC: 2.5-9 pF, 25 V	2	518-000A2.5-9	72982	
C30	Same as C8				
C31	Same as C20				
C32	Same as C8				
C33	Same as C3				
C34	CAPACITOR, PLASTIC, TUBULAR: 0.033 $\mu$ F, 10%, 100 V	1	663UW333-9-1W	84411	
C35	CAPACITOR, PLASTIC, TUBULAR: 6800 pF, 10%, 100 V	1	61F10AA682	06001	
C36	Same as C3				
C37	Same as C1				
C38	CAPACITOR, FIXED, PLASTIC: 0.1 $\mu$ F, 10%, 100 V	1	WMF1P1	14655	
C39	CAPACITOR, ELECTROLYTIC, TANTALUM: 1.0 $\mu$ F, 10%, 35 V	1	CS13BF105K	81349	56289
C40	Same as C2				
C41	Same as C20				
C42	Same as C29				
C43	NOT USED				
C44	Same as C20				
C45	Same as C8				
C46	Same as C3				
C47	Same as C20				
C48					
Thru C55	Same as C3				
C56	Same as C1				
C57	Same as C8				
C58	Same as C20				
C59	Same as C1				
C60	Same as C8				
C61	Same as C8				
C62	Same as C20				

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A19

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C63	Same as C1				
C64	Same as C12				
C65	Same as C8				
C66	Same as C20				
C67	Same as C1				
C68	Same as C1				
C69	Same as C20				
C70	Same as C8				
C71	Same as C8				
C72	Same as C1				
C73	Same as C2				
C74	Same as C12				
C75	CAPACITOR, MICA, DIPPED: 360 pF, 2%, 100 V	1	CM04FA361G03	81349	72136
FB1	FERRITE BEAD	3	56-590-65-4A	02114	
FB2	Same as FB1				
FB3	Same as FB1				
FL1	FILTER	1	92067	14632	
L1	COIL, FIXED: 0.56 $\mu$ H	2	202-11	99848	
L2	COIL, FIXED: 0.47 $\mu$ F	2	201-11	99848	
L3	INDUCTOR	1	21210-37	14632	
L4	COIL, FIXED	5	16209-3	14632	
L5	Same as L4				
L6	NOT USED				
L7	Same as L1				
L8	Same as L4				
L9	COIL, VARIABLE: 0.504-0.616 $\mu$ H	2	558-7107-10	71279	
L10	Same as L9				
L11	COIL, FIXED: 15 $\mu$ H	1	1537-40	99800	
L12	NOT USED				
L13	COIL, VARIABLE: 0.135-0.165 $\mu$ H	2	558-7107-03	71279	
L14	Same as L13				
L15	Same as L2				
L16	COIL, FIXED	1	20681-139	14632	
L17	Same as L4				
L18	COIL, FIXED: 0.82 $\mu$ H	1	204-11	99848	
L19	INDUCTOR	1	21210-62	14632	

REF DESIG PREFIX A19

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
L20	COIL, FIXED: 1.2 mH	1	553-3635-38	71279	
L21	INDUCTOR	4	21210-164	14632	
L22 Thru L24	Same as L21				
L25	Same as L4				
Q1	TRANSISTOR	1	2N929	80131	04713
Q2	TRANSISTOR	1	2N2270	80131	02735
Q3	TRANSISTOR	1	2N3906	80131	04713
Q4	TRANSISTOR	5	2N3639	80131	04713
Q5	Same as Q4				
Q6	TRANSISTOR	1	2N5109	80131	02735
Q7	Same as Q4				
Q8	TRANSISTOR	2	3N128	80131	02735
Q9	TRANSISTOR	1	2N709	80131	02735
Q10	Same as Q8				
Q11	Same as Q4				
Q12	Same as Q4				
RA1	HEATSINK	1	2225B	13103	
RA2	HEATSINK	1	6012B	13103	
R1	RESISTOR, FIXED, COMPOSITION: 5.1 k $\Omega$ , 5%, 1/4W	2	RCR07G512JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 200 k $\Omega$ , 5%, 1/4W	1	RCR07G204JS	81349	01121
R3	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	4	RCR07G103JS	81349	01121
R4	RESISTOR, VARIABLE, FILM: 500 $\Omega$ , 10%, 1/2W	4	62PR500	73138	
R5	RESISTOR, FIXED, COMPOSITION: 2.2 k $\Omega$ , 5%, 1/4W	1	RCR07G222JS	81349	01121
R6	RESISTOR, VARIABLE, FILM: 5 k $\Omega$ , 10%, 1/2W	4	62PR5K	73138	
R7	RESISTOR, FIXED, COMPOSITION: 240 $\Omega$ , 5%, 1/4W	2	RCR07G241JS	81349	01121
R8	RESISTOR, FIXED, COMPOSITION: 270 $\Omega$ , 5%, 1/4W	2	RCR07G271JS	81349	01121
R9	RESISTOR, FIXED, COMPOSITION: 2.0 k $\Omega$ , 5%, 1/4W	1	RCR07G202JS	81349	01121
R10	RESISTOR, FIXED, COMPOSITION: 470 $\Omega$ , 5%, 1/4W	14	RCR07G471JS	81349	01121
R11	Same as R1				
R12	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	7	RCR07G102JS	81349	01121
R13	Same as R10				
R14	NOT USED				
R15	Same as R10				
R16	RESISTOR, FIXED, COMPOSITION: 51 $\Omega$ , 5%, 1/4W	2	RCR07G510JS	81349	01121

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A19

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R17	Same as R16				
R18	RESISTOR, FIXED, COMPOSITION: 200 $\Omega$ , 5%, 1/4W	1	RCR07G201JS	81349	01121
R19	Same as R3				
R20	Same as R10				
R21	Same as R10				
R22	RESISTOR, FIXED, COMPOSITION: 10 $\Omega$ , 5%, 1/4W	1	RCR07G100JS	81349	01121
R23	Same as R10				
R24	RESISTOR, FIXED, COMPOSITION: 220 $\Omega$ , 5%, 1/4W	4	RCR07G221JS	81349	01121
R25	RESISTOR, FIXED, COMPOSITION: 91 $\Omega$ , 5%, 1/4W	1	RCR07G910JS	81349	01121
R26	Same as R12				
R27	Same as R10				
R28	NOT USED				
R29	Same as R10				
R30	RESISTOR, FIXED, COMPOSITION: 47 $\Omega$ , 5%, 1/4W	2	RCR07G470JS	81349	01121
R31	Same as R30				
R32	Same as R10				
R33	NOT USED				
R34	RESISTOR, FIXED, COMPOSITION: 750 $\Omega$ , 5%, 1/4W	1	RCR07G751JS	81349	01121
R35	Same as R10				
R36	Same as R10				
R37	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	3	RCR07G331JS	81349	01121
R38	RESISTOR, FIXED, COMPOSITION: 27 $\Omega$ , 5%, 1/4W	1	RCR07G270JS	81349	01121
R39	Same as R4				
R40	Same as R37				
R41	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	1	RCR07G101JS	81349	01121
R42	Same as R10				
R43	RESISTOR, FIXED, COMPOSITION: 180 $\Omega$ , 5%, 1/4W	2	RCR07G181JS	81349	01121
R44	Same as R24				
R45	Same as R3				
R46	NOT USED				
R47	Same as R7				
R48	Same as R8				
R49	Same as R43				
R50	Same as R37				
R51	Same as R12				
R52	Same as R6				



REF DESIG PREFIX A19

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
R53	RESISTOR, FIXED, COMPOSITION: 62 $\Omega$ , 5%, 1/4W	4	RCR07G620JS	81349	01121
R54	Same as R6				
R55	Same as R6				
R56	Same as R4				
R57	Same as R24				
R58	Same as R53				
R59	Same as R12				
R60	RESISTOR, FIXED, COMPOSITION: 910 $\Omega$ , 5%, 1/4W	1	RCR07G911JS	81349	01121
R61	Same as R12				
R62	RESISTOR, FIXED, COMPOSITION: 24 k $\Omega$ , 5%, 1/4W	1	RCR07G243JS	81349	01121
R63	RESISTOR, FIXED, COMPOSITION: 3.6 k $\Omega$ , 5%, 1/4W	2	RCR07G362JS	81349	01121
R64	Same as R63				
R65	Same as R53				
R66	Same as R4				
R67	Same as R3				
R68	Same as R12				
R69	Same as R53				
R70	Same as R12				
R71	Same as R24				
R72	Same as R10				
R73	Same as R10				
T1	TRANSFORMER	1	22969-4	14632	
U1	INTEGRATED CIRCUIT	2	MC10131L	04713	
U2	INTEGRATED CIRCUIT	2	MC10116L	04713	
U3	Same as U1				
U4	INTEGRATED CIRCUIT	2	MC1648L	04713	
U5	INTEGRATED CIRCUIT	2	N82S90A	18324	
U6	INTEGRATED CIRCUIT	1	95H90DC	07263	
U7	INTEGRATED CIRCUIT	1	867400	14632	
U8	MIXER, BALANCED	2	M6D	27956	
U9	INTEGRATED CIRCUIT	4	868280	14632	
U10	Same as U9				
U11	Same as U9				
U12	Same as U8				
U13	NOT USED				
U14	INTEGRATED CIRCUIT	1	9020DC	07263	

