

INSTRUCTION MANUAL

**GONSET**  
**G-66 AND G-66B**  
**MOBILE RECEIVER**

801 S. MAIN ST.



BURBANK, CALIF.

# **GONSET**

## **G-66 AND G-66B**

### **MOBILE RECEIVER**

#### *Warranty Policy*

The Gonset Company warrants its equipment, when properly registered, against defects in workmanship, materials, and construction under normal use and service for a period of 90 days from the date of original purchase. Under this warranty our obligation is limited to repairing or replacing any defective parts.

This warranty does 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.

On equipment employing a vibrator, all components are covered by the warranty with the exception of the vibrator itself.

This warranty is valid only when the enclosed card is properly filled in and returned within ten days from purchase date.

**DO NOT SEND EQUIPMENT TO THE FACTORY WITHOUT FIRST SECURING AUTHORIZATION TO DO SO.**

**THIS WARRANTY DOES NOT INCLUDE TRANSPORTATION COSTS TO AND FROM THE FACTORY.**

**GONSET COMPANY, INC.**  
801 SOUTH MAIN STREET  BURBANK, CALIFORNIA  
U.S. PATENT OFFICE

## TECHNICAL CHARACTERISTICS

### G-66 RECEIVER

TYPES OF RECEPTION:	AM, CW, SSB
TUNING RANGE:	.54 — 2.0 mc 3.5 — 4.0 mc 7.0 — 7.3 mc 14.0 — 14.35 mc 21.0 — 21.45 mc 28.0 — 29.70 mc
SENSITIVITY:	1.5 uv maximum across 50-ohm input for signal-plus-noise to noise ratio of 10 db
SELECTIVITY:	4 kc at 6 db down
SPURIOUS (INCLUDING IMAGE) SIGNAL RESPONSE:	60 db down minimum*
INTERMEDIATE FREQUENCIES:	2050 kc, 265 kc
OUTPUT IMPEDANCES:	3.2 ohms (speaker) 2000 ohms minimum (headphones)
ANTENNA INPUT:	unbalanced to match 50-ohm coaxial cable (BC band unbalanced to match standard BC whip ant.)
POWER REQUIREMENTS:	6 volts at 3 amp or 12 volts at 1.5 amp 200 volts dc at 80 ma
AUDIO OUTPUT:	3 watts maximum (8% total harmonic distortion)
WEIGHT:	8 lb
TUBE FUNCTIONS:	6DC6 r-f amp, 6U8 mixer-buffer, 6C4 local osc, 6BE6 converter, 6AU6 i-f amp, 6BJ6 i-f amp (G-66B only), 6AL5 det-avc-ant, 6AW8 audio amp-bfo, 6AQ5 audio output, OB2 voltage regulator.

\* Spurious signal response on BC band may be greater than value given when extremely strong signals of certain frequency combinations are simultaneously present at antenna input.

### NO. 3069 POWER SUPPLY

INPUT VOLTAGE:	115 volts ac at 40 watts or; (No. 3069-6) 6 volts dc at 7 amp (No. 3069-12) 12 volts dc at 4 amp
OUTPUT VOLTAGE:	200 volts dc, nominal, at 100 ma
WEIGHT:	6½ lb

### NO. 3098 POWER SUPPLY

INPUT VOLTAGE:	12 volts dc at 5 amp
OUTPUT VOLTAGE:	200 volts dc, nominal, at 120 ma
WEIGHT:	4½ lb

## GENERAL DESCRIPTION

The GONSET G-66 receiver is a double-conversion superheterodyne intended primarily for the mobile reception of signals in the 10 through 160-meter amateur bands. Provision for the reception of a-m broadcast signals is included, thus eliminating the need for a separate receiver for broadcast reception. The receiver features a built-in S meter, highly effective noise limiting, and excellent frequency stability. The illuminated slide-rule tuning dial provides easy readability under mobile operating conditions.

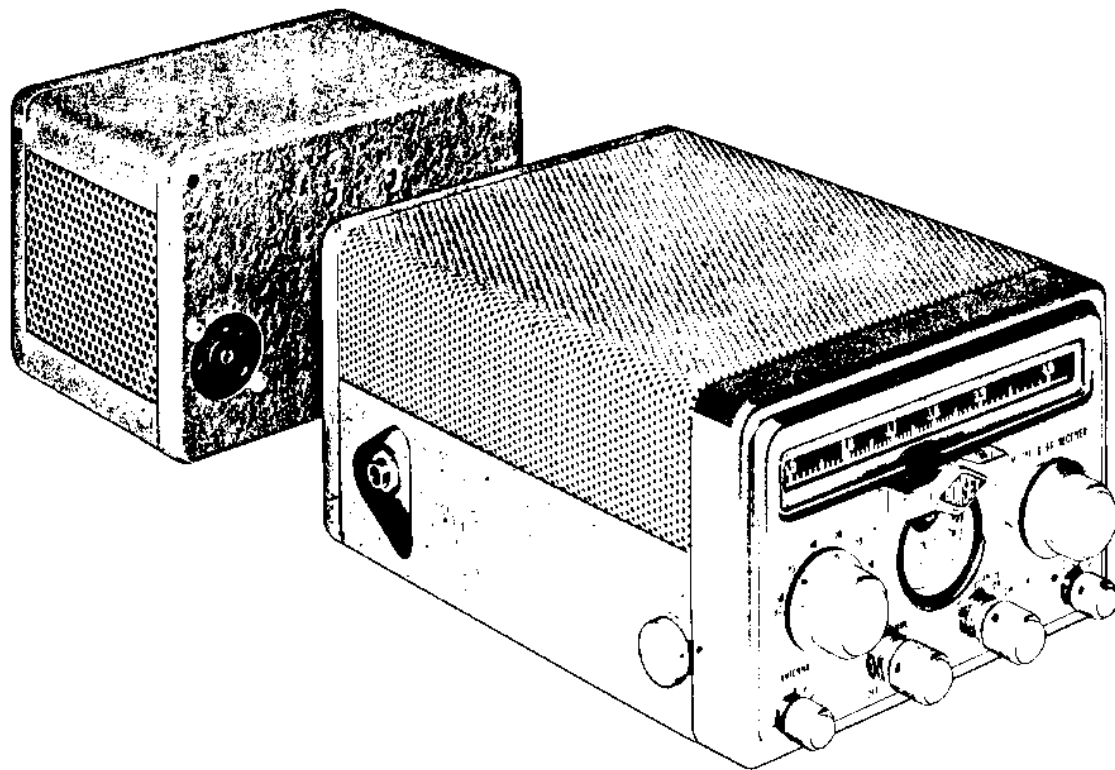
Although designed mainly for mobile applications, the G-66 receiver may also be used for fixed-station or emergency-portable operation.

The G-66B receiver incorporates an additional stage of i-f amplification which improves the noise-limiting action on the higher-frequency bands. In addition, a slight change in the a-v-c voltage distribu-

tion to the r-f amplifier provides a slightly better signal to noise ratio for weak signals.

The GONSET No. 3069 universal power supply, an accessory to the G-66 receiver, permits operation from either a low-voltage d-c power source or from 115 volts a-c. The power supply may be attached directly to the rear of the receiver or connected through a 4-ft patch cord which is supplied. A speaker is contained in this power-supply unit and connections are provided to operate the receiver through either this speaker or a "custom" dash-mounted speaker as desired.

The GONSET No. 3098 power supply is also available for use with the G-66 receiver. Operating only from a 12-volt d-c power source, it may be attached directly to the receiver case or patch-cord connected. No speaker is included in this unit.



## INSTALLATION

### MOUNTING

Brackets and other hardware are furnished for mounting the receiver under the dashboard of an average automobile. Other mounting arrangements are, of course, possible. Assuming that the No. 3069 or 3098 power supply is used, the simplest installation is afforded when it is attached directly to the rear of the receiver case. This method is recommended when space permits. Otherwise, the power supply may be attached to the automobile firewall with the mounting hardware furnished and connection made to the receiver with the 4-ft. patch cord supplied.

Mounting details for a typical installation are given in the accompanying drawing. Some receivers are supplied with a dashboard mounting bracket of slightly different construction but installation using this type bracket is quite similar to that shown in the drawing. Since the point at which the mounting bracket attaches to the receiver will vary with different automobiles, no holes are provided in the receiver case for bracket attachment. These holes ( $\frac{7}{32}$ " ) must be drilled in the case and the bracket fastened with the binder-head screws furnished. The screws are to be inserted with the heads *inside* the case to provide adequate clearance for the receiver chassis. The chassis is then slipped into the case and secured with the three bottom bolts.

When a slotted dashboard-mounting bracket is supplied, fasten the binder-head screws to the case with the nuts provided and then secure the case to the bracket with the supplied wing nuts. This type bracket permits slightly easier removal of the receiver for servicing.

### ANTENNA CONNECTIONS

Best performance is obtained when a whip antenna resonated to the band in operation is used. The antenna connects through RG-58/U coaxial cable to the *lower* antenna receptacle located at the left rear of the receiver. When operation on all bands is desired using a standard 8-ft. whip *without* a loading coil, the best compromise impedance match for all the various bands is obtained by using a connecting-cable length of 22 ft. If a transmitter is installed in the automobile, the antenna connection will be made through the customary T/R relay.

