

GONSET

INSTRUCTION MANUAL

RF POWER AMPLIFIER

MODEL 903A 2 METER
MODEL 913A 6 METER



GONSET[®], INC.
A SUBSIDIARY OF ALTEC LANSING CORPORATION
1515 S. MANCHESTER AVE., ANAHEIM, CALIF.

WARRANTY POLICY

Gonset, Inc., warrants this equipment, when properly registered, against defects in workmanship, materials, and constructions under normal use and service — in accordance with the warranty card furnished. Under this warranty, our obligation is limited to repairing or replacing any defective parts.

This warranty is valid only when the enclosed card is properly filled in and returned within ten (10) days from purchase date. This warranty shall not apply to any equipment which has been tampered with in any way, or which has been misused or damaged by accident or negligence, or which has had the serial number removed, altered, or effaced.

Gonset, Inc., reserves the right to discontinue or change, at any time, specifications, design, or prices without notice and without incurring obligations.

DO NOT SEND EQUIPMENT TO THE FACTORY WITHOUT FIRST SECURING AUTHORIZATION TO DO SO; EQUIPMENT SHOULD BE SENT ONLY TO AUTHORIZED REPAIR STATIONS, UNLESS OTHERWISE DIRECTED. THIS WARRANTY DOES NOT INCLUDE TRANSPORTATION COSTS TO AND FROM THE FACTORY.

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INTRODUCTION

The Gonset 903A and the 913A rf power amplifiers operate class AB₁ for SSB, AM, CW, FM, and FSK service and class C for FM, PM, and CW service. The model 903A covers the 2 meter band and the model 913A covers the 6 meter band. In addition, the frequency range of both models is extended to cover MARS, CAP, and other military frequency allocations. Both models use the 4X150A tetrode tube in a grid-driven configuration and since this is a high gain tube, it only requires 5 watts driving power to deliver full output power when operating class AB₁.

The Gonset 903A and the 913A rf power amplifiers form ideal companion amplifiers for the 2 or 6 meter Sidewinders or they can be used with any exciter that can supply at least 5 watts input. In the event that the exciter supplies too much power, Gonset has pads available in 5, 10, and 15 db attenuation rates to insure correct input levels.

The Gonset rf amplifiers come complete with all power supplies; the high voltage supply uses a solid-state bridge rectifier composed of 24, 800 pIV - 750 ma controlled avalanche diodes, the bias supply uses a husky 400 pIV - 500 ma diode for high reliability. To reduce operating current in standby condition, a link on the rear may be opened and the terminals connected to a T/R relay.

INSTALLATION

The Gonset model 903A and the model 913A rf power amplifiers are designed to operate from a 117 vac, 60 cycle source. The input impedance is 50 to 75 ohms and the output impedance is 50 ohms nominal. Exciters and antennas of other terminating impedances will require impedance transformation networks between them and the Gonset rf amplifiers. The ARRL Handbook deals with these problems and is suggested reading.

Antennas:

The 903A and the 913A will perform satisfactorily with any of the common antenna systems designed for use on the high frequency amateur bands providing the characteristic impedance of the transmission line is not outside the limits of the output matching network of the rf power amplifier.

Location:

The 903A and the 913A may be placed in any location that will permit free air circulation around the cabinet. DO NOT place anything on top of the cabinet.

CAUTION: Never operate the equipment when it cannot get adequate ventilation or in an environment where other equipments or room heaters can cause an excessive temperature rise.

PERFORMANCE SPECIFICATIONS

	<u>Model 903A</u>	<u>Model 913A</u>
Frequency Range:	144 to 148 mc (2 meters)	50 to 54 mc (6 meters)
Power Input to Amplifiers:	500 watts (PEP, SSB) 500 watts CW 500 watts AM (peak) 500 watts FM	500 watts (PEP, SSB) 500 watts CW 500 watts AM (peak) 500 watts FM
Power Tube:	4X150A (The 4X250B or the 7580 may be used.)	4X150A (The 4X250B or the 7580 may be used.)
Minimum Exciter Output Required for Full Power Output: (class AB ₁ operation)	5 watts	5 watts
Output Impedance:	50 ohms, nominal	50 ohms, nominal
Input Impedance:	50/75 ohms, nominal	50/75 ohms, nominal
Finish:	Light Grey Baked Enamel	Light Grey Baked Enamel
Weight:	60 pounds	60 pounds
Dimensions:	8-1/2" high x 12-5/8" wide x 17-5/16" deep.	8-1/2" high x 12-5/8" wide x 17-5/16" deep.

On special order, rf amplifiers to cover any segment of the frequency range from 1.6 to 500 megacycles are available. When ordering, specify frequency, mode of operation, and conditions of operation. Fungus proofing is also available on special order for rf power amplifiers that will be used in tropical regions.

INSTALLATION

Power Sources:

The ac power source used for the rf amplifiers should have good regulation with adequate power capabilities for the quite considerable load that rf amplifiers present. If there is any doubt as to the power capabilities and the regulation of your ac line, contact your local power company for information.

Lightning Protection:

It is highly recommended that a lightning arrester be installed in the antenna system to prevent damage to the equipment and provide protection to the operator. Refer to the ARRL Handbook for details.

Exciter Connections:

Either the 903A or the 913A may be driven with any exciter delivering a minimum of 5 watts output in linear service. In non-linear service, class C, more power from the exciter is required. Many exciter/transmitters will deliver more power than the amplifiers require, and therefore, a pad is required between the exciter and the amplifier. Gonsset makes three such pads and they are available in the following attenuation rates:

- 5 db = Model #3448
- 10 db = Model #3449
- 15 db = Model #3450

Figure 2 is intended as a guide in choosing the proper attenuator. If there is any doubt as to the output of your exciter, use the next highest value pad. For exciters that have more output than is covered by the graph, use two or more pads in series.

Figure 1, 3, and 4 illustrate some typical hook-ups. The pads are indicated with dotted lines. To have complete cutoff of all plate current in "standby" or "between words" with "vox", "push-to-talk", or "keying", link 2 on the rear of the chassis may be opened and the terminals connected to a pair of normally-open contacts — either on the exciter relay or on the antenna relay.

NOTE: When using the rf amplifiers without a relay connected to the link 2 terminals, make sure that the link is closed.

Communicator Series:

In non-linear service, class C operation, any of the Gonsset COMMUNICATOR SERIES may be used with the proper attenuator. Check your exciter output and refer to Figure 2.