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A19

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
U15	INTEGRATED CIRCUIT	2	8693L10	14632	
U16	Same as U15				
U17	INTEGRATED CIRCUIT	4	MC4018P	04713	
U18	PRESET MODULE	1	31689-15	14632	
U19	Same as U2				
U20	INTEGRATED CIRCUIT	1	9316DC	07263	
U21	Same as U17				
U22	PRESET MODULE	2	31689-1	14632	
U23	INTEGRATED CIRCUIT	2	MC4044P	04713	
U24	Same as U5				
U25	Same as U17				
U26	Same as U22				
U27	Same as U4				
U28	Same as U9				
U29	Same as U23				
U30	Same as U17				
U31	PRESET MODULE	1	31689-2	14632	
U32	INTEGRATED CIRCUIT	1	SN75154N	01295	
U33	INTEGRATED CIRCUIT	1	SN74S00N	01295	
VR1	DIODE, ZENER: 6.2 V	1	1N753A	80131	04713
VR2	DIODE, ZENER: 3.3 V	1	1N746A	80131	04713
Y1	CRYSTAL, QUARTZ	2	98204-10	14632	
Y2	Same as Y1				

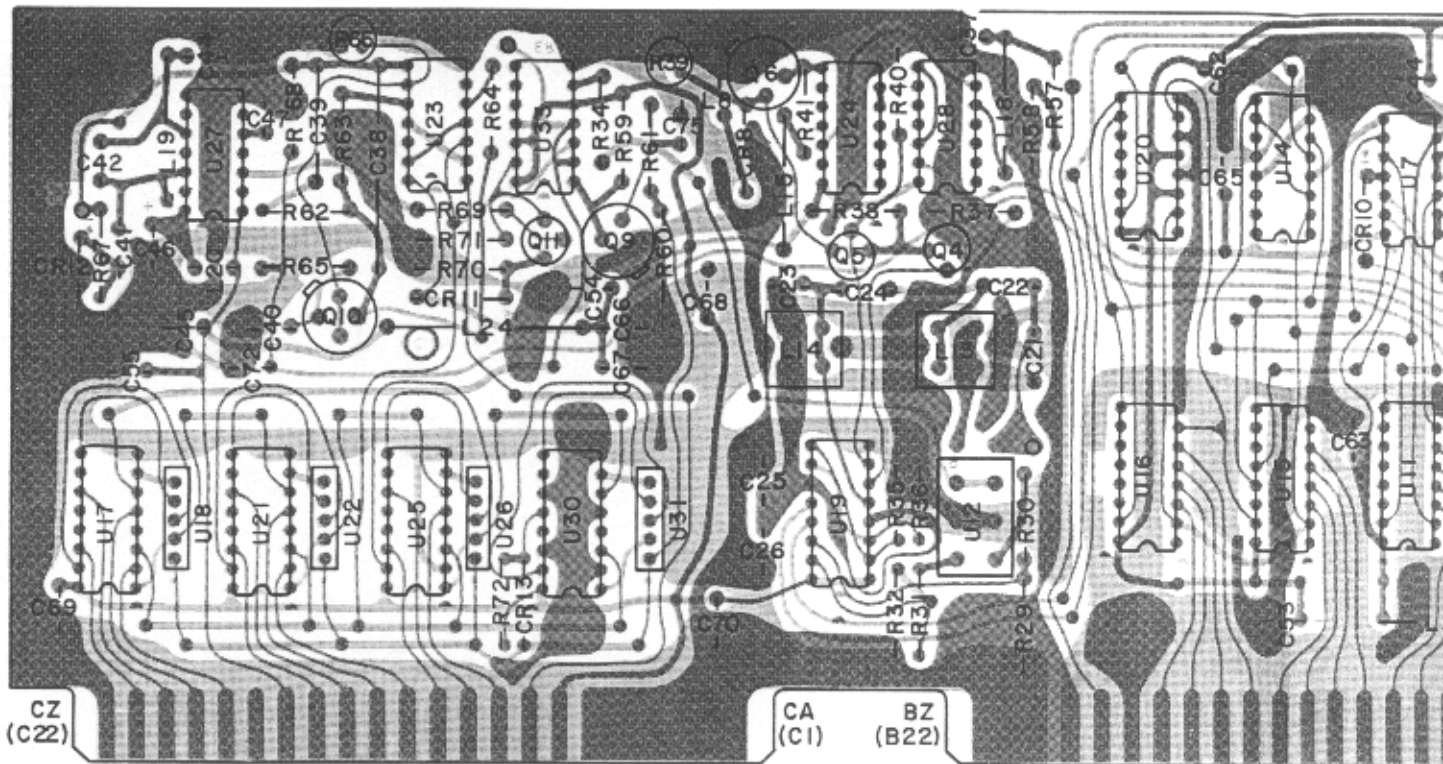


Figure 6-30. Type 791117 2nd IO and BFO (A19), Loc

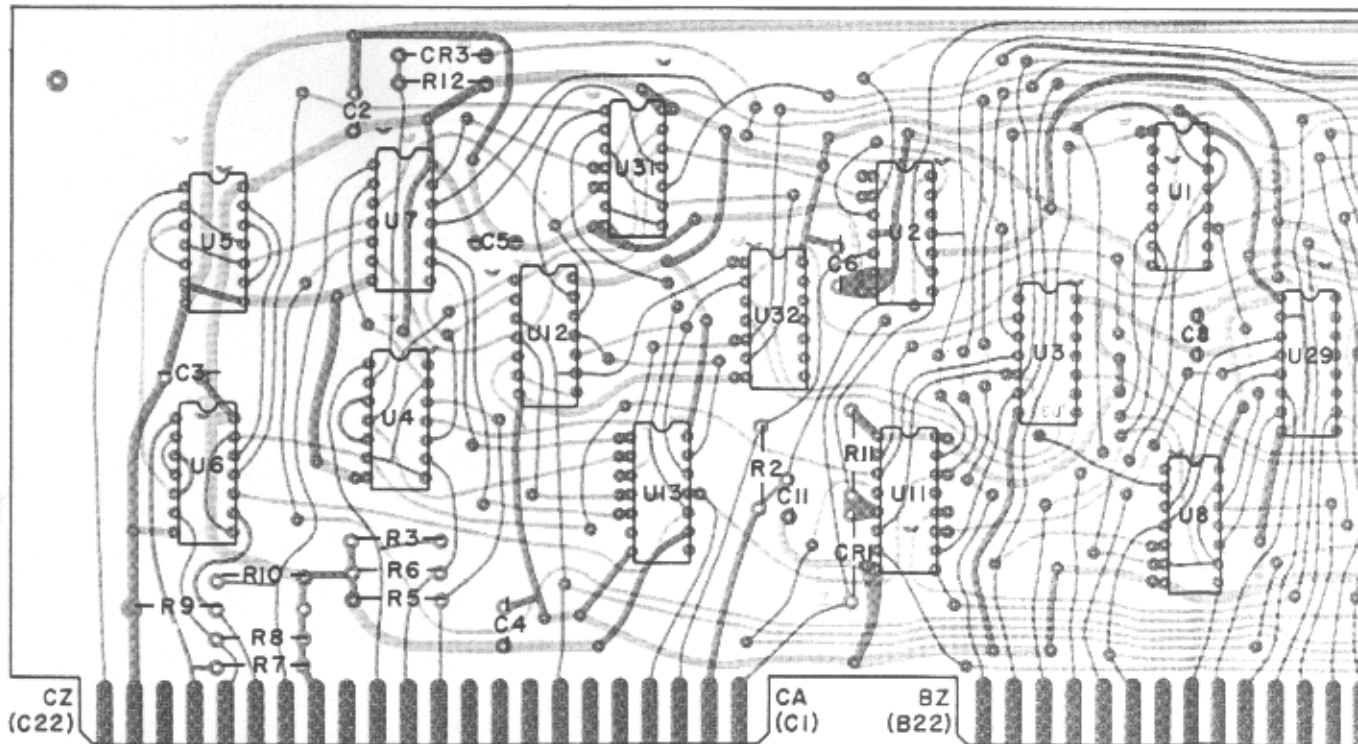
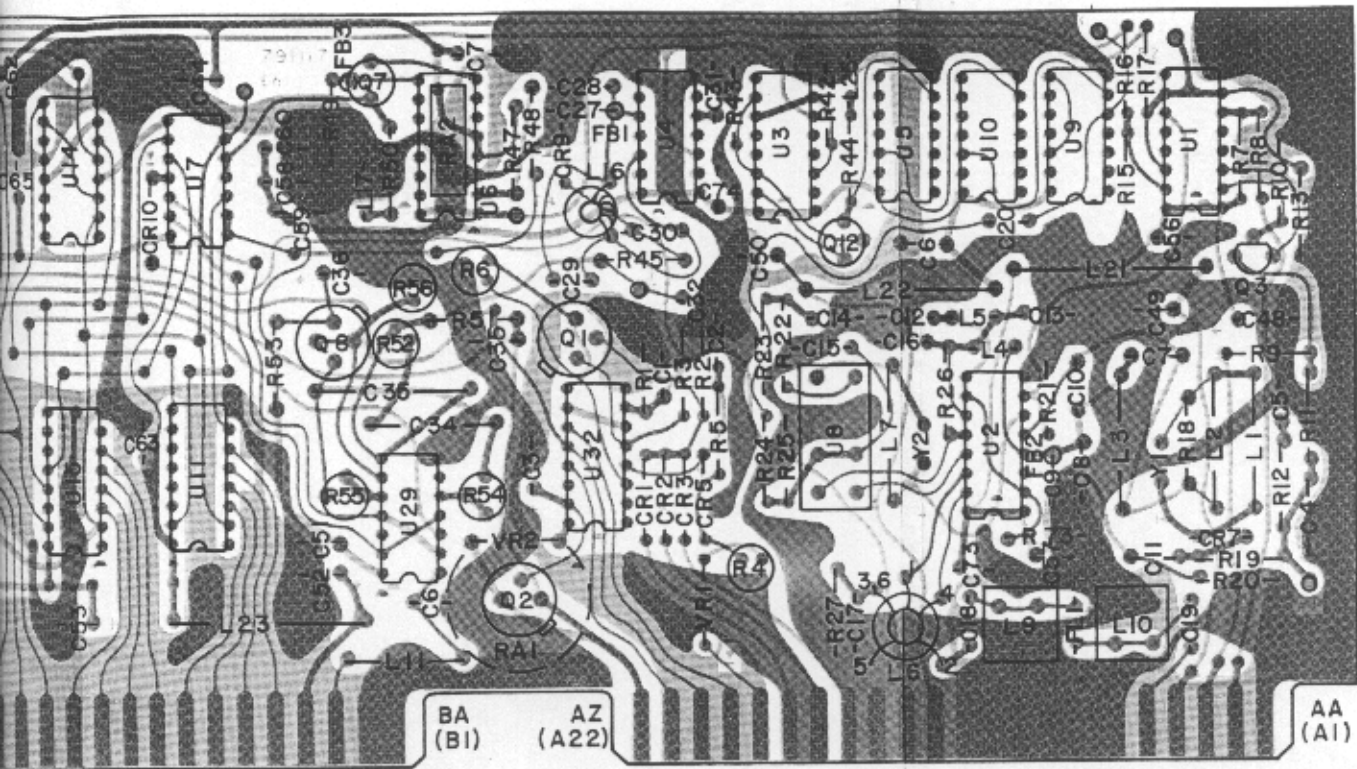
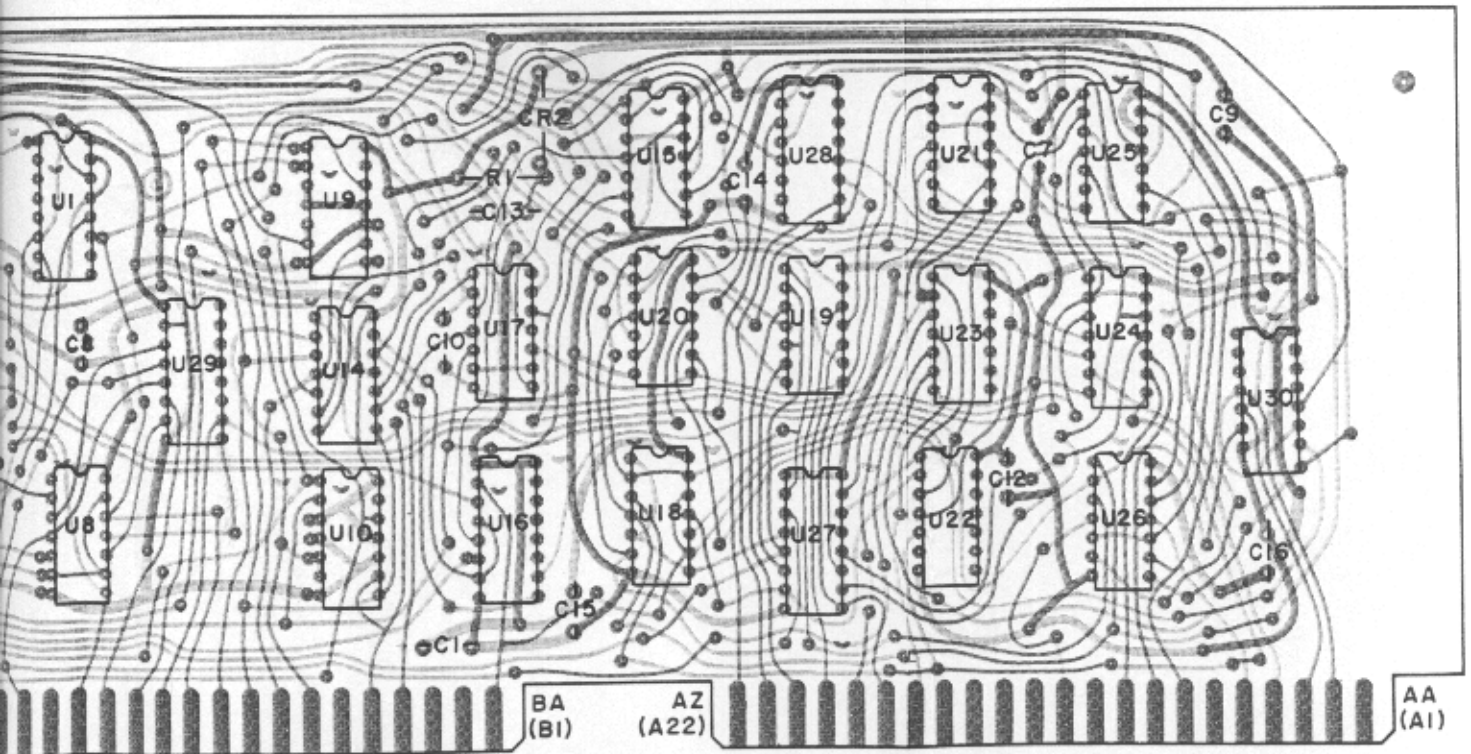