Best broadcast-band operation requires the use of a separate BC antenna which may be a standard side-cowl whip. This connects through the normal coax cable to the receptacle just above the high-frequency antenna connector. The two receptacles are coupled by an adjustable capacitor which is accessible through a hole located midway between the two antenna inputs. When a separate BC antenna is used, the capacitor is adjusted for minimum capacity (4 to 5 turns counterclockwise from tight position) which effectively removes it from the circuit. If desired, the receiver may be operated on the broadcast band using

the high-frequency antenna alone. In this case the capacitor is adjusted for optimum BC-band performance. This type of operation has the disadvantage that changes in the high-frequency antenna loading coil will affect broadcast-band performance.

### SPEAKER CONNECTIONS

A speaker is provided as part of the No. 3069 power supply and connections at the rear of this power supply provide for the use of this speaker or an external speaker as desired. Removing the strap between terminals 4 and 5 of the terminal strip at the rear of the power supply disconnects the internal speaker. The external speaker is then connected to terminals 3 and 4. If an auto radio is already installed and it is desired to use the auto-radio speaker, terminals 3 and 4 may be connected directly to the voice coil of this speaker. A slight loss in audio power output and frequency response from both receivers will usually result, however. A better arrangement is to connect a switch to transfer the voice coil to either receiver as required.

The No. 3098 power supply contains no speaker and, when using this type supply, a separate speaker is required. Connect the speaker to terminals 4 and 5 of the power-supply terminal strip.

### POWER CONNECTIONS

It is strongly recommended that the power-input lead from the power supply be connected directly to the "hot" terminal of the automobile battery. If it is found necessary to extend the power-input lead, use at least No. 14 stranded wire for 6-volt installations and No. 18 wire for 12 volts. If these precautions are not observed, frequency stability of the receiver on the higher-frequency bands will be impaired due to the wide fluctuation in heater voltage as the automobile generator operates. This instability is particularly noticeable on SSB and CW operation. If the receiver is to be used only for a-m reception, the power-input lead may be connected to the "accessory" terminal under the dash of the automobile.

The No. 3069 power supply operates from either an auto battery or from a 115-volt a-c source. Necessary circuit switching is made automatically when the appropriate cord is plugged in. In addition, the power supply may be converted from 6 to 12-volt operation by installing a vibrator of the correct voltage rating, installing a capacitor, modifying the power-input plug and switching two connections on the terminal strip located just to the rear of the vibrator socket on the underside of the power-supply chassis. These changes are detailed on the power-supply schematic diagram.

The No. 3098 power supply operates only from a 12-volt d-c source and conversion to another voltage source is not possible. A 6-volt model of this power supply is available on special order.

If a power supply other than the No. 3069 or 3098 is used it must be well filtered both for ripple and r-f hash and be capable of delivering 190 to 220 volts at 80 ma under continuous-service conditions. The output filter capacitor must be at least 30 mfd to provide a sufficiently low impedance audio return path. A smaller capacitor may cause audio feedback within the receiver.

#### MUTING

Provisions are made for muting the receiver during transmitting periods. By removing the strap between terminals 1 and 2 of the power-supply terminal strip and connecting these terminals to contacts on the T/R relay, plate-supply voltage to the receiver is interrupted during transmission. Use well-insulated wire for these leads and make certain that the connections at the terminal strip do not short to the power-supply case. Also be sure to replace the phenolic safety cover over the terminal strip after connections are made. The T/R relay contacts used for muting must be capable of breaking 200 volts at 100 ma. If necessary, a spark arresstor consisting of a 0.1 mfd capacitor in series with a 270-ohm resistor may be connected across the relay contacts to suppress sparking.

This muting method effects a considerable saving in battery power while transmitting. However, it will be found that the receiver local oscillator drifts slightly between receiving periods since the oscillator tube cools during the time when plate voltage is

removed. The drift is noticeable only when receiving SSB and CW signals on the high-frequency bands. If a considerable amount of this type of reception is planned, an alternate muting method is advisable. Connect terminals 3 and 4 of the power-supply terminal strip to T/R relay contacts that *make* during transmission. Do not remove the strap between terminals 1 and 2. This method shorts the speaker voice coil during transmission and is very effective provided that fairly heavy wire is used for the connections and the total length is not excessive.

#### TRANSMITTER FREQUENCY SPOTTING

The high voltage available at terminal 1 of the power-supply terminal strip may be used to operate a transmitter VFO through a "spot" switch if desired. A maximum of 25 ma may be drawn for this purpose for short periods without harm to the power supply.

#### ELECTRICAL NOISE SUPPRESSION

The G-66 receiver contains a highly-effective noise-limiting circuit. Nonetheless, for optimum performance it is important that electrical noise generated by various parts of the automobile be suppressed to an absolute minimum. Much useful information on vehicular noise suppression is contained in *MOBILE MANUAL FOR RADIO AMATEURS*, published by ARRL, and *RADIO AMATEUR'S MOBILE HANDBOOK*, published by CQ magazine.

## OPERATION

### FUNCTION SWITCH and VOLUME CONTROL

The function switch provides for reception of phone, CW, or single-sideband signals. Noise limiting may be applied to phone signals as desired. In addition, a standby position is included to be used when automatic receiver muting is not employed.

With the switch in either of the ANL positions, a-v-c voltage is applied to the r-f and i-f amplifiers and the volume control is connected only to the audio portion of the receiver. When the switch is in CW-SSB position, the a-v-c function is removed from the circuit and the volume control controls the r-f and i-f amplifiers while the audio amplifier operates at full gain. Thus, optimum gain adjustment is obtained with a single control, a desirable feature for mobile operation.

### TUNING

Tuning is indicated by an illuminated slide-rule dial which displays only the band in use. The gear ratio to the tuning knob is unusually high to permit non-critical tuning under mobile operating conditions. For this reason the tuning knob has a "broad tuning" feel and this should not be thought of as lack of selectivity within the receiver.

The receiver is accurately calibrated before leaving the factory. Aging of components, however, may cause the calibration to drift slightly after extended use. An oscillator trimmer, controlled by the flat knob on the left side of the receiver, is provided to readjust the calibration against a transmitter crystal of known frequency or any other accurate signal source. The receiver is factory calibrated with the set-screw hole of the trimmer control knob facing directly forward and it should be left in this position except when setting the calibration to a signal of known accuracy. Due to the method in which the calibration trimmer is connected in the broadcast circuit, a slight movement of the knob has a large effect on the broadcast-band calibration. This is especially true at the high-frequency end of the dial. For this reason the calibration knob should always be returned to the factory setting (set-screw hole directly forward) when tuning the broadcast band.

### BFO ADJUSTMENT

The beat-frequency oscillator (BFO) operates with the function switch in CW-SSB position. The front-panel BFO adjustment knob is calibrated to receive SSB signals transmitting either the upper or lower sideband. With the knob in position A, upper sideband signals are received on all bands except 20 meters. On 20 meter lower-sideband signals are passed. When the knob is in position B, the opposite

sideband is received. Since these positions are only approximate settings, careful adjustment of the knob is required for good-quality SSB reception. For CW signals the BFO knob may be set near either position and adjusted for the desired pitch.

### ANTENNA TRIMMER

The antenna trimmer is effective on all bands and should be adjusted for maximum signal strength or background noise. On all bands except 10 meters, setting the antenna trimmer on a signal near the center of the tuning dial will adjust the receiver for good reception throughout the band. On 10 meters some advantage is usually gained by adjusting the trimmer to each signal as it is tuned in.

### S METER

The S meter indicates a signal increase of about 6 db for each meter division up to S9. The meter is factory adjusted to indicate "S zero" with the antenna disconnected and the antenna trimmer adjusted for maximum background noise. If desired, the no-signal reading may be readjusted by inserting an insulated alignment tool through the rubber grommet on the right-hand side of the receiver case. Do not use a metallic screwdriver for this adjustment; the S-meter adjustment is at B-plus potential. The zero adjustment on the meter face is factory set so the meter goes slightly off scale to the right when the receiver is turned off. This is normal and is required to provide accurate readings on very strong signals.

### BROADCAST-BAND OPERATION

To permit more compact construction the double-conversion feature of the receiver is retained on the broadcast band. On any receiver with an intermediate frequency higher than the received signal, certain combinations of incoming signal frequencies can cause "tweets" or whistles on some stations. Normally this condition is not troublesome and occurs only in areas where many high-powered broadcast stations are operating. If trouble of this nature is found, reduce the length of the BC antenna to a minimum consistent with adequate signal strength. If a separate BC antenna is not used, turn the antenna coupling adjustment (located between the two antenna receptacles) to the position most counter-clockwise that still allows good broadcast reception.

Best broadcast reception is obtained with the automatic noise limiter switched off since this circuit distorts the audio output to some extent. The effect is objectionable only when receiving high-quality music.

## SERVICE INSTRUCTIONS

### LUBRICATION

All mechanical parts of the receiver have been factory lubricated and further lubrication is not recommended until the need becomes obvious. The band-switch and tuning mechanisms can become stiff or erratic in operation after extended use and this may be remedied by the sparing application of Lubriplate or a similar lubricant. Clean the part thoroughly with carbon tetrachloride before applying new lubrication. An occasional cleaning of the entire chassis with a small brush or dry compressed air is advisable. Make certain that no components of the set are disturbed during this operation.

### MALFUNCTIONING

Experience has shown that nearly 90% of the causes of malfunctioning are traceable to defective tubes. Therefore, when the reason for lack of per-

formance is not immediately obvious, check all tubes before proceeding further. All component parts in the G-66 are operated well below maximum ratings and parts failures will be very infrequent.

### ALIGNMENT

Realignment of the receiver should be considered only when lack of sensitivity or selectivity is experienced and other possible causes have been eliminated.