Grounding:

Satisfactory operation requires the best ground possible. This means solid copper strap between all units used, not braid. Also avoid running grounds that are a multiple of quarter-wave lengths of the operating frequency.

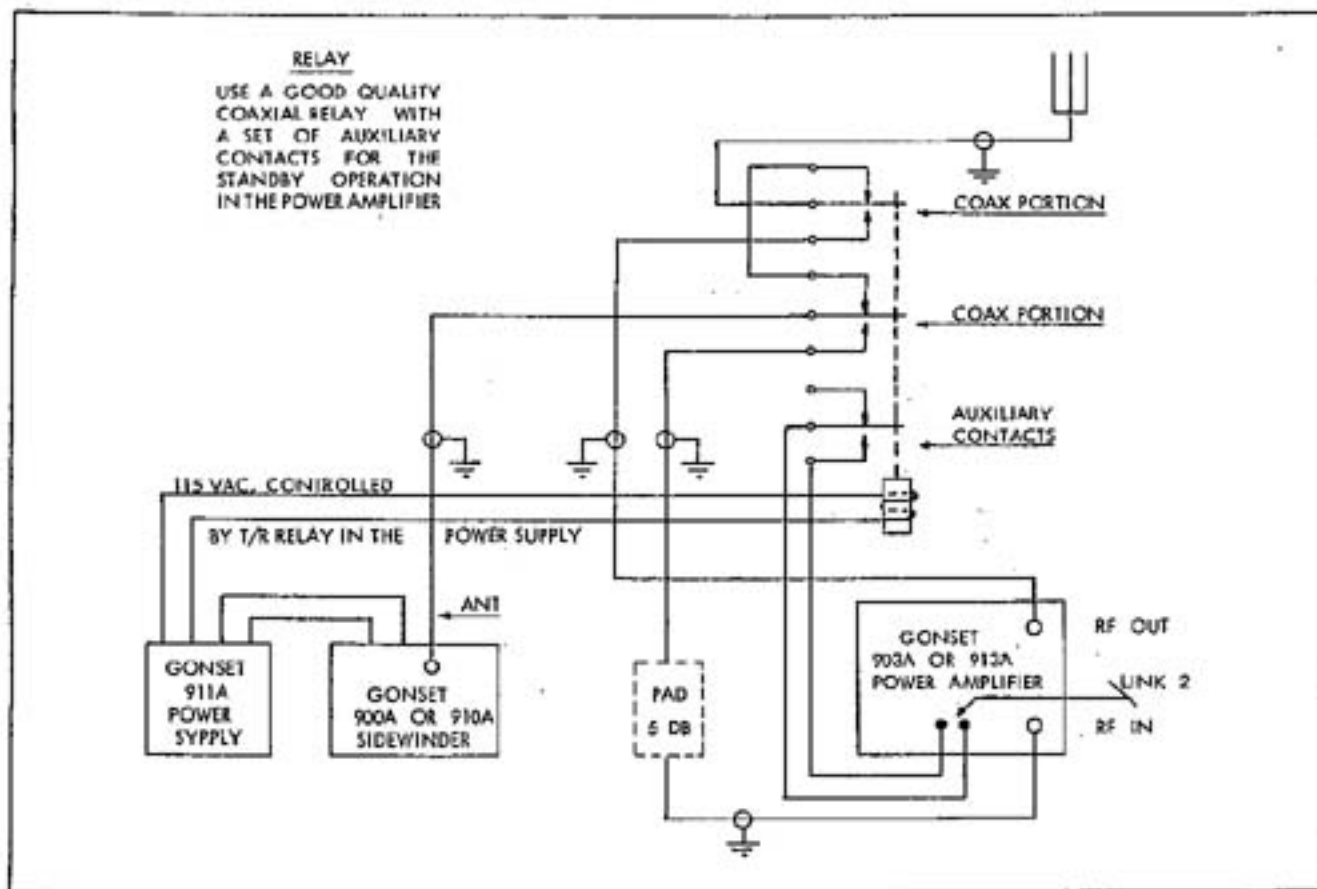
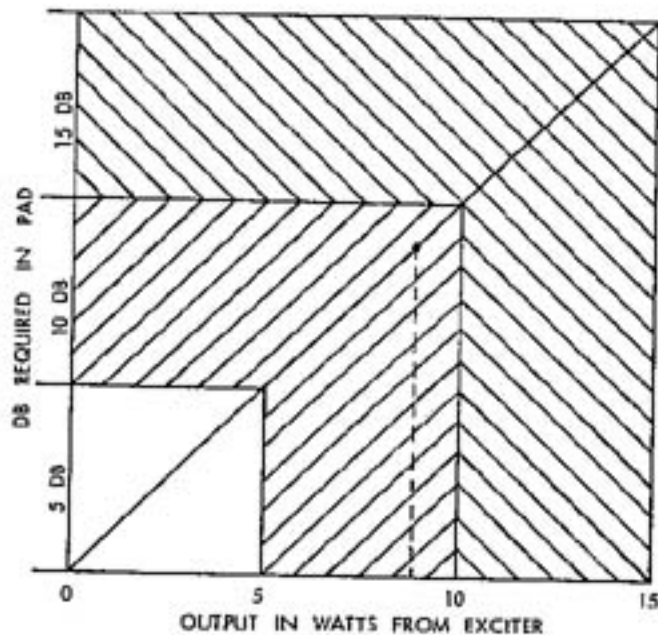


Figure 1






-  IF YOUR EXCITER FALLS WITHIN THIS RANGE, USE 5 DB PAD OR NO PAD
-  IF YOUR EXCITER OUTPUT FALLS WITHIN THIS RANGE, USE 10 OR 15 DB PAD
-  IF YOUR EXCITER OUTPUT FALLS WITHIN THIS RANGE, USE 15 DB PAD