Figure 6-31. Type 791124 Program Sequence



U10 and BFO (A19), Location of Components.



U24 Program Sequencer (A20), Location of Components

## 6.4.19 TYPE 791124 PROGRAM SEQUENCER

REF DESIG PREFIX A20

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	3	1N995	80131	04713
CR2	Same as CR1				
CR3	Same as CR1				
C1	CAPACITOR, ELECTROLYTIC, TANTALUM: 47 $\mu$ F, 20%, 20 V	1	196D476X0020PE4	56289	
C2	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	13	8131M100-651-104M	72982	
C3 Thru C9	Same as C2				
C10	CAPACITOR, MICA, DIPPED: 200 pF, 2%, 500 V	1	CM05FD201G03	81349	72136
C11	Same as C2				
C12	Same as C2				
C13	CAPACITOR, MICA, DIPPED: 100 pF, 2%, 500 V	1	CM05FD101G03	81349	72136
C14 Thru C16	Same as C2				
R1	RESISTOR, FIXED, COMPOSITION: 1.0 M $\Omega$ , 5%, 1/4W	3	RCR07G105JS	81349	01121
R2	RESISTOR, FIXED, COMPOSITION: 5.1 M $\Omega$ , 5%, 1/4W	1	RCR07G515JS	81349	01121
R3	RESISTOR, FIXED, COMPOSITION: 100 k $\Omega$ , 5%, 1/4W	7	RCR07G104JS	81349	01121
R4	NOT USED				
R5 Thru R10	Same as R3				
R11	Same as R1				
R12	Same as R1				
U1	INTEGRATED CIRCUIT	1	CD4017AE	02735	
U2	INTEGRATED CIRCUIT	1	CD4013AD	02735	
U3	INTEGRATED CIRCUIT	6	CD4001AE	02735	
U4	INTEGRATED CIRCUIT	6	CD4011AE	02735	
U5	INTEGRATED CIRCUIT	1	CD4013AE	02735	
U6 Thru U8	Same as U4				
U9	INTEGRATED CIRCUIT	2	868293	14632	
U10	Same as U9				
U11	INTEGRATED CIRCUIT	5	CD4049AE	02735	
U12	INTEGRATED CIRCUIT	3	CD4023AE	02735	
U13	INTEGRATED CIRCUIT	2	CD4012AE	02735	
U14	INTEGRATED CIRCUIT	3	CD4025AE	02735	

REPLACEMENT PARTS LIST

WJ-8868

REF DESIG PREFIX A20

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
U15	Same as U14				
U16	Same as U11				
U17	Same as U4				
U18	Same as U3				
U19	Same as U3				
U20	Same as U14				
U21	Same as U3				
U22	INTEGRATED CIRCUIT	1	CD4002AE	02735	
U23	Same as U3				
U24	Same as U12				
U25	Same as U13				
U26	Same as U4				
U27 Thru U29	Same as U11				
U30	Same as U3				
U31	Same as U12				
U32	INTEGRATED CIRCUIT	1	CD4030AE	02735	

## 6.4.20 TYPE 791137 SWITCH ENCODER

REF DESIG PREFIX A21

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	54	1N995	80131	04713
CR2 Thru CR54	Same as CR1				
C1	CAPACITOR, ELECTROLYTIC, TANTALUM: 47 $\mu$ F, 20%, 25 V	2	196D476X0035TE4	56289	
C2	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	9	6131M100-651-104M	72982	
C3 Thru C9	Same as C2				
C10	NOT USED				
C11	CAPACITOR, ELECTROLYTIC, TANTALUM: 0.47 $\mu$ F, 10%, 35 V	1	CS13BF474K	61349	
C12	Same as C2				
C13	Same as C1				
DS1	LAMP, INCANDESCENT	24	330	08108	71744
DS2 Thru DS24	Same as DS1				
Q1	TRANSISTOR	2	2N2222A	80131	04713
Q2	Same as Q1				
Q3	TRANSISTOR	1	MJE800	04713	
RA1	HEATSINK	1	23367-1	14632	
R1	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	18	RCR07G103JS	81349	01121
R3 Thru R18	Same as R1				
R19	RESISTOR, FIXED, COMPOSITION: 100 k $\Omega$ , 5%, 1/4W	1	RCR07G104JS	81349	01121
R20	RESISTOR, FIXED, COMPOSITION: 1.0 M $\Omega$ , 5%, 1/4W	1	RCR07G105JS	81349	01121
R21	RESISTOR, FIXED, COMPOSITION: 2.0 k $\Omega$ , 5%, 1/4W	2	RCR07G202JS	81349	01121
R22	RESISTOR, FIXED, COMPOSITION: 16 k $\Omega$ , 5%, 1/4W	1	RCR07G163JS	81349	01121
R23	RESISTOR, FIXED, COMPOSITION: 7.5 k $\Omega$ , 5%, 1/4W	2	RCR07G572JS	81349	01121
R24	Same as R23				
R25	RESISTOR, VARIABLE, FILM: 2 k $\Omega$ , 10%, 1/2W	1	62PAR2K	73138	
R26	Same as R21				
S1	SWITCH, PUSHBUTTON	24	513-0308-604	72619	
S2 Thru S24	Same as S1				
U1	INTEGRATED CIRCUIT	1	CD4013AE	02735	

REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A21

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
U2	INTEGRATED CIRCUIT	6	CD4011AE	02735	
U3 Thru U7	Same as U2				
U8	INTEGRATED CIRCUIT	6	CD4023AE	02735	
U9 Thru U13	Same as U8				
U14	INTEGRATED CIRCUIT	1	CD4002AE	02735	
U15	INTEGRATED CIRCUIT	1	NE555V	18324	
U16	INTEGRATED CIRCUIT	1	CD4050AE	02735	
U17	INTEGRATED CIRCUIT	2	CD4049AE	02735	
U18	INTEGRATED CIRCUIT	2	7439PC	07263	
U19	Same as U18				
U20	INTEGRATED CIRCUIT	2	SN74145N	01295	
U21	Same as U20				
U22	Same as U17				
U23	INTEGRATED CIRCUIT	2	CD4042AE	02735	
U24	Same as U23				



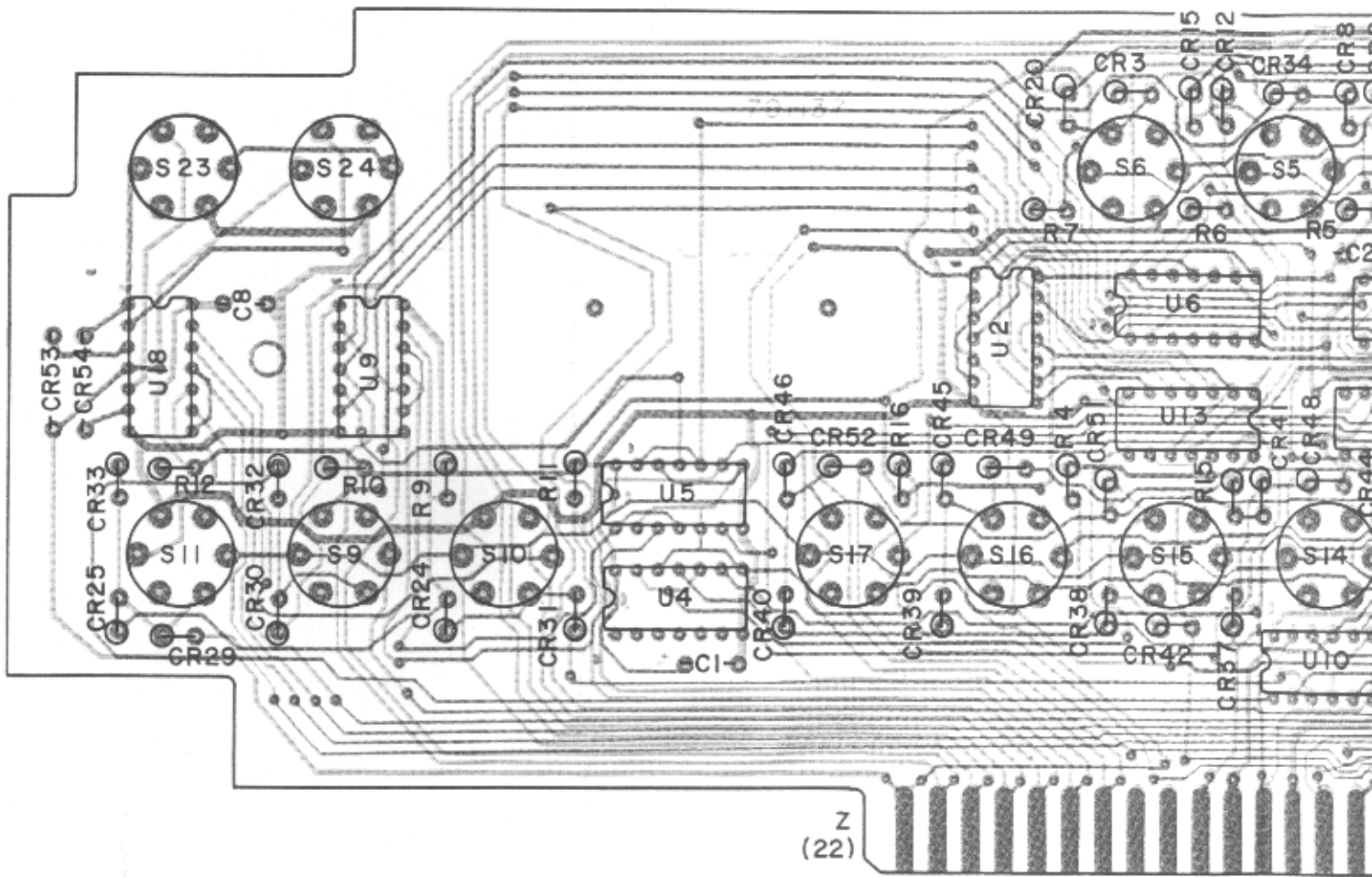
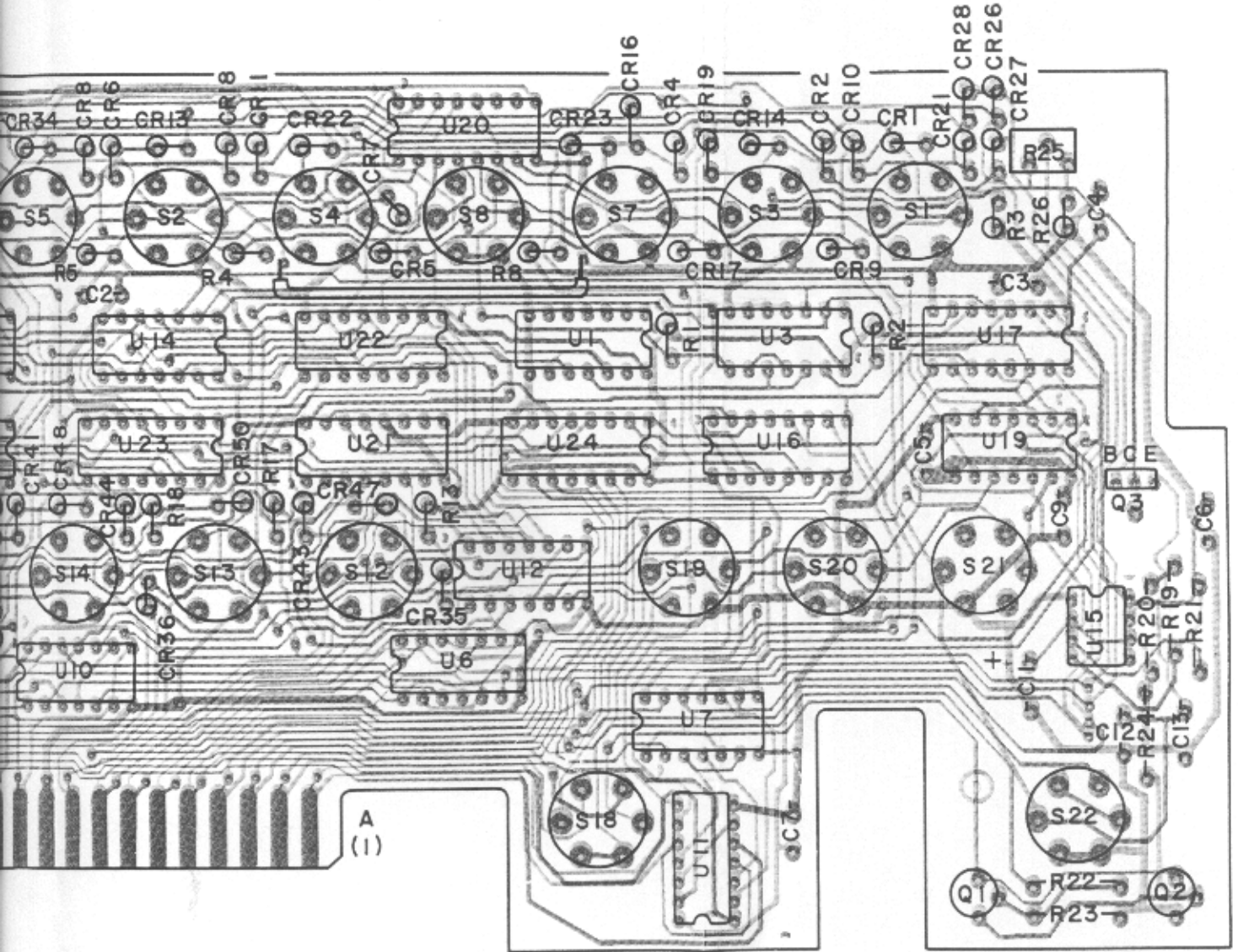