Do not attempt alignment without the use of a well-calibrated signal generator of good quality. If possible, the signal generator should be checked against a 100-kc crystal frequency standard as each alignment frequency is set up. Use a General Cement No. GC-8606, or equivalent, alignment tool for rf-coil adjustments. A small screwdriver, preferably insulated, is required to adjust the i-f transformer cores.

## ALIGNMENT PROCEDURE

- a. Connect a VTVM to junction of R20 and terminal lug of T3. Adjust VTVM to read approximately 5 volts dc full scale.
- b. Set controls as follows:  
 ANTENNA to mid-capacity setting  
 FUNCTION switch to ANL-OFF  
 VOLUME control to ON  
 BFO to 0  
 CALIBRATION TRIMMER set-screw hole directly forward
- c. Connect signal generator through 0.001 mfd or larger blocking capacitor. Adjust generator output so that VTVM reading does not exceed 3 volts during alignment.

Step	Sig. Generator Frequency	Sig. Generator Connection	Band Switch Position	Tuning Dial Setting	Remarks
1	265 kc	6BE6, pin 7	BC-160 M	1.8 mc	Adjust T2, T3, T4, T5 for maximum output
2	2050 kc	BC Ant. Input	BC-160 M	1.8 mc	Adjust T1 for maximum output
3	2580 kc	BC Ant. Input	BC-160 M	1.8 mc	Adjust L2 for <i>minimum</i> output
4	600 kc	BC Ant. Input	BC-160 M	.6 mc	Adjust BC osc coil for maximum output
5	1800 kc	BC Ant. Input	BC-160 M	1.8 mc	Adjust C110 for maximum output
6	Repeat steps 4 and 5 until adjustments coincide				
7	800 kc See note below	BC Ant. Input	BC-160 M	.8 mc	Adjust BC mixer coil for maximum output
8	3600 kc	HF Ant. Input	80 M	3.60 mc	Adjust 80 M osc coil for maximum output
9	3950 kc	HF Ant. Input	80 M	3.95 mc	Adjust C106 for maximum output



Step	Sig. Generator Frequency	Sig. Generator Connection	Band Switch Position	Tuning Dial Setting	Remarks
10	Repeat steps 8 and 9 until adjustments coincide				
11	3800 kc	HF Ant. Input	80 M	3.80 mc	Adjust 80 M mixer and ant coils for maximum output
12	7050 kc	HF Ant. Input	40 M	7.05 mc	Adjust 40 M osc coil for maximum output
13	7250 kc	HF Ant. Input	40 M	7.25 mc	Adjust C116 for maximum output
14	Repeat steps 12 and 13 until adjustments coincide				
15	7200 kc	HF Ant. Input	40 M	7.20 mc	Adjust 40 M mixer and ant coils for maximum output
16	14050 kc	HF Ant. Input	20 M	14.05 mc	Adjust 20 M osc coil for maximum output
17	14300 kc	HF Ant. Input	20 M	14.30 mc	Adjust C117 for maximum output
18	Repeat steps 16 and 17 until adjustments coincide				
19	14250 kc	HF Ant. Input	20 M	14.25 mc	Adjust 20 M mixer and ant coils for maximum output
20	21050 kc	HF Ant. Input	15 M	21.05 mc	Adjust 15 M osc coil for maximum output
21	21400 kc	HF Ant. Input	15 M	21.40 mc	Adjust C145 for maximum output
22	Repeat steps 20 and 21 until adjustments coincide				
	21250 kc	HF Ant. Input	15 M	21.25 mc	Adjust 15 M mixer and ant coils for maximum output
24	28100 kc	HF Ant. Input	10 M	28.10 mc	Adjust 10 M osc coil for maximum output
25	29500 kc	HF Ant. Input	10 M	29.50 mc	Adjust C142 for maximum output
26	Repeat steps 24 and 25 until adjustments coincide				
27	28700 kc	HF Ant. Input	10 M	28.70 mc	Adjust 10 M mixer and ant coils for maximum output
28	Set FUNCTION switch to CW-SSB, BFO to 0. Disconnect signal generator. Adjust T6 for lowest pitch beat-oscillator hiss.				

NOTE: BC-160 M antenna coil adjustments should be made with receiver connected to BC antenna normally used. BC-160 M antenna coil contains two cores. Inner core may be reached by using small-shank end of alignment tool. Adjust both cores for maximum output on BC station in vicinity of 700 kc. If adjustment using the actual antenna is not feasible, connect signal generator through 70 mmf capacitor to BC antenna input and peak both cores with signal generator and tuning dial set to 700 kc.

### DIAL CORD REPLACEMENT

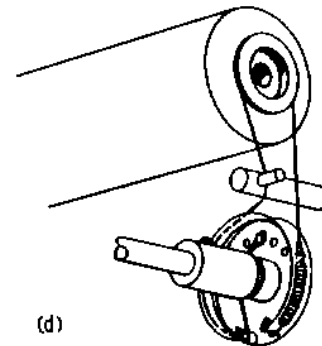
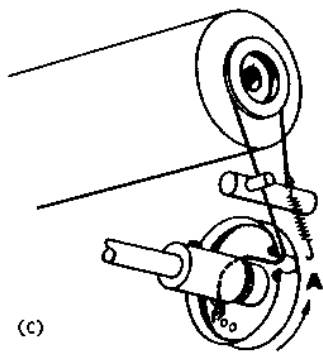
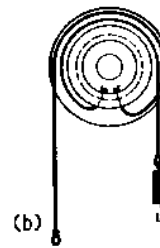
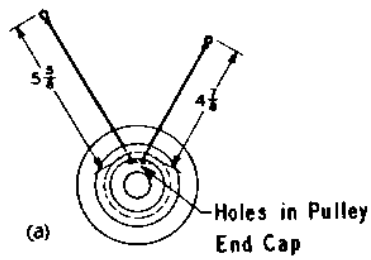
Replacement of either dial cord in the G-66 receiver requires the removal of the front panel. Remove all front-panel knobs and the bushing nuts from the VOLUME and FUNCTION controls. Then remove the screws adjacent to the bandswitch and tuning-knob shafts and carefully slip the front panel forward.

To replace the band-change cord, proceed as follows:

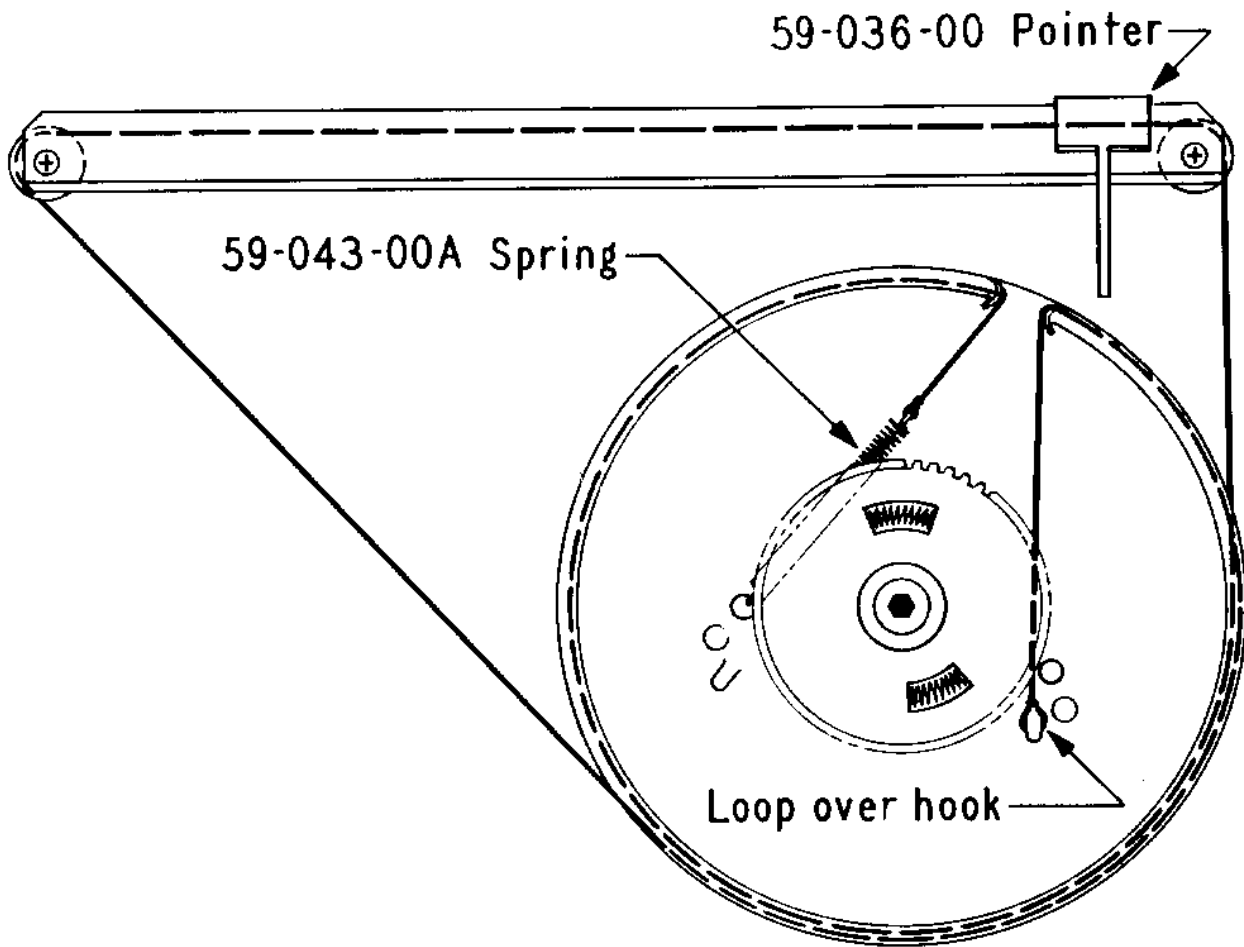
- a. Set the band-change shaft to 20 M position and loosen the pulley setscrew.
- b. Rotate the pulley until it is possible to disengage the spring. Then rotate the pulley in the opposite direction until the looped end of the cord can be unhooked.
- c. Remove the pivot screw from the left end of the tuning drum. The drum may now be dropped slightly to make the ends of the cords more accessible.
- d. Rotate the dial drum until the cord holes are below the dial-drum bracket. Remove the broken cords and replace with cords made to the lengths shown in (a) of the bandchange cord stringing diagram.
- e. Replace the dial-drum pivot screw. Wind the cords on the dial-drum pulley as shown in (b). Rotate the bandswitch-shaft pulley to the position shown in (c) and connect the looped-end cord.
- f. Rotate the bandswitch-shaft pulley clockwise and hook the spring as shown in (d).