Figure 2

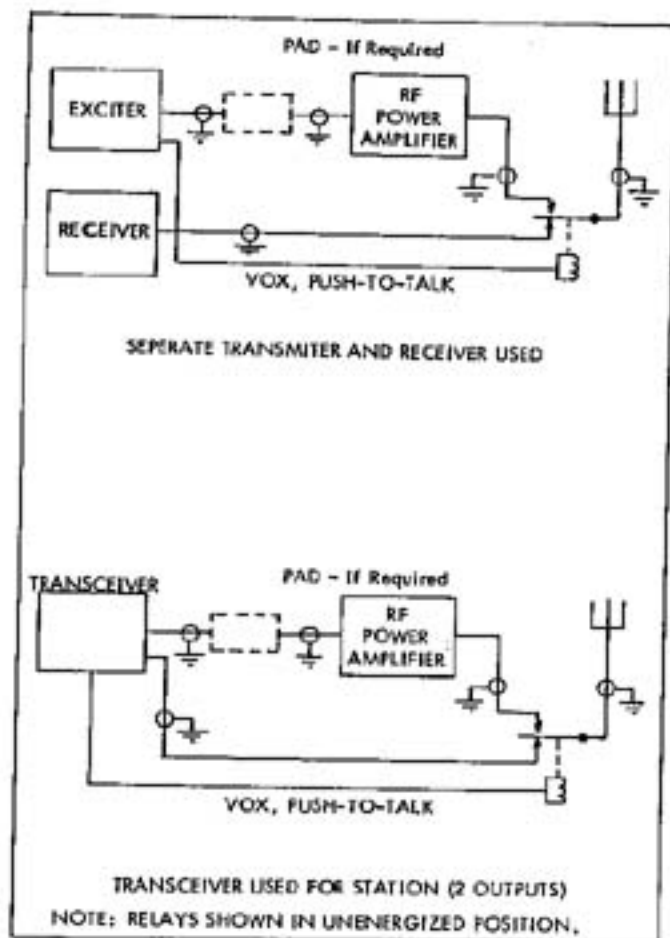
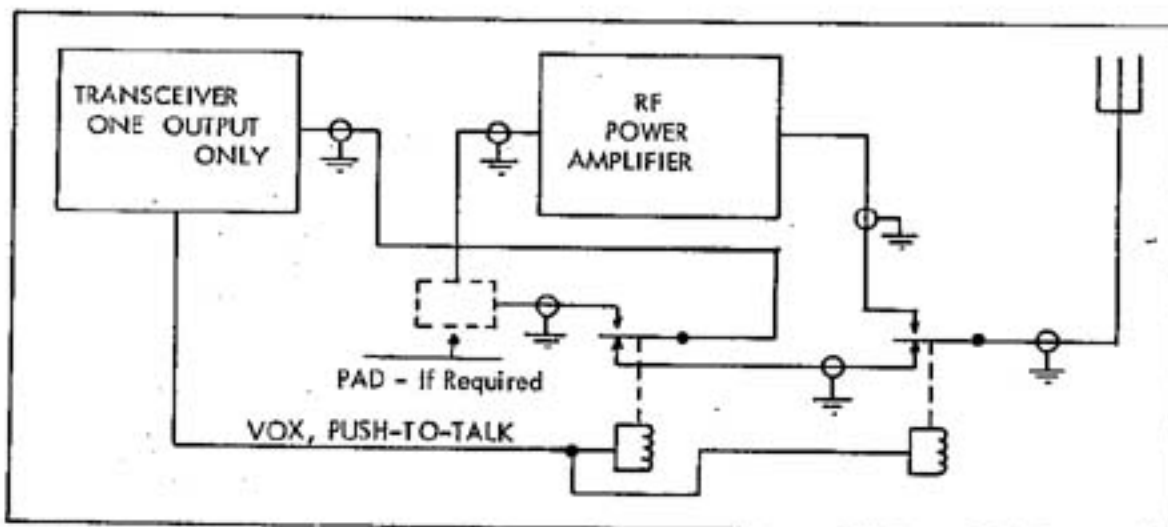


Figure 3



TRANSCIEVER (ONE OUTPUT ONLY) USED FOR STATION. SEPERATE COAX RELAYS MAY BE USED, HOWEVER A DPOT COAX RELAY IS AVAILABLE FROM DOW-KEY, # DK2-60
NOTE: RELAYS SHOWN IN UNENERGIZED POSITION.

Figure 4

OPERATION

Linear Operation:

For linear operation make sure that the link on the rear lip of the chassis is closed. Refer to Figure 6 for details.

Non-linear Operations:

For non-linear operation, link 1 on the rear lip of the chassis must be open. See Figure 6.

Meter and Meter Selector Switch:

The meter has two scales; 0-500 and 0-50, the 0-500 scale indicates plate current milliamperes, the 0-50 scale indicates grid or screen current in milliamperes and is selected by the meter switch on the front panel. The meter selector switch has two output positions; power and tune. In tune position maximum sensitivity is used for initial tune-up — "tune for maximum". In power position the output power is approximately seven times the 0-50 scale reading, a relative value.

Tune-up Procedure:

The filament and bias voltage along with the blower motor are operated by the filament switch and should be ON two minutes before the plate switch is turned on.

NOTE: When tuning the amplifier off, it is important to always turn off the plate switch first.

For the initial tune-up procedure the TUNE/OPERATE switch is used in the TUNE position.

CAUTION: Never operate the equipment for over two minutes in the TUNE position; if you require less power output, reduce the audio gain or the rf drive of the exciter input — never use the rf amplifier TUNE/OPERATE switch for this purpose.

The following charts indicate typical operation for this equipment and should be used for tune-up and after tube replacement.

Tube Type: 4X150A, class AB₁ service.

Zero signal plate current*	70 ma
Maximum plate current	250 ma
Maximum screen current	30 ma

* Adjust zero signal plate current by turning the bias control provided on the rear of the chassis.

Tube Type: 4X250B, class AB₁ linear service.

Zero signal plate current	90 ma
Maximum plate current	280 ma
Maximum screen current	30 ma

Tube Type: 7580, class AB₁ linear service.

Zero signal plate current	70 ma
Maximum plate current	300 ma
Maximum screen current	30 ma

Tube Types: 4X150A & 4X250B, class C service.

Zero signal plate current	0
Maximum screen current	25 ma
Maximum grid current	20 ma
Maximum plate current	250 ma

NOTE: Non-linear operation, class C, should not be used with all types of tubes that may be used with these amplifiers. The amplifiers are shipped from the factory supplied with the 4X150A tube. This tube and the 4X250B may be used in class C operation. The 7580 tube must not be used in non-linear class C service.

Under certain conditions the grid current may reverse producing negative current indication on the meter which is normal for most tetrodes. In linear operation the grid current may be from negative to a maximum of plus one. Zero grid current is normal and desired. See the section on RF POWER AMPLIFIER CLASSIFICATION.

RF POWER AMPLIFIER CLASSIFICATION

The function of the rf power amplifier is to raise the power level of the input signal without changing the signal. That is, the envelope of the output signal must be a replica of the envelope of the input signal. A power amplifier which will perform this function is, by definition, a linear power amplifier.