Figure 6-32. Type 791137 Switch Encoder (



Tech Encoder (A21), Location of Components

## 6.4.21 TYPE 791134 FRONT PANEL REGISTER

REF DESIG PREFIX A22

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
BT1	BATTERY	1	3/CH225T	83740	
CR1	DIODE	3	1N995	80131	04713
CR2	DIODE	1	5082-2900	28480	
CR3	DIODE	3	1N4446	80131	93332
CR4	Same as CR3				
CR5	Same as CR3				
CR6	Same as CR1				
CR7	Same as CR1				
CR8	NOT USED				
CR9	NOT USED				
C1	CAPACITOR, POLYCARBONATE, TUBULAR: 0.12 $\mu$ F, 2%, 200 V	1	MPC124-2-2	04090	
C2	CAPACITOR, MICA, DIPPED: 100 pF, 2%, 500 V	1	CM05FD101G03	81349	72136
C3	CAPACITOR, MICA, DIPPED: 500 pF, 5%, 500 V	1	DM15-501J	72136	
C4	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	16	8131M100-651-104M	72982	
C5	CAPACITOR, CERAMIC, DISC: 0.47 $\mu$ F, 20%, 100 V	1	8131M100-651-474M	72982	
C6	CAPACITOR, ELECTROLYTIC, TANTALUM: 120 $\mu$ F, 10%, 15 V	1	196D127X9015TE4	56289	
C7	NOT USED				
C8	CAPACITOR, MICA, DIPPED: 2000 pF, 2%, 500 V	1	CM06FD202G03	81349	72136
C9	CAPACITOR, CERAMIC, DISC: 0.01 $\mu$ F, 10%, 200 V	1	CK06BX103K	81349	56289
C10	CAPACITOR, MICA, DIPPED: 470 pF, 5%, 500 V	1	DM15-471J	72136	
C11	CAPACITOR, ELECTROLYTIC, TANTALUM: 1.5 $\mu$ F, 10%, 35 V	1	CS13BF155K	81349	56289
C12	CAPACITOR, MICA, DIPPED: 1200 pF, 2%, 500 V	1	CM06FD122G03	81349	72136
C13	Same as C4				
C14	CAPACITOR, ELECTROLYTIC, TANTALUM: 47 $\mu$ F, 20%, 20 V	1	196D476X0020PE4	56289	
C15 Thru C23	Same as C4				
C24	NOT USED				
C25	NOT USED				
C26 Thru C30	Same as C4				
C31+	CAPACITOR, MICA, DIPPED: 510 pF, 2%, 500 V	1	DM15-511G	72136	
J1	CONNECTOR, RECEPTACLE	1	3131-1002	75037	

\* Nominal value; final value factory selected.

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A22

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
Q1	TRANSISTOR	1	2N3251	80131	04713
Q2	TRANSISTOR	1	2N929	80131	04713
Q3	TRANSISTOR	2	3N187	80131	02735
Q4	Same as Q3				
R1	RESISTOR, FIXED, COMPOSITION: 1.0 M $\Omega$ , 5%, 1/4W	9	RCR07G105JS	81349	01121
R2*	RESISTOR, FIXED, FILM: 8.06 k $\Omega$ , 1%, 1/10W	1	RN55C8061F	81340	75042
R3	Same as R1				
R4	RESISTOR, FIXED, COMPOSITION: 100 $\Omega$ , 5%, 1/4W	2	RCR07G101JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 10 k $\Omega$ , 5%, 1/4W	2	RCR07G103JS	81349	01121
R8	Same as R5				
R9	RESISTOR, FIXED, COMPOSITION: 4.7 k $\Omega$ , 5%, 1/4W	1	RCR07G472JS	81349	01121
R10	RESISTOR, FIXED, COMPOSITION: 510 k $\Omega$ , 5%, 1/4W	1	RCR07G514JS	81349	01121
R11	RESISTOR, FIXED, COMPOSITION: 270 $\Omega$ , 5%, 1/4W	1	RCR07G271JS	81349	01121
R12	RESISTOR, FIXED, COMPOSITION: 1.0 k $\Omega$ , 5%, 1/4W	1	RCR07G102JS	81349	01121
R13	Same as R1				
R14	RESISTOR, FIXED, COMPOSITION: 240 k $\Omega$ , 5%, 1/4W	1	RCR07G244JS	81349	01121
R15	Same as R1				
R16	RESISTOR, FIXED, COMPOSITION: 3.6 k $\Omega$ , 5%, 1/4W	1	RCR07G362JS	81349	01121
R17	RESISTOR, VARIABLE, FILM: 5 k $\Omega$ , 10%, 1/2W	1	62PAR5K	73138	
R18	RESISTOR, VARIABLE, FILM: 5 k $\Omega$ , 10%, 1/2W	1	62PR5K	73138	
R19 Thru R24	Same as R1				
R25	RESISTOR, FIXED, COMPOSITION: 51 k $\Omega$ , 5%, 1/4W	2	RCR07G513JS	81349	01121
R26	Same as R25				
R27	RESISTOR, FIXED, COMPOSITION: 100 k $\Omega$ , 5%, 1/4W	3	RCR07G104JS	81349	01121
R28	Same as R27				
R29	Same as R27				
R30	Same as R1				
R31	Same as R4				
TP1	TEST POINT	2	TJ203R	04013	
TP2	Same as TP1				
U1	INTEGRATED CIRCUIT	1	CD4028AD	02735	
U2	INTEGRATED CIRCUIT	1	MCM14505AL	04713	
U3**	Same as U6				
U4**	Same as U6				

\* Nominal value; final value factory selected.

REF DESIG PREFIX A22

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
U5**	Same as U6				
U6***	INTEGRATED CIRCUIT	1	CD4061AD	02735	
U7	INTEGRATED CIRCUIT	1	CD4001AD	02735	
U8	INTEGRATED CIRCUIT	1	CD4049AD	02735	
U9	INTEGRATED CIRCUIT	3	CD4011AE	02735	
U10	INTEGRATED CIRCUIT	2	CD4025AE	02735	
U11	INTEGRATED CIRCUIT	3	868293	14632	
U12	Same as U11				
U13	Same as U11				
U14	INTEGRATED CIRCUIT	2	NE555V	18324	
U15	INTEGRATED CIRCUIT	2	CD4013AE	02735	
U16	INTEGRATED CIRCUIT	4	CD4049AE	02735	
U17	INTEGRATED CIRCUIT	1	CD4006AE	02735	
U18	INTEGRATED CIRCUIT	2	CD4035AE	02735	
U19	INTEGRATED CIRCUIT	1	CD4014AE	02735	
U20	INTEGRATED CIRCUIT	4	CD4034AD	02735	
U21 Thru U23	Same as U20				
U24	Same as U18				
U25	INTEGRATED CIRCUIT	7	CD4029AE	02735	
U26 Thru U31	Same as U25				
U32	INTEGRATED CIRCUIT	1	CD4016AE	02735	
U33	Same as U14				
U34	Same as U15				
U35	Same as U9				
U36	Same as U16				
U37	Same as U16				
U38	Same as U9				
U39	INTEGRATED CIRCUIT	1	CD4023AE	02735	
<u>OPTIONAL MEMORY CHANNELS</u>					
** U3 - Memory Channels 12 thru 15					
U4 - Memory Channels 8 thru 11					
U5 - Memory Channels 4 thru 7					
*** U6 - Memory Channels 0 thru 3 (Supplied)					

## REPLACEMENT PARTS LIST

WJ-8888

REF DESIG PREFIX A22

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
U40	Same as U10				
U41	INTEGRATED CIRCUIT	1	CD4001AE	02735	
U42	Same as U16				
U43	INTEGRATED CIRCUIT	1	CD4042AE	02735	