g. With the bandswitch set to 20 M position rotate the bandswitch-shaft pulley until the 14-mc band appears in the window. Tighten the pulley setscrew and rotate the bandswitch throughout its range several times to permit the cord to

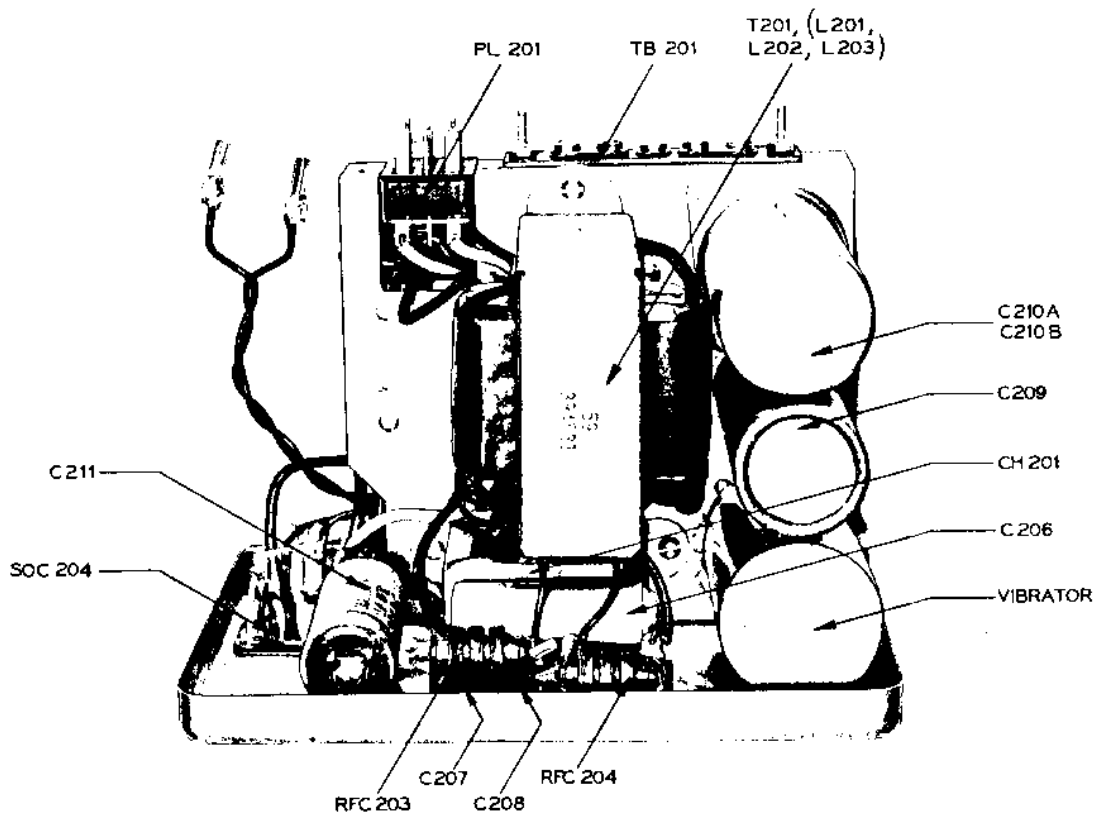
stretch and settle on the pulley. Finally, return the bandswitch to 20 M position and adjust the pulley position as required to center the tuning-drum scale in the window. Tighten the pulley setscrew securely.