RF amplifiers are classified A, B, and C according to the angle of plate current flow; that is, the number of degrees of plate current during a 360° rf cycle. Class A amplifiers have a continuous plate current flow and operate over a small portion of the plate current range of the tube.

Class B amplifiers have their grids biased to near plate current cutoff so that plate current flows for approximately 180° of the rf cycle. Amplifiers operated with appreciably more than 180° of plate current flow are called class AB amplifiers. Both class AB and B operation is used in the high power stages of rf linear amplifiers to achieve higher efficiency and maximum output power with less distortion. The distinction between class AB and B is somewhat arbitrary since both operate over more than 180° but less than 360°. However, the class AB amplifier draws appreciably more static plate current than the class B amplifier, which draws only a little static plate current.

The class C amplifier is biased well beyond cutoff so that plate current flows less than 180° of the rf cycle. The principle advantage of the class C amplifier is high plate efficiency — from 65 to 85% — but class C amplifiers are not suited for SSB use because they are not linear amplifiers and will not respond to low-level input signals.

A subscript number is commonly added to the amplifier class designator to indicate whether or not the tube is operated in the positive grid region over part of the cycle. For example, class AB₁ indicates that the grid never goes positive so that no grid current is drawn. Class AB₂ indicates that the grid does go positive so that grid current is drawn.

The Gonset rf amplifiers operating class AB₁ produce efficiencies as high as 55% and 65% in class C operation.

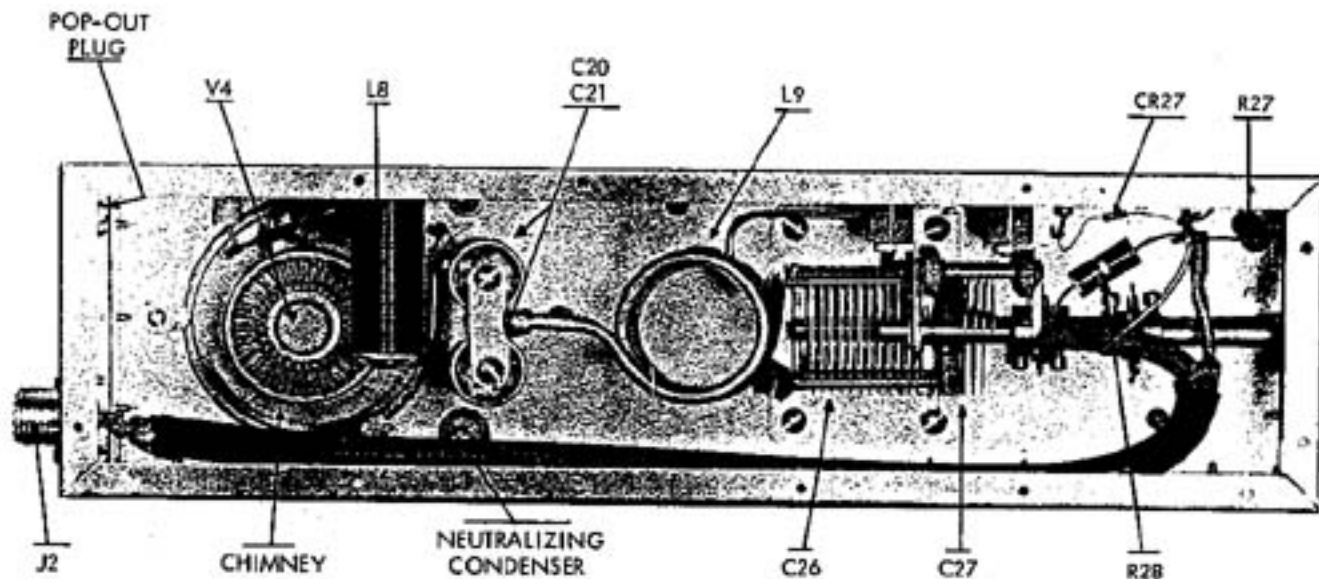


Figure 5

MAINTENANCE

The Gonset rf power amplifiers are designed for high efficiency and long life. Certain burdens however, fall upon the operator to insure these qualities. Strict maintenance is required in the following areas:

1. The blower wheel, the 4X150A air-system socket, and the tube fins must be kept clean. See Figure 5.
2. The fan motor bearings must be lubricated every six months.

NOTE: The above maintenance procedure is dictated by the environment and the amount of use given the amplifier.

CAUTION: Never operate the amplifier where it cannot get an adequate air supply or where other equipments or room heaters cause an excessive temperature rise. If it's too hot for the operator, it's TOO HOT for the amplifier.

Chassis Removal:

The cover is held to the chassis with six sheet metal screws. To remove the cover from the chassis the amplifier must be placed on its side and the four screws inside the rubber feet removed first. Then return the amplifier to its normal position and remove the two screws from the rear chassis lip. The amplifier can then be slid from the cover.

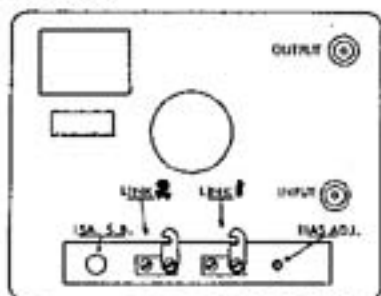


Figure 6

NOTICE: BEFORE SERVICING, UNPLUG THE UNIT FROM THE POWER LINE, THEN SHORT THE CHASSIS TO THE HIGH VOLTAGE FEED THROUGH CAPACITOR C19.

Power Tube Replacement:

1. Remove the cover from the chassis. (See Chassis Removal section.)
2. Remove top from rf amplifier section. (21 screws)
3. Remove screw holding L8, rf choke, to side of chassis.
4. Remove the two screws from the top of the coupling capacitors. (C20 and C21)
5. Remove plate connector ring. The screw holding the plate connector ring may be reached by removing the pop-out plug on the rear of the rf section.
6. Lift out the ceramic chimney from around the tube.
7. Remove the tube by pulling straight out from the socket.
8. Insert the replacement tube.

CAUTION: Do not force at an angle or the screen fingers will be bent or broken. Make sure that all the screen fingers are on the outside of the tube.

9. Replace the ceramic chimney. The wide mouthed end of the chimney must be next to the chassis or the air flow will be blocked.
10. Replace the plate connector ring. (Do not tighten this screw yet.)
11. Replace the two screws holding the coupling capacitors to the plate connector ring. Make sure L8 is in place. Tighten down these screws and the screw holding the plate connector ring to the tube.
12. Replace the screw in the side of the chassis holding L8 in place.
13. Replace the cover and the pop-out plug.