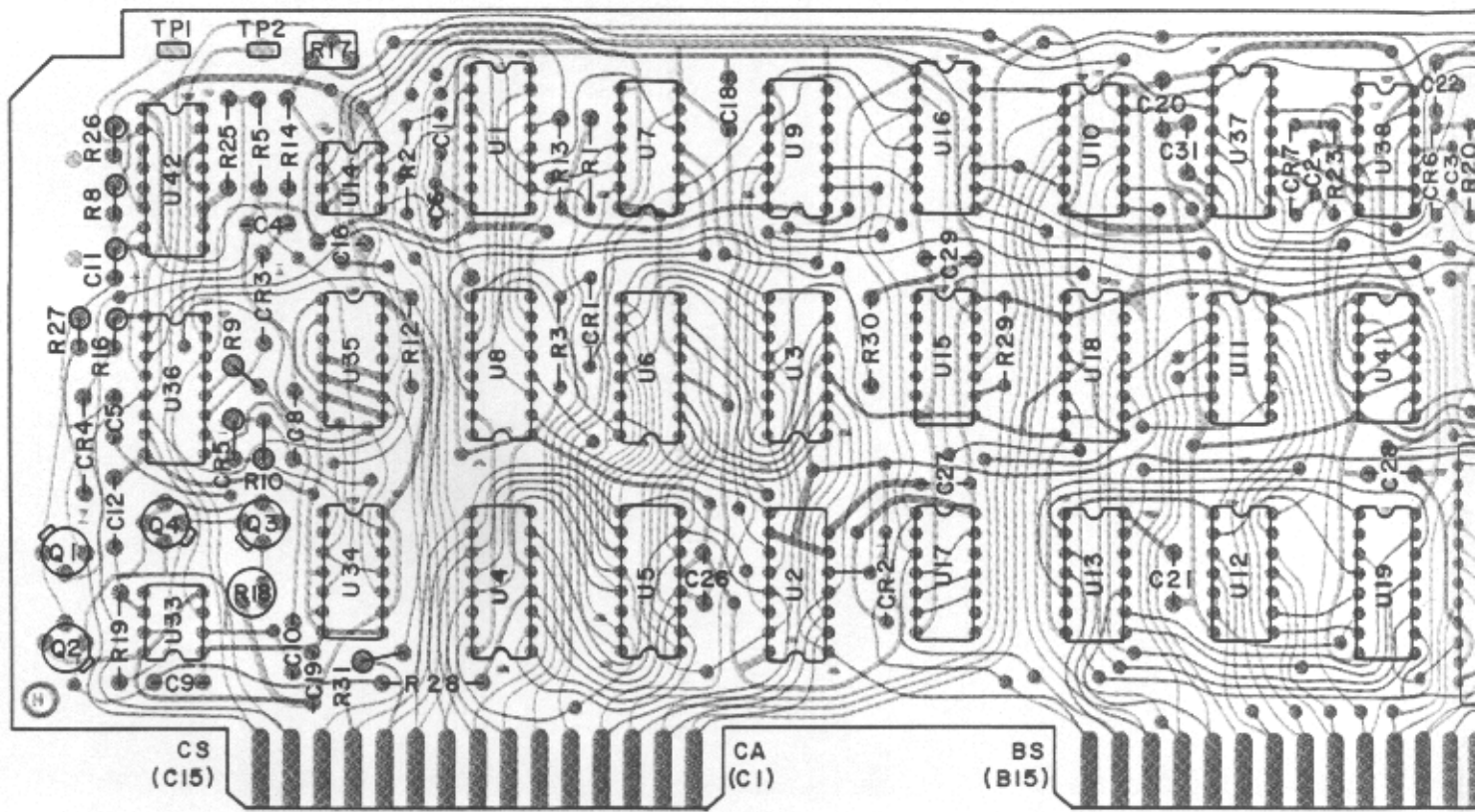
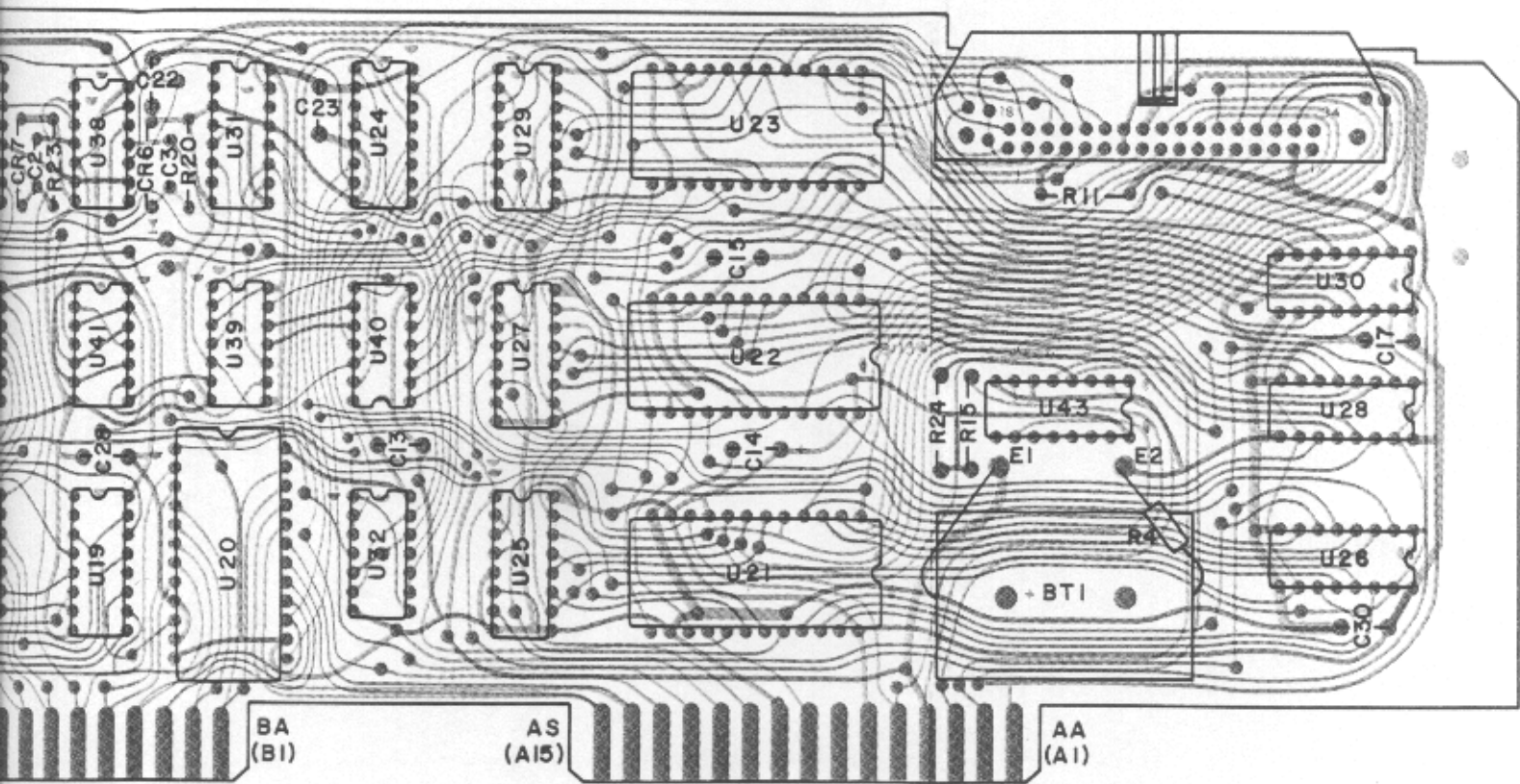


Figure 6-33. Type 791134 Front Panel Res





4 Front Panel Register (A22), Location of Components



6.4.22 TYPE 791126 DISPLAY BUFFER

REF DESIG PREFIX A23

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
A1	DIGITAL DISPLAY	1	23458	14632	
P1	CONNECTOR, PLUG	1	3414-0000	75037	
U1	INTEGRATED CIRCUIT	5	02735		
U2 Thru U5	Same as U1				

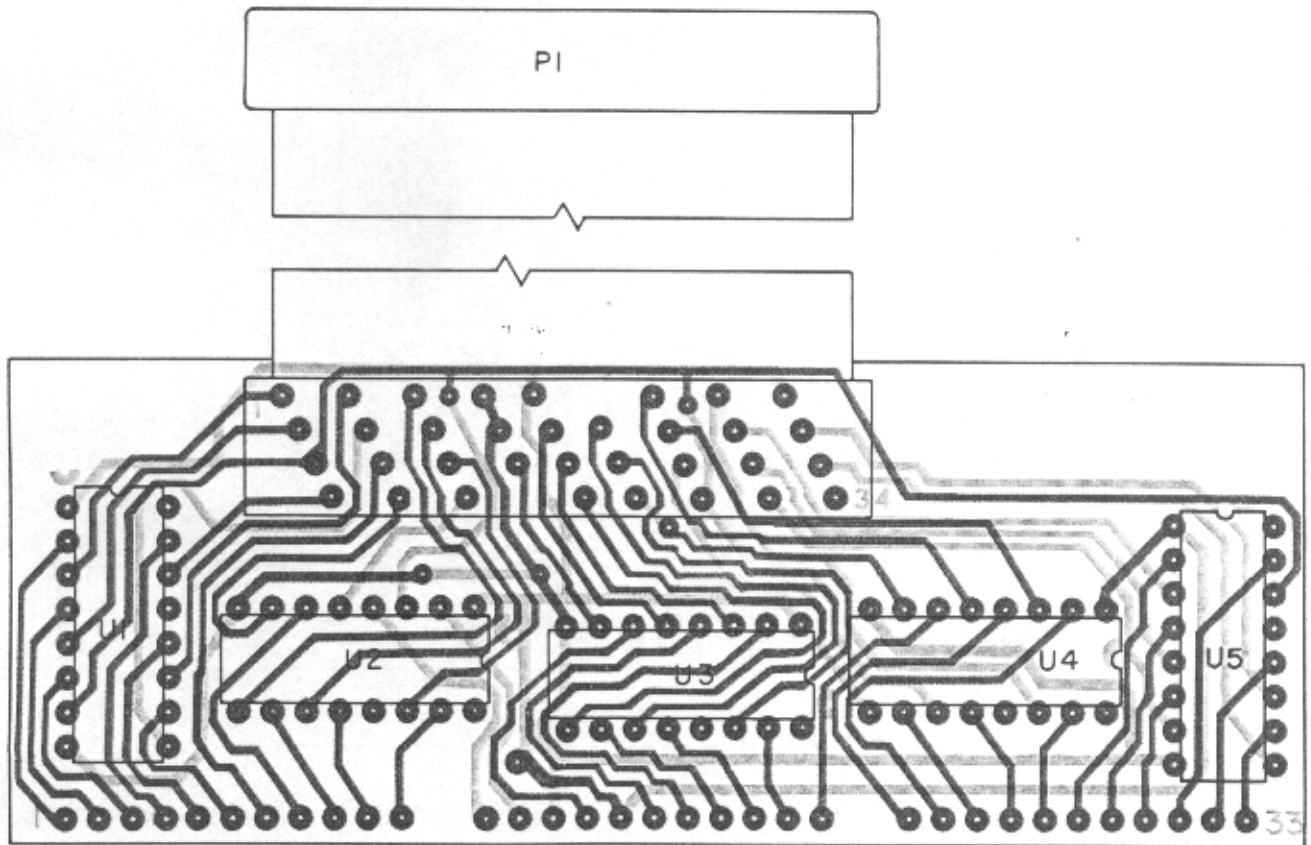


Figure 6-34. Type 791126 Display Buffer (A23), Location of Components

6.4.22.1 Part 23458 Digital Display

REF DESIG PREFIX A23A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE, MODIFIED	1	17481-1	14632	
U1 U2 Thru U7	INTEGRATED CIRCUIT, LED DISPLAY  Same as U1	7	5082-7300	28480	