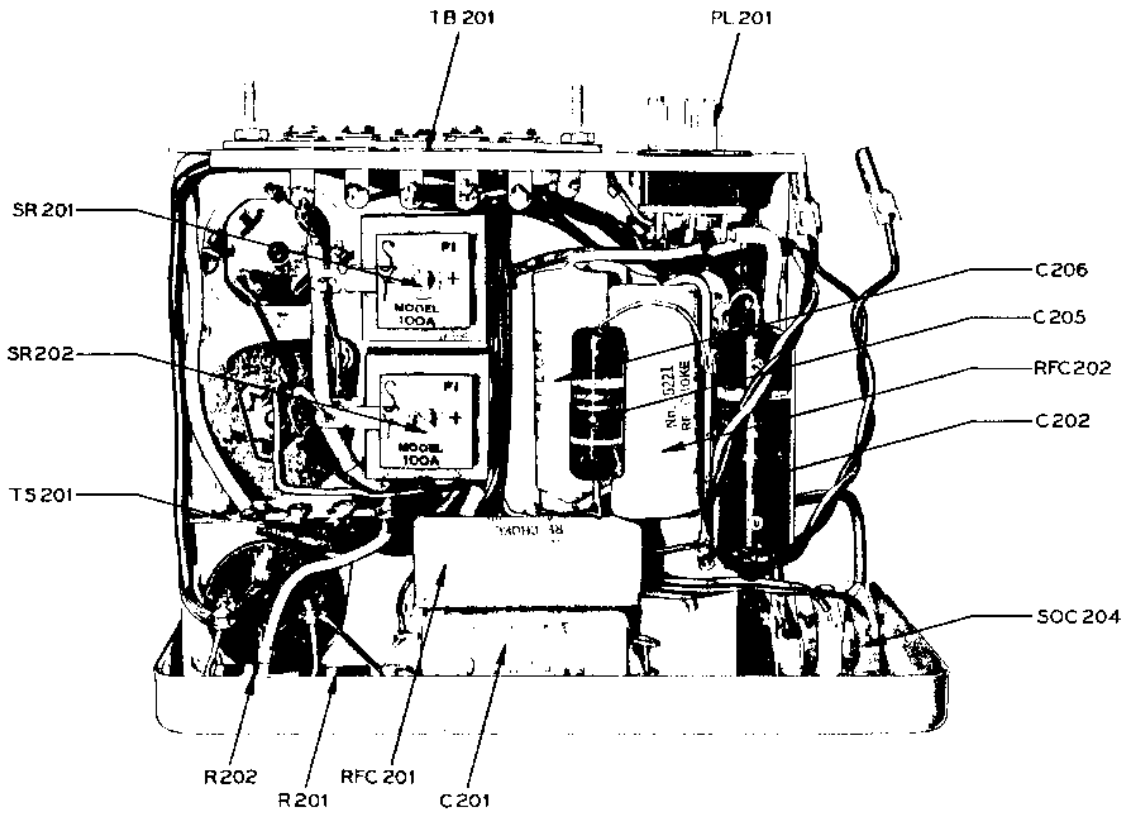
**BANDCHANGE CORD STRINGING DIAGRAM**



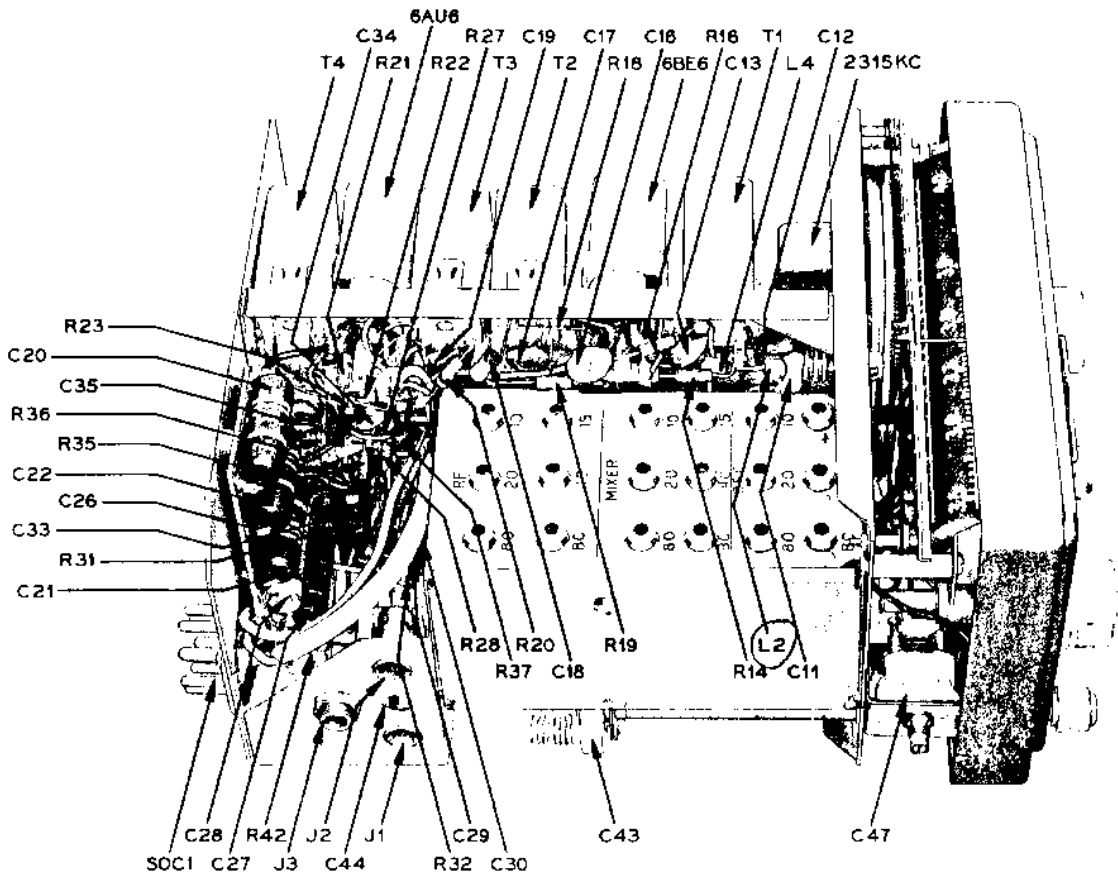
TUNING CORD STRINGING DIAGRAM



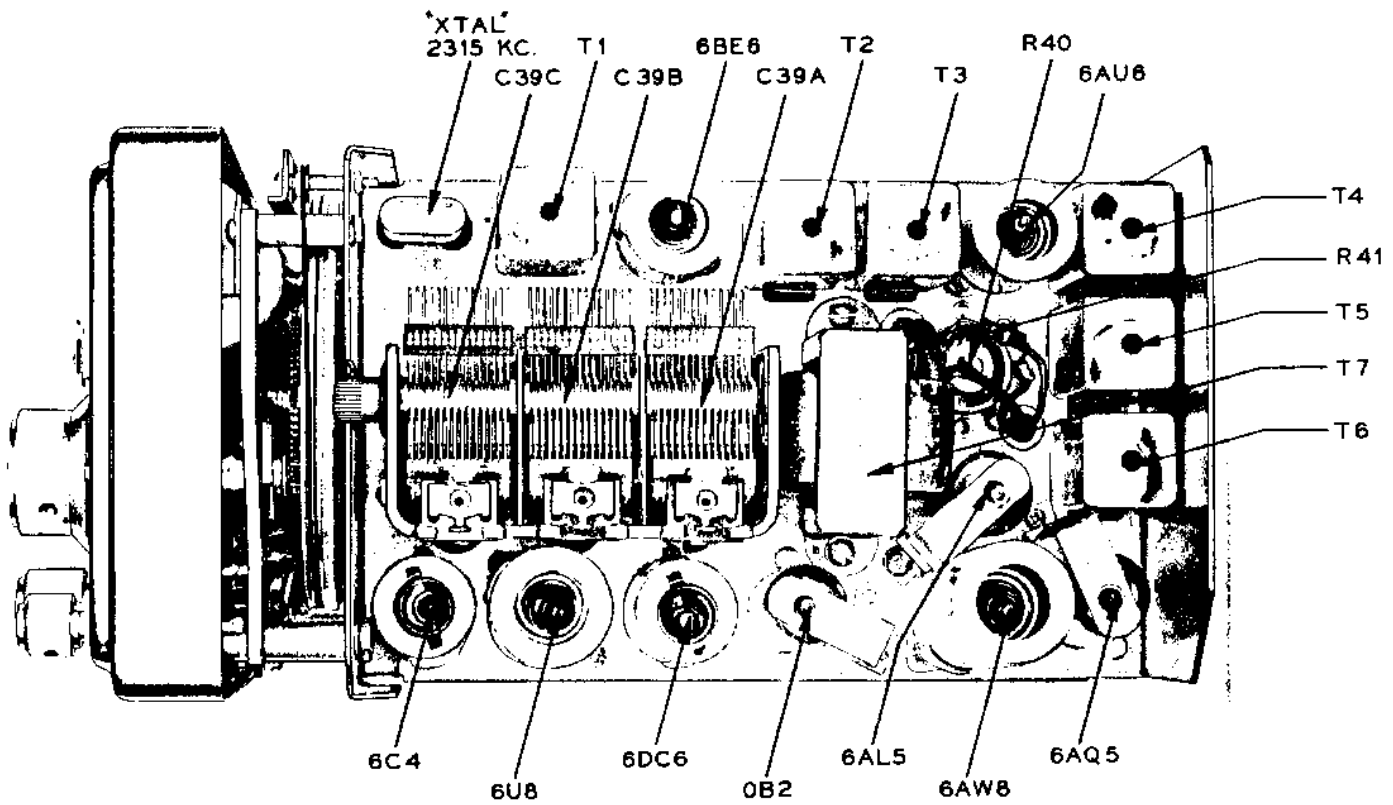
NO. 3069 POWER SUPPLY, TOP VIEW



NO. 3069 POWER SUPPLY, BOTTOM VIEW



G-66 RECEIVER, LEFT SIDE VIEW



G-66 RECEIVER, RIGHT SIDE VIEW

G-66B RECEIVER SHOWING  
LOCATION OF SECOND  
I-F AMPLIFIER STAGE



TUBE	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8	PIN 9
6DC6	-0.6	1.1	† 0	6.1AC	202	115	0		
6U8	43	-0.1	104	6.1AC	0	202	2.7	0	-3.9
6C4	104	0	6.1AC	† 0	104	-3.9	0		
6BE6	-9	0	6.1AC	† 0	195	95	-1.2		
6AU6	-0.2-1.1 -1.1**	0	† 0	6.1AC	200	135 190**	0.7 3.9**		
6AL5	0	-0.5 -2.4**	0	3.8AC	-0.2 -2.4**	0	-0.7 -4.0**		
6AW8	0	-0.7	70	0	6.1AC	0	*-5.2	* 26	* 72
6AQ5	0	12	† 0	6.1AC	200	210	0		
0B2	105	0	0	0	105	0	0		
** 6BH6	-1.0	3.1	6.1AC	† 0	200	190	0		

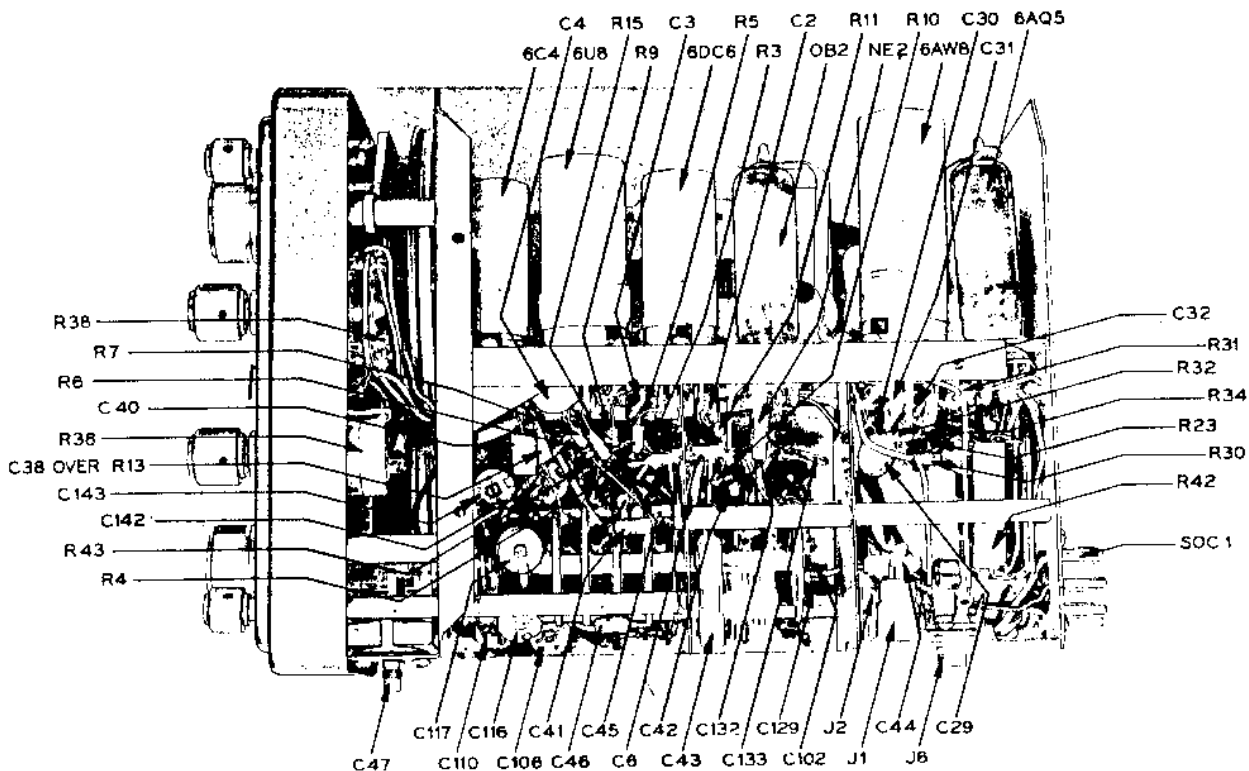
\*\*G-66B MODEL ONLY.