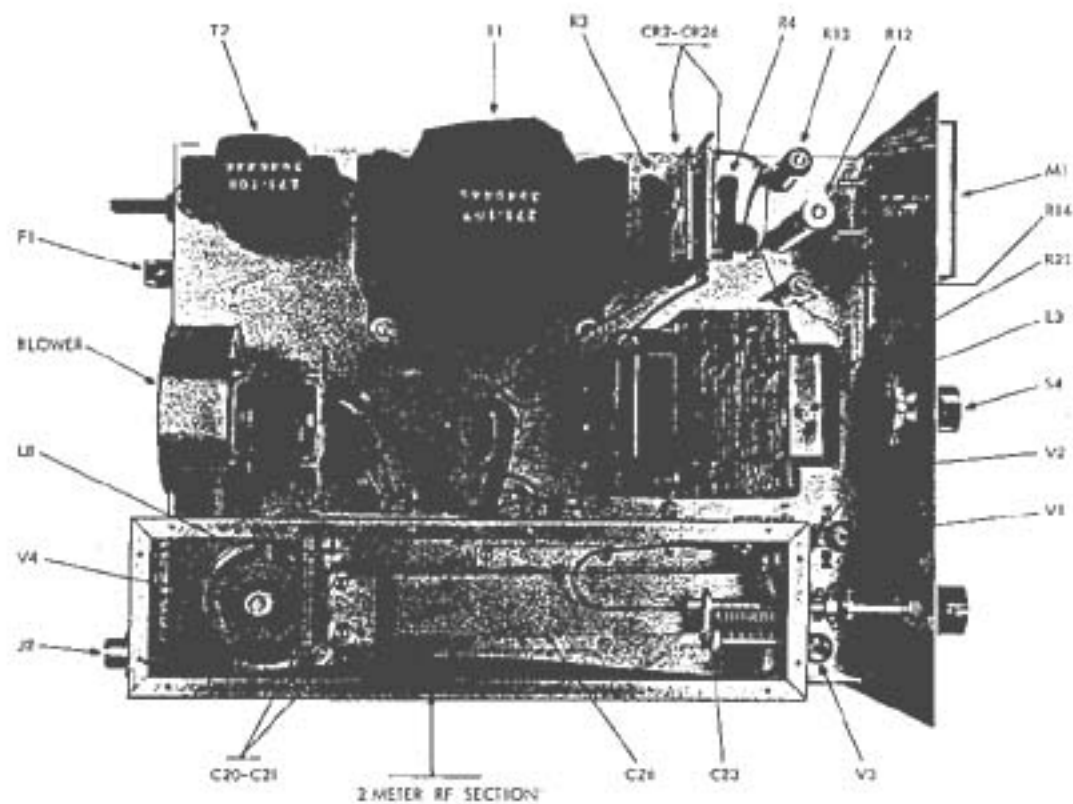


Figure 7

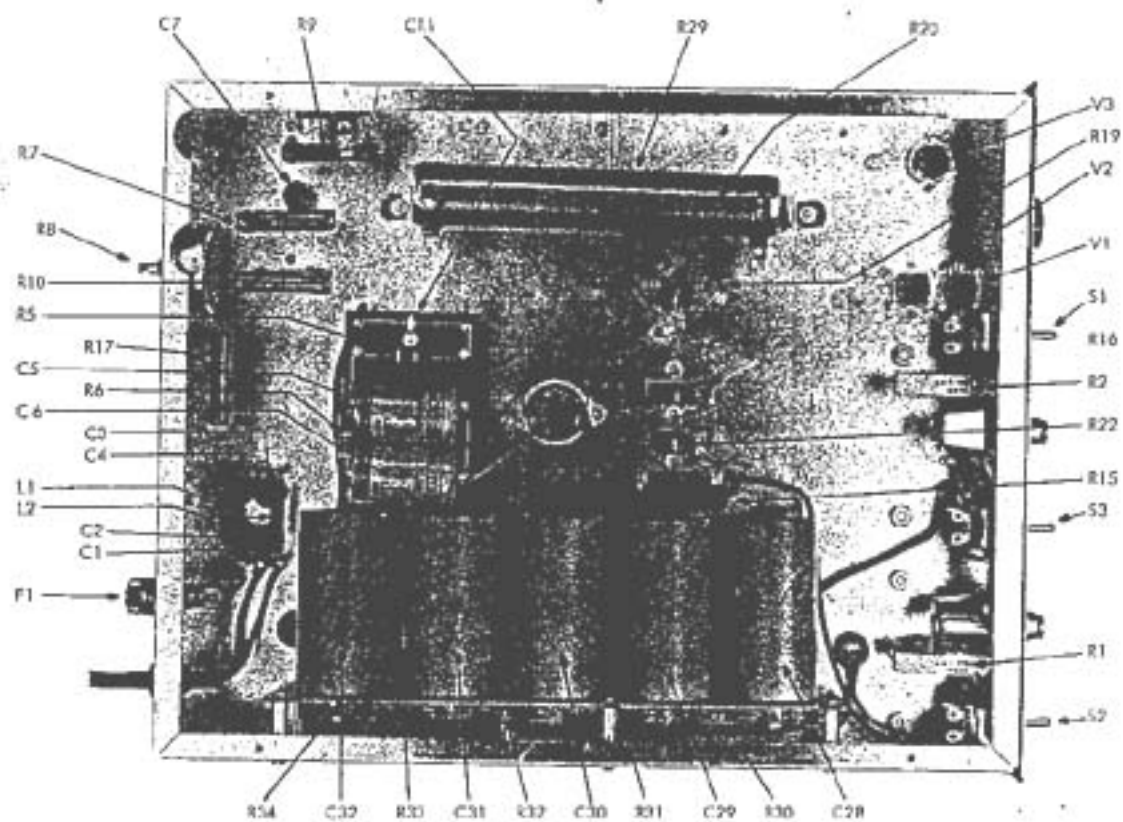


Figure B

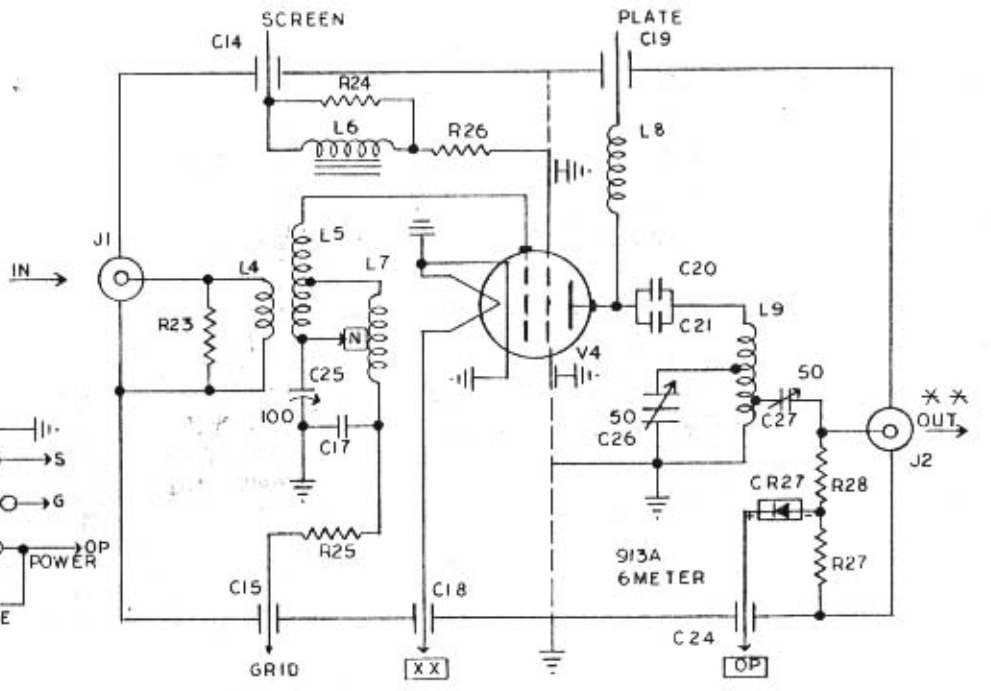