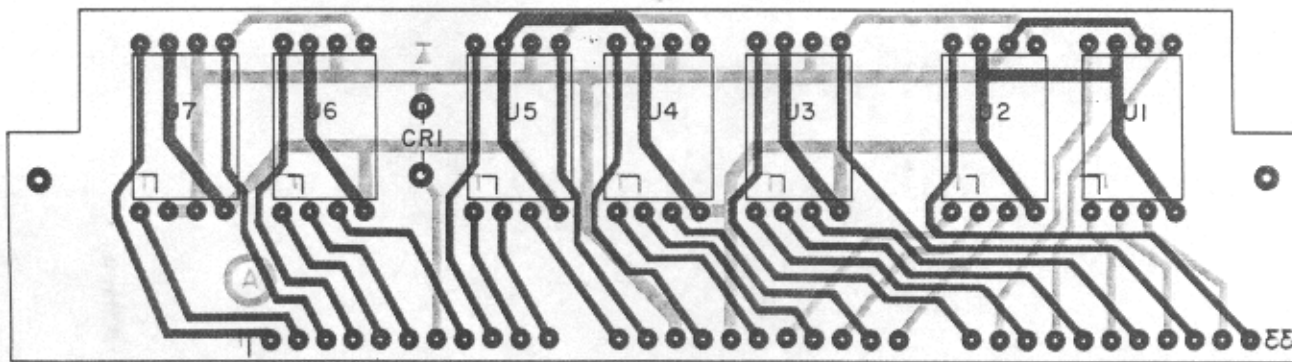


Figure 6-35. Part 23458 Digital Display (A23A1), Location of Components

6.4.23 TYPE 791276 OPTIONAL TUNING CONNECTOR FILTER

REF DESIG PREFIX A24

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C1	CAPACITOR, CERAMIC, FEEDTHRU: 1000 pF, GMV, 500 V	2	2404-000X5U0-102P	72982	
C2	CAPACITOR, CERAMIC, FEEDTHRU: 0.05 $\mu$ F, GMV, 300 V	1	54-785-002-503P	33095	
C3	Same as C1				
J1	CONNECTOR, MODIFIED	1	23671-1	14632	
L1	COIL, FIXED: 47 $\mu$ H	3	1025-60	99800	
L2	Same as L1				
L3	Same as L1				

## REPLACEMENT PARTS LIST

WJ-8888

6.4.24 TYPE 791202 ENCODER ASSEMBLY

REF DESIG PREFIX A25

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
A1	OPTICAL TRANSMITTER	1	17543-1	14632	
A2	OPTICAL RECEIVER	1	17544-1	14632	

## 6.4.24.1 Part 17543 Optical Transmitter

REF DESIG PREFIX A25A1

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	2	ME7140	76541	
CR2	Same as CR1				

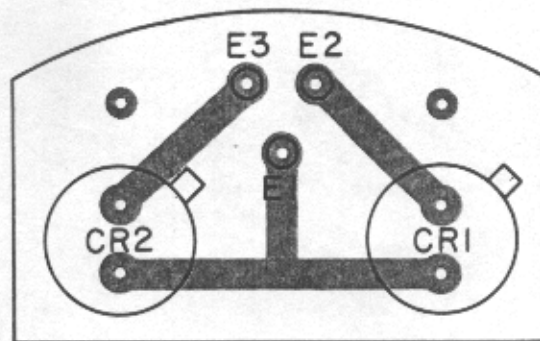


Figure 6-36. Part 17543 Optical Transmitter (A25A1), Location of Components

6.4.24.2 Part 17544 Optical Receiver

REF DESIG PREFIX A25A2

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
Q1	TRANSISTOR	2	MT2	76541	
Q2	Same as Q1				
Q3	TRANSISTOR	2	2N3904	80131	04713
Q4	Same as Q3				
R1	RESISTOR, VARIABLE, FILM: 100 $\Omega$ , 10%, 1/4W	2	62-2-1/2-101	02111	
R2	Same as R1				
R3	RESISTOR, FIXED, COMPOSITION: 51 $\Omega$ , 5%, 1/4W	2	RCR07G510JS	81349	01121
R4	Same as R3				
R5	RESISTOR, FIXED, COMPOSITION: 510 $\Omega$ , 5%, 1/4W	1	RCR07G511JS	81349	01121
R6	RESISTOR, FIXED, COMPOSITION: 330 $\Omega$ , 5%, 1/4W	1	RCR07G331JS	81349	01121

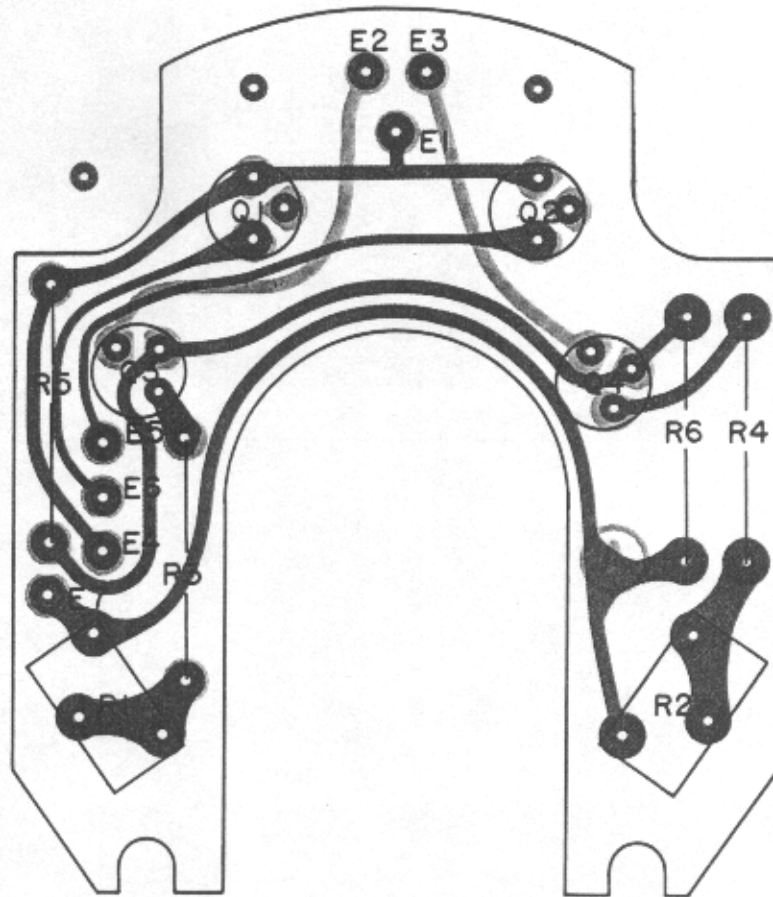


Figure 6-37. Part 17544 Optical Receiver (A25A2), Location of Components

## 6.4.25 TYPE 76210-7 POWER SUPPLY

REF DESIG PREFIX A26

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C1	CAPACITOR, MICA, DIPPED: 500 pF, 5%, 500 V	2	DM15-501J	72136	
C2	CAPACITOR, ELECTROLYTIC, TANTALUM: 2.2 $\mu$ F, 20%, 35 V	2	196D225X0035JE3	56289	
C3	Same as C1				
C4	Same as C2				
Q1	TRANSISTOR	2	2N3055	80131	02735
Q2	Same as Q1				
R1	RESISTOR, FIXED, COMPOSITION: 3.3 k $\Omega$ , 5%, 1/4W	2	RCR07G332JS	81349	01121
R2	RESISTOR, VARIABLE, FILM: 1 k $\Omega$ , 10%, 1/2W	2	62PAR1K	73138	
R3	RESISTOR, FIXED, COMPOSITION: 2.7 k $\Omega$ , 5%, 1/4W	2	RCR07G272JS	81349	01121
R4	Same as R1				
R5	Same as R2				
R6	Same as R3				
RA1	HEATSINK	2	6103B	13103	
RA2	Same as RA1				
RA3	HEATSINK	1	6012B	13103	
U1	RECTIFIER ASSEMBLY	2	MDA920A3	04713	
U2	INTEGRATED CIRCUIT	2	U6A7723393	07263	
U3	Same as U1				
U4	Same as U2				