\*FUNCTION SWITCH ON CW-SSB

### G-66 RECEIVER, VOLTAGE MEASUREMENTS

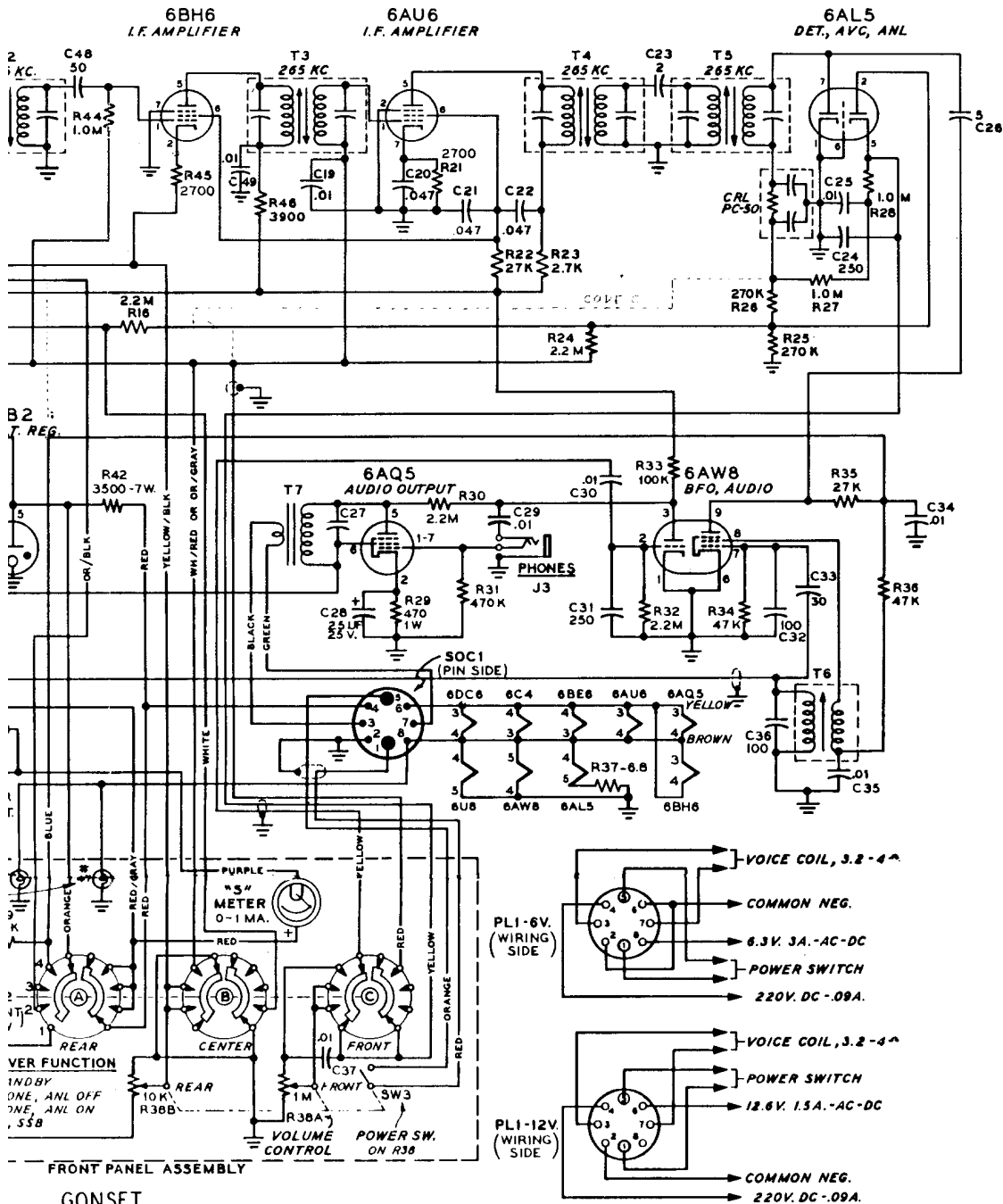
NOTE: Measurements made with DC supply of 210 volts, such as furnished by the Gonset G-66 universal power supply at 117 volts AC input. DC measurements are made with a VTVM. Function switch at "ANL-ON" position except where the asterisk is indicated, in which case the switch is at "CW-SSB". Bandswitch is set to 10 meters, dial at 29 mc, no antenna.

†With 12 volt operation, these points will measure 12 volts DC.



G-66B RECEIVER, BOTTOM VIEW





**GONSET  
B MOBILE RECEIVER**

**C**, Fig. 1  
CODE

**NOTE: PLUG CONNECTIONS SHOWN ABOVE ARE FOR USE WITH POWER SUPPLIES OTHER THAN GONSET G66**  
**NOTE: ALL RED WIRES ARE B\***

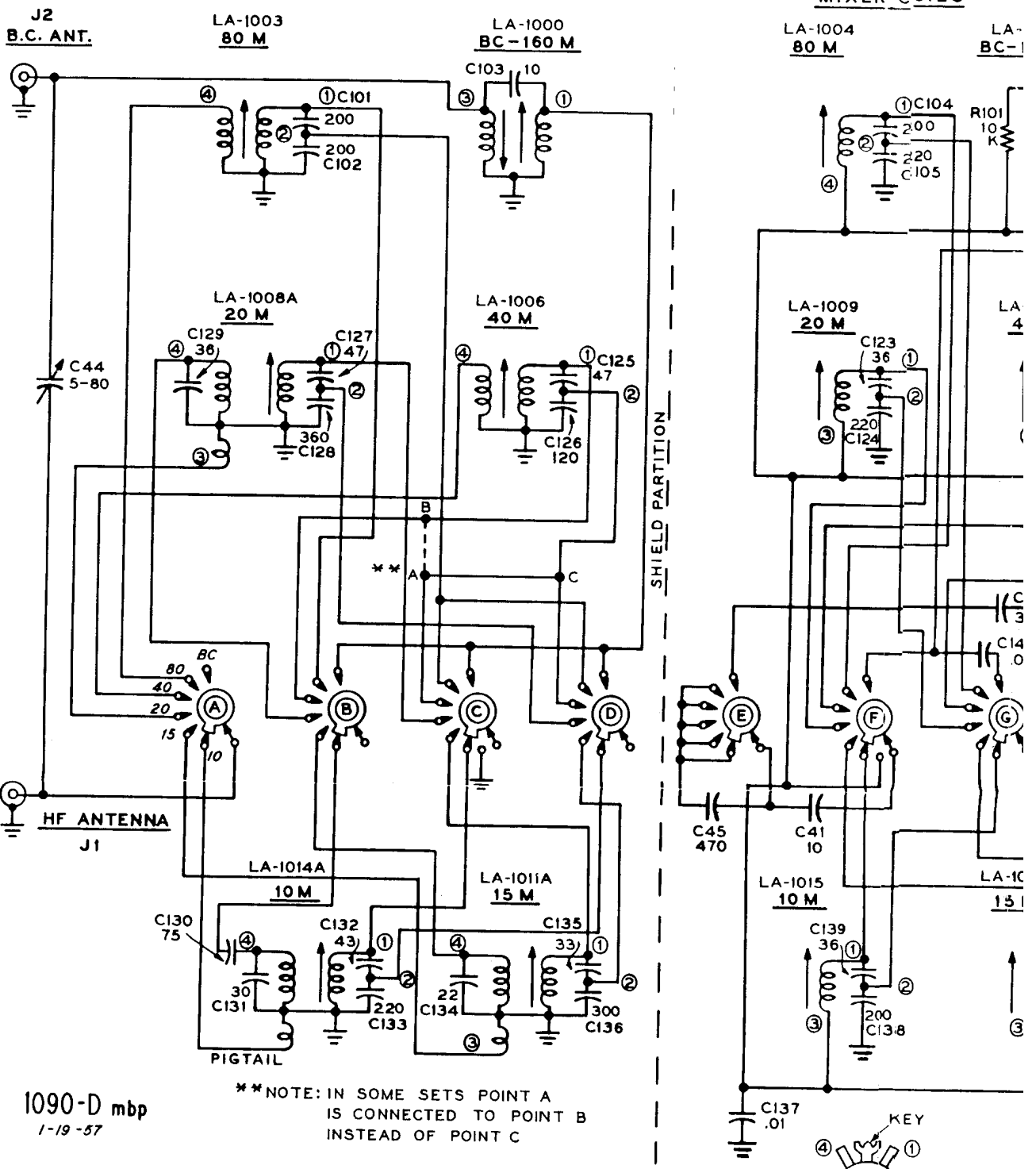
- R33 100K 1/2 watt
- R34 47K 1/2 watt
- R35 27K 1/2 watt
- R36 47K 1/2 watt
- R37 6.8 ohm 1 watt, Comp. or Wire-wound
- R38 1.0 megohm Volume Control, Special
- R38B 10K
- R39 18K 1/2 watt
- R40 30 ohm Variable, Wire-wound
- R41 Deleted
- R42 3.3K 7 watt
- R43 1000 ohm 1/2 watt
- \*\*R44 1.0 megohm 1/2 watt
- \*\*R45 2700 ohm 1/2 watt
- \*\*R46 3.9K 1/2 watt
- \*\*R47 2.2 megohm 1/2 watt

- T1 2050 KC. I-F Transformer, Special
- T2 265 KC. I-F Transformer, Special
- T3 265 KC. I-F Transformer, Special
- T4 265 KC. I-F Transformer, Special
- T5 265 KC. I-F Transformer, Special
- T6 265 KC. I-F Transformer, Special
- T7 265 KC. I-F Transformer, Special

- NOTES: ALL RESISTORS ARE COMPOSITION AND 10% TOLERANCE EXCEPT AS NOTED.**
- J1 BC Antenna Connector Jack
  - J2 SW Antenna Connector Jack
  - J3 Phone Jack, 1/2 inch size, closed circuit
  - SB1 Bandswitch, Special
  - SB2 Receiver Function Switch, Special
  - SB3 ON - OFF Switch on R38
  - SOC1 8 Prong Male Socket, CINCH # 9158
  - PL1 8 Prong Female Plug, CINCH #781-S with #720-S Shell

\* Used only in G66-A Models.  
\*\* Used only in G66-B Models.