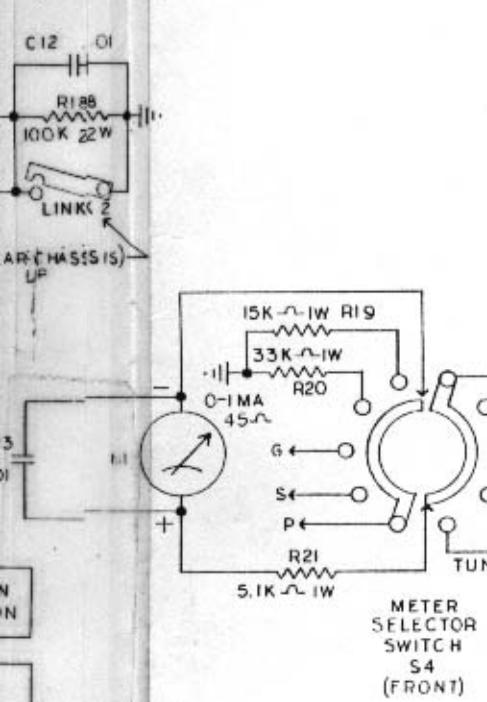
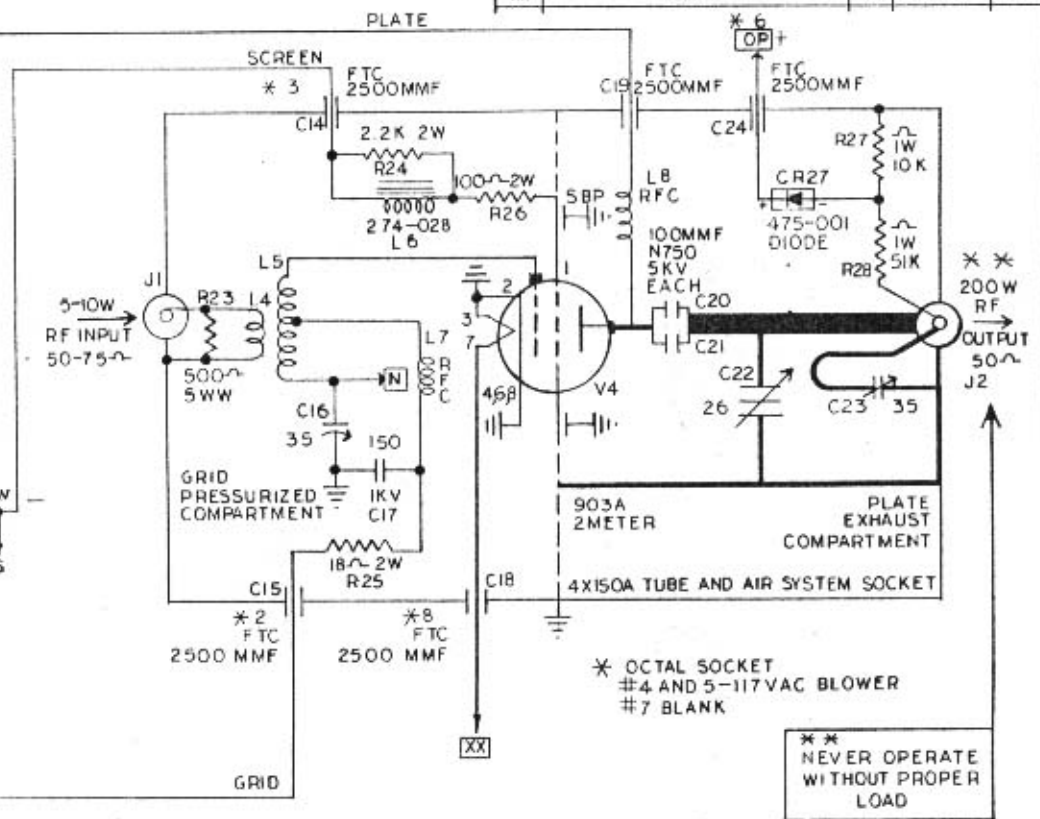
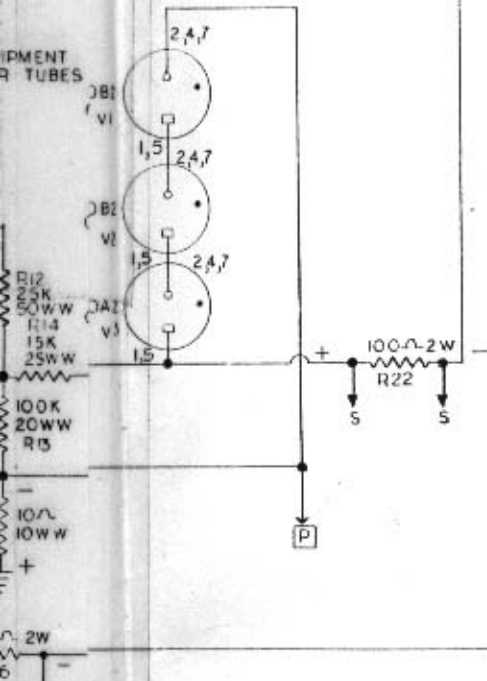
PARTS LIST — MODEL 903A