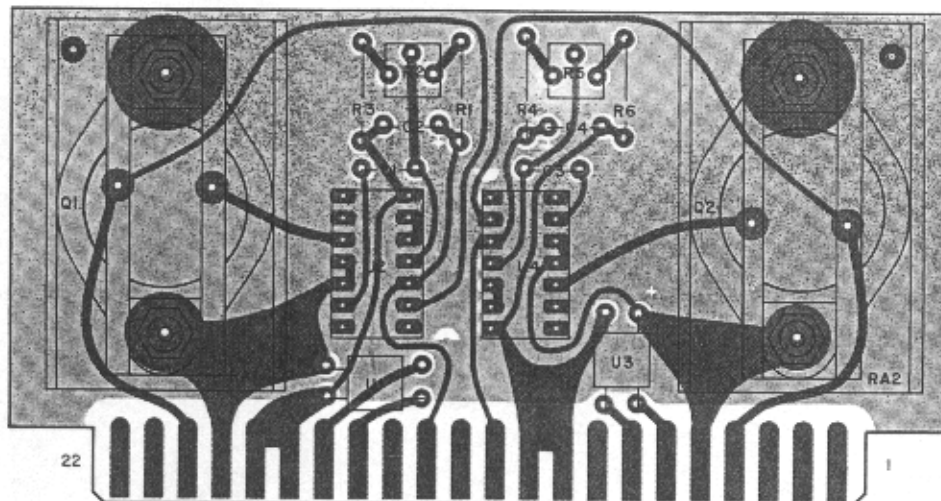


Figure 6-38. Type 76210-7 Power Supply (A26), Location of Components

## REPLACEMENT PARTS LIST

WJ-8888

## 6.4.26 TYPE 76209 SWITCHING REGULATOR

REF DESIG PREFIX A27

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
CR1	DIODE	1	UTX4105	12969	
CR2	DIODE	1	5082-2800	28480	
CR3	DIODE	1	1N4446	80131	93332
C1	CAPACITOR, ELECTROLYTIC, TANTALUM: 100 $\mu$ F, 20%, 20 V	7	196D107X0020MA3	56289	
C2	Same as C1				
C3	CAPACITOR, CERAMIC, DISC: 0.1 $\mu$ F, 20%, 100 V	2	6131M100-651-104M	72982	
C4	CAPACITOR, CERAMIC, DISC: 0.05 $\mu$ F, -20+80%, 25 V	1	DFJ1	73899	
C5	Same as C1				
C6	Same as C1				
C7	Same as C3				
C8 Thru C10	Same as C1				
L1	COIL, TOROIDAL	1	20681-129	14632	
L2	COIL, TOROIDAL	1	20681-74	14632	
L3	COIL, TOROIDAL	1	20681-130	14632	
Q1	TRANSISTOR	1	2N4918	80131	04713
Q2	TRANSISTOR	1	2N5039	80131	02735
Q3	TRANSISTOR	1	2N2905A	80131	04713
RA1	NOT USED				
RA2	HEATSINK, MODIFIED	1	22915-1	14632	
R1	RESISTOR, FIXED, COMPOSITION: 270 $\Omega$ , 5%, 1/4W	2	RCR07G271JS	81349	01121
R2	Same as R1				
R3	RESISTOR, FIXED, COMPOSITION: 68 $\Omega$ , 5%, 1/4W	1	RCR07G680JS	81349	01121
R4	RESISTOR, FIXED, COMPOSITION: 510 k $\Omega$ , 5%, 1/4W	1	RCR07G514JS	81349	01121
R5	RESISTOR, FIXED, COMPOSITION: 22 $\Omega$ , 5%, 1/4W	1	RCR07G220JS	81349	01121
R6	RESISTOR, FIXED, COMPOSITION: 4.3 k $\Omega$ , 5%, 1/4W	1	RCR07G432JS	81349	01121
R7	RESISTOR, VARIABLE, FILM: 1 k $\Omega$ , 10%, 1/2W	1	62PAR1K	73138	
R8	RESISTOR, FIXED, COMPOSITION: 2.4 k $\Omega$ , 5%, 1/4W	1	RCR07G242JS	81349	01121
R9	RESISTOR, FIXED, WIRE-WOUND: 1.0 $\Omega$ , 5%, 1W	1	BW20(1.0 $\Omega$ , J)	75042	
TP1	JACK, TIP	1	TJ203R	49956	
U1	RECTIFIER ASSEMBLY	1	MDA950A3	04713	
U2	INTEGRATED CIRCUIT	1	LM305H	27014	
VR1	DIODE, ZENER: 5.6 V	1	LVA56A	01281	



6.4.27 TYPE 791275 PHONE JACK ASSEMBLY

REF DESIG PREFIX A28

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C1	CAPACITOR, CERAMIC, FEEDTHRU: 1000 pF, GMV, 500 V	2	54-794-001-102W	33095	
C2	Same as C1				
J1	CONNECTOR, PHONE JACK	1	CN12A	82389	

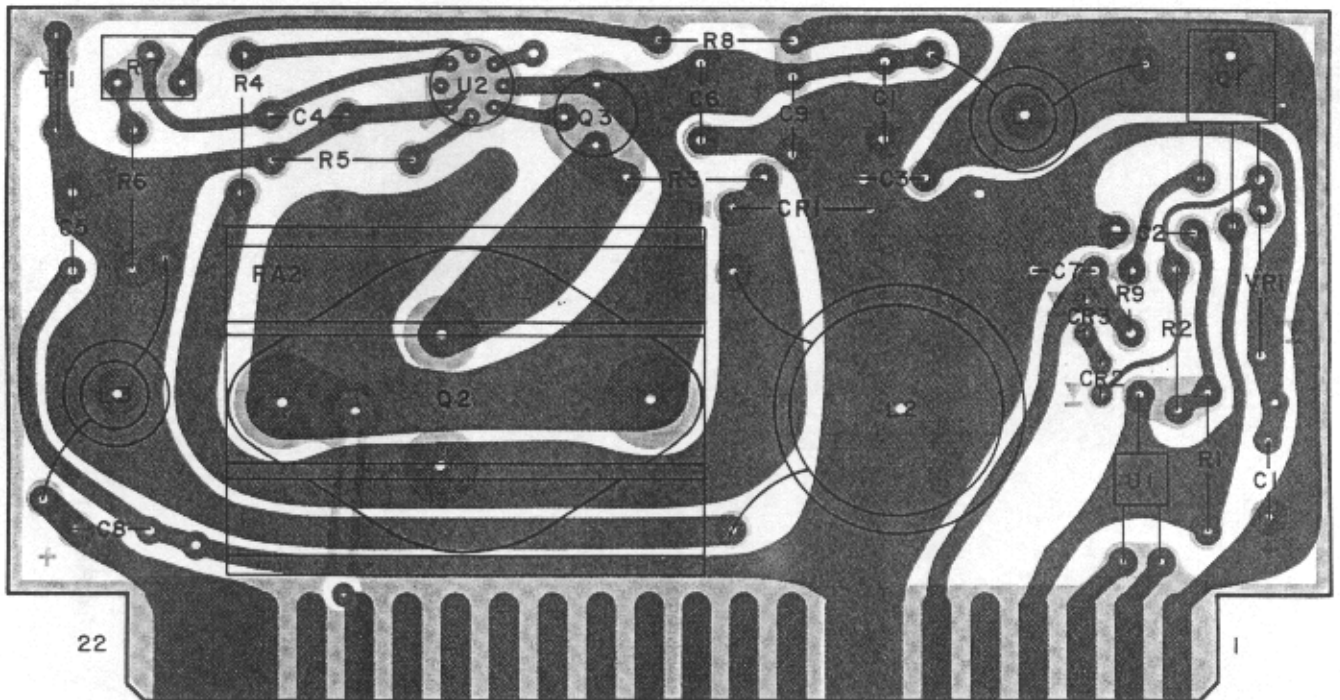


Figure 6-39. Type 76209 Switching Regulator (A27), Location of Components

6.4.28 TYPE 791203 LIGHT BOARD

REF DESIG PREFIX A29

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
DS1 DS2 Thru DS4	LAMP, INCANDESCENT  Same as DS1	4	CM8-683	71744	

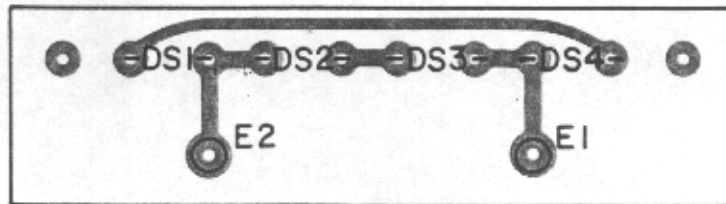


Figure 6-40. Type 791203 Light Board (A29), Location of Components

## 6.4.29 TYPE 791312 .5-30 MHz BANDPASS FILTER ASSEMBLY

REF DESIG PREFIX A30

REF DESIG	DESCRIPTION	QTY. PER ASSY.	MANUFACTURER'S PART NO.	MFR. CODE	RECM. VENDOR
C1	CAPACITOR, MICA, DIPPED: 6800 pF, 5%, 100 V	2	DM19-682J	72136	
C2	Same as C1				
C3	CAPACITOR, MICA, DIPPED: 120 pF, 2%, 500 V	2	CM05FD121G03	81349	72136
C4	CAPACITOR, MICA, DIPPED: 200 pF, 2%, 500 V	2	CM05FD201G03	81349	72136
C5	Same as C4				
C6	Same as C3				
J1	CONNECTOR, RECEPTACLE, SMC SERIES	2	10-0104-002	19505	
J2	Same as J1				
L1	COIL, FIXED: 15 $\mu$ H	1	1537-40	99800	
L2	COIL, TOROIDAL	2	20681-126	14632	
L3	COIL, TOROIDAL	1	20681-127	14632	
L4	Same as L2				

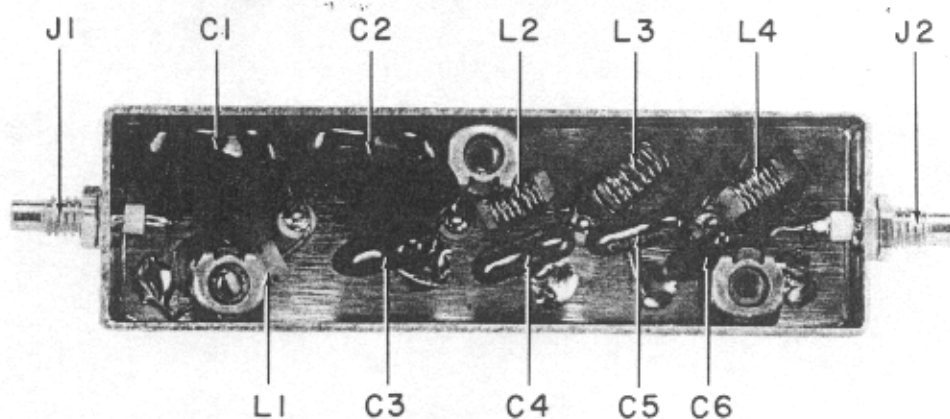


Figure 6-41. Type 791312 .5-30 MHz Bandpass Filter Assembly (A30),  
Location of Components