1090-D mbp  
1-19-57

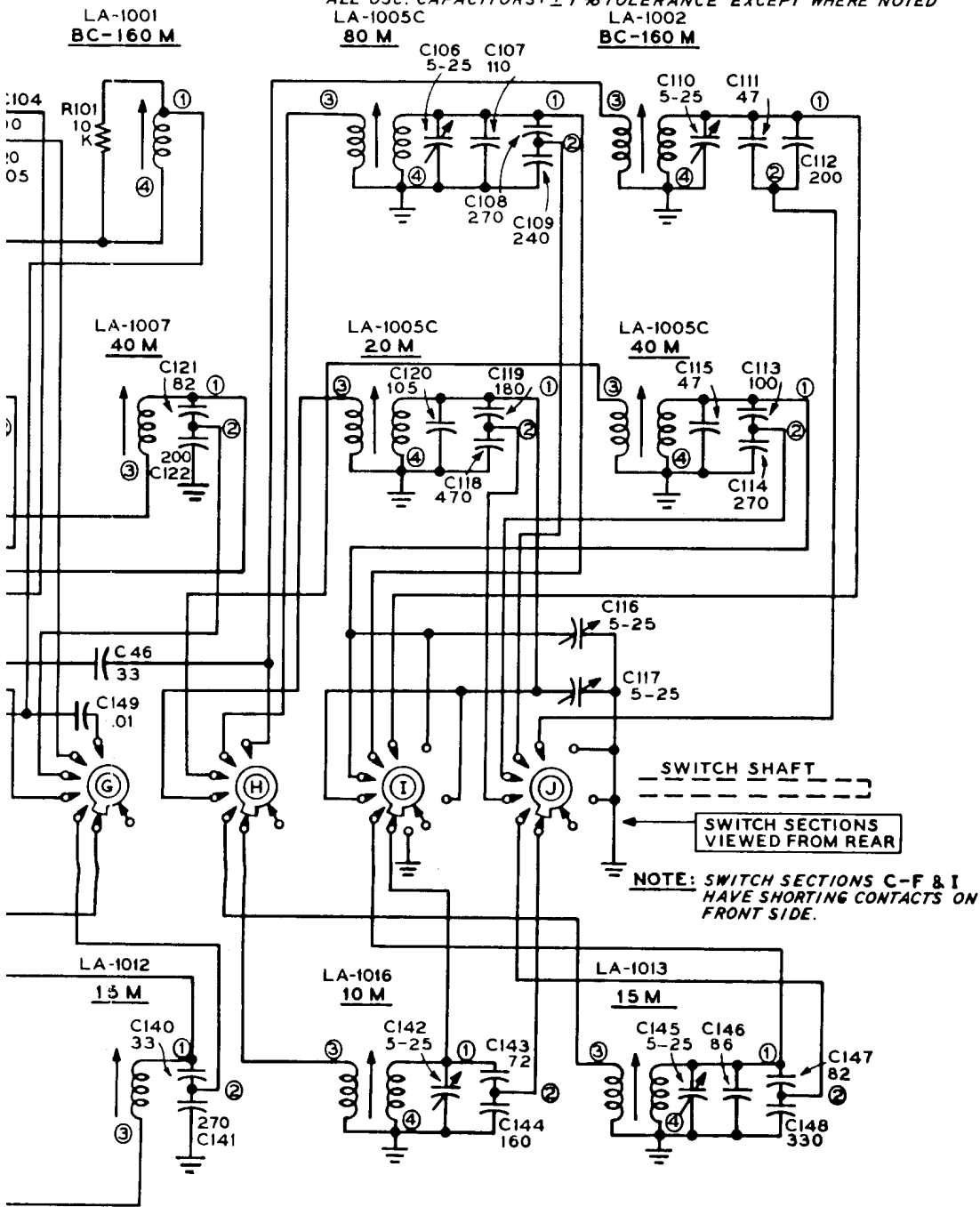
\*\* NOTE: IN SOME SETS POINT A IS CONNECTED TO POINT B INSTEAD OF POINT C

- C101 200 uuf + 5% Disc Ceramic
- C102 200 uuf + 5% Disc Ceramic
- C103 10 uuf + 10% Tubular Ceramic
- C104 200 uuf + 3% Disc Ceramic
- C105 220 uuf + 5% Disc Ceramic
- C106 5-25 uuf NPO Ceramic Trimmer
- C107 110 uuf + 1% Silver Mica DM-15
- C108 270 uuf + 1% Silver Mica DM-15
- C109 240 uuf + 1% Silver Mica DM-15
- C110 5-25 uuf NPO Ceramic Trimmer
- C111 47 uuf + 1% N330 Disc Ceramic
- C112 200 uuf + 1% Silver Mica DM-15
- C113 100 uuf + 1% Silver Mica DM-15

- C114 270 uuf + 1% Silver Mica DM-15
- C115 47 uuf + 2% N330 Disc Ceramic
- C116 5-25 uuf NPO Ceramic Trimmer
- C117 5-25 uuf NPO Ceramic Trimmer
- C118 470 uuf + 1% Silver Mica DM-15, 300 V
- C119 180 uuf + 1% Silver Mica DM-15
- C120 105 uuf + 1% N150 Silver Mica DM-15
- C121 82 uuf + 3% Disc Ceramic
- C122 200 uuf + 5% Disc Ceramic
- C123 36 uuf + 3% Disc Ceramic
- C124 220 uuf + 3% Disc Ceramic
- C125 47 uuf + 3% Disc Ceramic

- C126 120 uuf + 5% Disc Ceramic
- C127 47 uuf + 3% Disc Ceramic
- C128 360 uuf + 3% Disc Ceramic, N2100, 250 V
- C129 36 uuf + 5% Disc Ceramic
- C130 75 uuf + 5% Tubular Ceramic
- C131 30 uuf + 5% Disc Ceramic
- C132 43 uuf + 3% Disc Ceramic
- C133 220 uuf + 3% Disc Ceramic
- C134 22 uuf + 5% Disc Ceramic
- C135 33 uuf + 3% Disc Ceramic
- C136 300 uuf + 3% Disc Ceramic
- C137 .01
- C45 470
- C41 10
- C44 5-80
- C129 36
- C127 47
- C128 360
- C124 220
- C123 36
- C139 36
- C138 200
- C131 30
- C132 43
- C133 220
- C134 22
- C135 33
- C136 300
- C45 470

ALL OSC. CAPACITORS:  $\pm 1\%$  TOLERANCE EXCEPT WHERE NOTED



REAR VIEW OF COIL FORM  
SHOWING TERMINAL NUMBERING

**GONSET G66B RECEIVER**  
**SCHEMATIC COIL ASSEMBLY SECTION**

CODE **D** FIG. 2

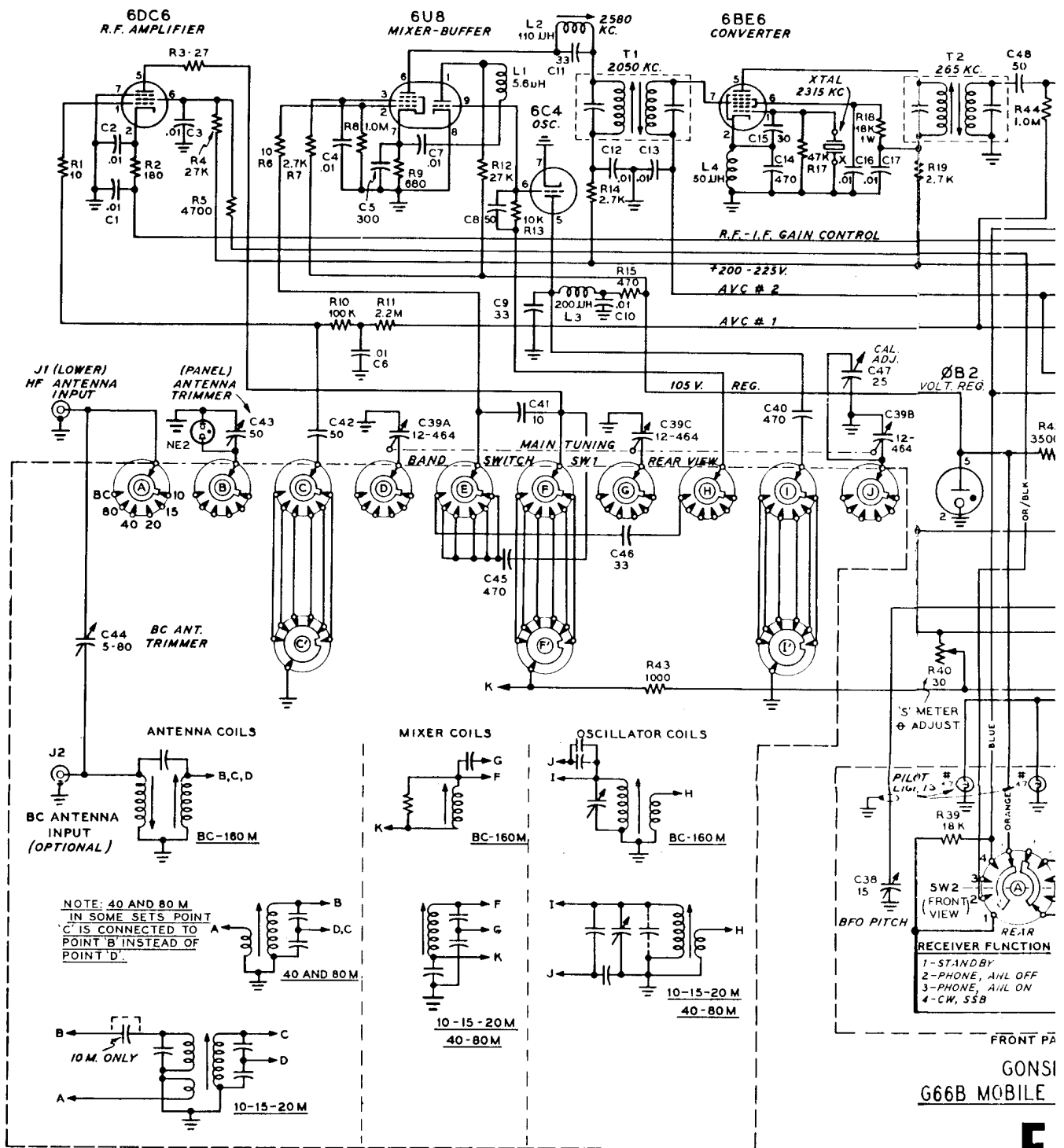
- C11 10  $\mu$ F  $\pm 10\%$  Tubular Ceramicon
- C137 .01  $\mu$ F 5W Disc Ceramicon
- C138 200  $\mu$ F  $\pm 5\%$  Disc Ceramicon
- C139 36  $\mu$ F  $\pm 3\%$  Disc Ceramicon
- C140 33  $\mu$ F  $\pm 3\%$  Disc Ceramicon
- C141 270  $\mu$ F  $\pm 3\%$  Disc Ceramicon
- C142 5-25  $\mu$ F NPO Ceramic Trimmer
- C143 72  $\mu$ F  $\pm 1\%$  NO80 Disc Ceramicon
- C144 160  $\mu$ F  $\pm 1\%$  Silver Mica DM-15
- C145 5-25  $\mu$ F NPO Ceramic Trimmer
- C146 86  $\mu$ F  $\pm 1\%$  M150 Silver Mica DM-15
- C147 82  $\mu$ F  $\pm 1\%$  Silver Mica DM-15
- C148 330  $\mu$ F  $\pm 1\%$  Silver Mica DM-15