SCHMATIC SYMBOL	DESCRIPTION	GONSET PART NUMBER	SCHMATIC SYMBOL	DESCRIPTION	GONSET PART NUMBER
R1	Resistor, 1000 Ω , 10 W, 10%, WW	049-082	C21	Capacitor, ceramic, .0001 mfd N750	077-032
R2	Resistor, 1000 Ω , 10 W, 10%, WW	049-082	C22	Capacitor, variable air	074-158
R3	Resistor, 10 Ω , 10 W, 10%, WW	049-065	C23	Capacitor, variable air	074-156
R4	Resistor, 10 Ω , 10 W, 10%, WW	049-065	C24	Capacitor, feedthru, 2500 pf, 1500v	077-031
R5	Resistor, 47 Ω , 1 W, 10%, comp	043-470	C25	Not used in this model	
R6	Resistor, 470 Ω , 2 W, 10%, comp	044-471	C26	Not used in this model	
R7	Resistor, 2000 Ω , 10 W, 5%, WW	049-111	C27	Not used in this model	
R8	Potentiometer, 2000 Ω , 4 W, WW	052-144	C28	Capacitor, electrolytic, 100 mfd 450v	073-077
R9	Resistor, 5000 Ω , 10 W, Slider, 10%	049-113	C29	Capacitor, electrolytic, 100 mfd 450v	073-077
R10	Resistor, 3500 Ω , 10 W, 5%, WW	049-112	C30	Capacitor, electrolytic, 100 mfd 450v	073-077
R11	Not Required		C31	Capacitor, electrolytic, 100 mfd 450v	073-077
R12	Resistor, 25K, 50 W, 5%, WW	049-109	C32	Capacitor, electrolytic, 100 mfd 450v	073-077
R13	Resistor, 100K, 20W, 5%, WW	049-110			
R14	Resistor, 15K, 25W, 10%, WW	049-062	L1	Choke, TVI filter	027-092
R15	Resistor, 10 Ω , 10W, 10%, WW	049-065	L2	Choke, TVI filter	027-092
R16	Resistor, 100 Ω , 2W, 10%, comp	044-101	L3	Choke, filter	274-012
R17	Resistor, 3500 Ω , 10W, 5%, WW	049-112	L4	Coil, input link 2 m	011-145
R18	Resistor, 100K, 2W, 10%, comp	044-104	L5	Coil, grid 2 m	011-146
R19	Resistor, 15K, 1W, 10%, comp	043-153	L6	Choke	274-028
R20	Resistor, 33K, 1W, 10%, comp	043-333	L7	Choke, 1.8 uh, rf grid 2m	027-078
R21	Resistor, 5100 Ω , 1 W, 5%, comp	047-512	L8	Choke, rf plate, 2m	026-017
R22	Resistor, 100 Ω , 2W, 10%, comp	044-101		Coil, output link, 2m	011-147
R23	Resistor, 500 Ω , 5W, 5%, WW	049-108			
R24	Resistor, 2.2K, 2W, 10%, comp	044-222	T1	Transformer, plate	271-107
R25	Resistor, 18 Ω , 2W, 10% comp	044-180	T2	Transformer, bias and fil.	271-108
R26	Resistor, 100 Ω , 2W, 10%, comp	044-101	CR1	Diode, 400 piv, 500 ma	474-010
R27	Resistor, 10K, 1W, 10%, comp	043-103	CR2-CR25	Diode, 800 piv, 750 ma	474-029
R28	Resistor, 51K, 1W, 5%, comp	047-513	CR27	Diode, 1N34A	475-001
R29	Resistor, 4K, 100W, 10%, WW	049-089	V1	Electron tube, 0B2	472-032
R30	Resistor, 100K, 2W, 10%, comp	044-104	V2	Electron tube, 0B2	472-032
R31	Resistor, 100K, 2W, 10%, comp	044-104	V3	Electron tube, 0A2	472-049
R32	Resistor, 100K, 2W, 10%, comp	044-104	V4	Electron tube, Tetrode	472-537
R33	Resistor, 100K, 2W, 10%, comp	044-104	DS1	Lamp, pilot	471-025
R34	Resistor, 100K, 2W, 10%, comp	044-104	DS2	Lamp, pilot	471-025
			S1	Switch, toggle DPST	172-016
C1	Capacitor, disc, .0047 mfd, 600v	391-472	S2	Switch, toggle DPST	172-016
C2	Capacitor, disc, .0047 mfd, 600v	391-472	S3	Switch, toggle DPST	172-016
C3	Capacitor, disc, .0047 mfd, 600v	391-472	S4	Wafer switch, 2 pole - 5 position	171-151
C4	Capacitor, disc, .0047 mfd, 600v	391-472	M1	Meter	112-050
C5	Capacitor, electrolytic, 40 mfd, 250v	073-053			
C6	Capacitor, electrolytic, 40 mfd, 250v	073-053	F1	Fuse, 15A, 3AG Slo-Blo	482-029
C7	Capacitor, disc, .01 mfd, 600v	391-103P		Fuse Holder	337-014
C8	Capacitor, disc, .001 mfd, 3 kv	394-102P		Lamp socket & assembly, green	351-025
C9	Not Required			Lamp socket & assembly, red	351-024
C10	Capacitor, disc, .01 mfd, 600v	391-103P		Tube socket chimney	341-543
C11	Capacitor, disc, .01 mfd, 600v	391-103P		Motor, blower	115-007
C12	Capacitor, disc, .01 mfd, 600v	391-103P		Impeller, blower	115-008
C13	Capacitor, disc, .01 mfd, 600v	391-103P		Housing, blower	115-009
C14	Capacitor, feedthru, 2500 pf, 1500v	077-031		Knob, with index (four used)	215-065
C15	Capacitor, feedthru, 2500 pf, 1500v	077-031			
C16	Capacitor, variable air	074-156			
C17	Capacitor, mica, 150 pf, 5%, 1 kv	434-151 J			
C18	Capacitor, feedthru, 2500 pf, 1500v	077-031			
C19	Capacitor, feedthru, 2500 pf, 1500v	077-031			
C20	Capacitor, ceramic, .0001 mfd N750	077-032			

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SCHEMATIC SYMBOL	DESCRIPTION	GONSET PART NUMBER	SCHEMATIC SYMBOL	DESCRIPTION	GONSET PART NUMBER
R1	Resistor, 1000 Ω , 10W, 10% WW	049-082	C24	Capacitor, feedthru, 2500 pf, 1500v	077-031
R2	Resistor, 1000 Ω , 10W, 10% WW	049-082	C25	Capacitor, variable air	074-163
R3	Resistor, 10 Ω , 10W, 10% WW	049-065	C26	Capacitor, variable air	074-161
R4	Resistor, 10 Ω , 10W, 10% WW	049-065	C27	Capacitor, variable air	074-162
R5	Resistor, 47 Ω , 1W, 10% comp	043-470	C28	Capacitor, electrolytic, 100 mfd 450v	073-077
R6	Resistor, 470 Ω , 2W, 10% comp	044-471	C29	Capacitor, electrolytic, 100 mfd 450v	073-077
R7	Resistor, 2000 Ω , 10W, 5% WW	049-111	C30	Capacitor, electrolytic, 100 mfd 450v	073-077
R8	Potentiometer, 2000 Ω , 4W, WW	052-144	C31	Capacitor, electrolytic, 100 mfd 450v	073-077
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R11	Not Required		L1	Choke, TVI filter	027-092
R12	Resistor, 25 K, 50W, 5% WW	049-109	L2	Choke, TVI filter	027-092
R13	Resistor, 100 K, 20W, 5% WW	049-110	L3	Choke, filter	274-012
R14	Resistor, 15 K, 25W, 10% WW	049-062	L4	Coil, input link, 6m	011-148
R15	Resistor, 10 Ω , 10W, 10% WW	049-065	L5	Choke, 8.2 uh, rf grid 6m	027-079
R16	Resistor, 100 Ω , 2W, 10% comp	044-101	L6	Choke	274-028
R17	Resistor, 3500 Ω , 10W, 5% WW	049-112	L7	Coil, grid 6m	011-149
R18	Resistor, 100 K, 2 W, 10% comp	044-104	L8	Choke, rf plate 6m	026-019
R19	Resistor, 15 K, 1W, 10% comp	043-153	L9	Coil, plate tank 6m	011-150
R20	Resistor, 33 K, 1W, 10% comp	043-333			
R21	Resistor, 5100 Ω , 1W, 5% comp	047-512	T1	Transformer, plate	271-107
R22	Resistor, 100 Ω , 2W, 10% comp	044-101	T2	Transformer, bias and fil	271-108
R23	Resistor, 500 Ω , 5W, 5% WW	049-108			
R24	Resistor, 2.2 K, 2W, 10% comp	044-222	CR1	Diode, 400 piv, 500 ma	474-010
R25	Resistor, 18 Ω , 2W, 10% comp	044-180	CR2-CR25	Diode, 800 piv, 750 ma	474-029
R26	Resistor, 100 Ω , 2W, 10% comp	044-101	CR27	Diode, 1N34A	475-001
R27	Resistor, 10 K, 1W, 10% comp	043-103			
R28	Resistor, 51 K, 1W, 5% comp	047-513	V1	Electron tube, 0B2	472-032
R29	Resistor, 4 K, 100W, 10% WW	049-089	V2	Electron tube, 0B2	472-032
R30	Resistor, 100 K, 2W, 10% comp	044-104	V3	Electron tube, 0A2	472-049
R31	Resistor, 100 K, 2W, 10% comp	044-104	V4	Electron tube, tetrode	472-537
R32	Resistor, 100 K, 2W, 10% comp	044-104			
R33	Resistor, 100 K, 2W, 10% comp	044-104	DS1	Lamp, pilot	471-025
R34	Resistor, 100 K, 2W, 10% comp	044-104	DS2	Lamp, pilot	471-025
C1	Capacitor, disc, .0047 mfd, 600v	391-472	S1	Switch, toggle DPST	172-016
C2	Capacitor, disc, .0047 mfd, 600v	391-472	S2	Switch, toggle DPST	172-016
C3	Capacitor, disc, .0047 mfd, 600v	391-472	S3	Switch, toggle DPST	172-016
C4	Capacitor, disc, .0047 mfd, 600v	391-472	S4	Switch, wofar, 2 pole - 5 position	171-151
C5	Capacitor, electrolytic, 40 mfd, 250v	073-053			
C6	Capacitor, electrolytic, 40 mfd, 250v	073-053	M1	Meter,	112-050
C7	Capacitor, disc, .01 mfd, 600v	391-103P			
C8	Capacitor, disc, .001 mfd, 3 kv	394-102P	F1	Fuse, 15A, 3AG, SLO-BLO	482-029
C9	Not Required			Fuse holder	337-014
C10	Capacitor, disc, .01 mfd, 600v	391-103P			
C11	Capacitor, disc, .01 mfd, 600v	391-103P		Lamp socket & assembly - red	351-024
C12	Capacitor, disc, .01 mfd, 600v	391-103P		Lamp socket & assembly - green	351-025
C13	Capacitor, disc, .01 mfd, 600v	391-103P			
C14	Capacitor, feedthru, 2500 pf, 1500v	077-031		Motor, blower	115-007
C15	Capacitor, feedthru, 2500 pf, 1500v	077-031		Impeller, blower	115-008
C16	Not used in this model			Housing, blower	115-009
C17	Capacitor, mica, 150 pf, 5%, 1 kv	434-151J			
C18	Capacitor, feedthru, 2500 pf, 1500v	077-031		Tube socket chimney	341-543
C19	Capacitor, feedthru, 2500 pf, 1500v	077-031			
C20	Capacitor, ceramic, .0001 mfd N750	077-032		Line cord, 3 wire with plug	696-016
C21	Capacitor, ceramic, .0001 mfd N750	077-032			
C22	Not used in this model				
C23	Not used in this model				

REVISIONS				
REV	DESCRIPTION	DATE	APPROVAL	INSTR



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ON FRONT & PLACE DEC 3 PLACE DEC	ORIGINAL DATE OF DRAWING	GONSET R.F. AMPLIFIER MODEL 903A 2 METERS MODEL 913A 6 METERS	GONSET ANAHEIM, CALIFORNIA
DR. BY: <i>[Signature]</i>	CHKD. BY: <i>[Signature]</i>		
DATE: <i>[Date]</i>	ENGR. <i>[Signature]</i>	D	510-134
NEXT ASSEMBLY USED ON	SCALE	CODE	SHEET OF