- C119 .01  $\mu$ F 5W Disc Ceramicon
- R101 10K  $\pm 10\%$  1/2 watt

LA-1000  
THRU  
LA-1016  
GONSET SPECIAL-REORDER  
BY PART NUMBER.

NOTE 1: ALL CERAMICON CAPACITORS HAVE GP-1 CLASSIFICATION EXCEPT WHERE NOTED.

NOTE 2: ALL CAPACITORS ARE 500 V. RATING EXCEPT WHERE NOTED.



1089-E mbp  
2-9-57

FOR COMPLETE TUNER SCHEMATIC, SEE FIG. 2

- C1 .01 uF GMV 500V. Disc Ceramic
- C2 .01 uF GMV 500V. Disc Ceramic
- C3 .01 uF GMV 500V. Disc Ceramic
- C4 .01 uF GMV 500V. Disc Ceramic
- C5 300 uF ± 5% 500V. Silver Mica, DM-15
- C6 .01 uF GMV 500V. Disc Ceramic
- C7 .01 uF GMV 500V. Disc Ceramic
- C8 50 uF ± 5% 500V. Silver Mica, CM-15
- C9 33 uF ± .99 uF N330, 500V. Tubular Ceramic
- C10 .01 uF GMV 500V. Disc Ceramic
- C11 33 uF ± .99 uF N330, 500V. Tubular Ceramic
- C12 .01 uF GMV 500V. Disc Ceramic
- C13 .01 uF GMV 500V. Disc Ceramic
- C14 470 uF ± 5% 300V. Silver Mica, DM-15
- C15 30 uF ± 10% N330, 500V. Tubular Ceramic
- C16 .01 uF GMV 500V. Disc Ceramic
- C17 .01 uF GMV 500V. Disc Ceramic
- \*C18 2 uF ± .25 uF NPO, 500V. Tubular Ceramic
- C19 .01 uF GMV 500V. Disc Ceramic
- C20 .047 uF ± 20% 400V. Paper, Molded Case
- C21 .047 uF ± 20% 400V. Paper, Molded Case
- C22 .047 uF ± 20% 400V. Paper, Molded Case
- C23 2 uF ± .25 uF NPO, 500V. Tubular Ceramic
- C24 250 uF ± 10% GP2, 500V. Tubular Ceramic
- C25 .01 uF GMV 500V. Disc Ceramic
- C26 5 uF ± .5 uF GPL, 500V. Tubular Ceramic
- \*C27 .01 uF ± 10% 600V. Paper, Molded Case
- C28 25 uF 25 W.V. Electrolytic

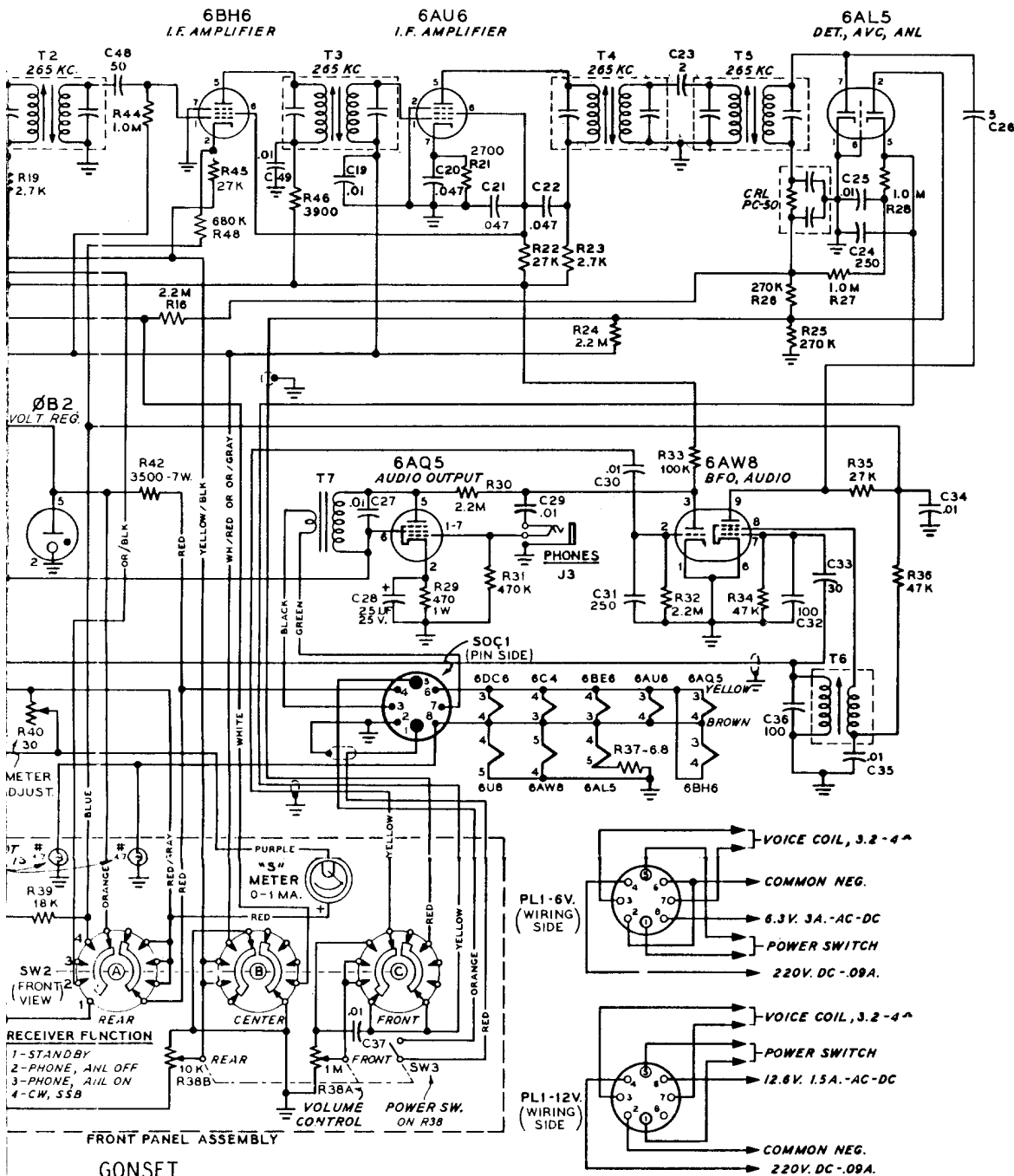
- C29 .01 uF 400V. Paper, Molded Case
- C30 .01 uF GMV 500V. Disc Ceramic
- C31 250 uF ± 10% GP2, 500V. Tubular Ceramic
- C32 100 uF ± 5% 500V. Silver Mica, DM-15
- C33 30 uF ± 5% N153, 500V. Tubular Ceramic
- C34 .01 uF GMV 500V. Disc Ceramic
- C35 .01 uF GMV 500V. Disc Ceramic
- C36 100 uF ± 5% 500V. Silver Mica, DM-15
- C37 .01 uF GMV 500V. Disc Ceramic
- C38 15 uF Variable, APC
- C39A 12 - 464 uF
- C39B 12 - 464 uF
- C39C 12 - 464 uF
- C40 470 uF ± 5% 300V. Silver Mica, CM-15
- C41 10 uF ± 1 uF GPL, 500V. Tubular Ceramic
- C42 50 uF ± 20% GPL, 500V. Tubular Ceramic
- C43 50 uF Variable, APC
- C44 5 - 80 uF Mica Compression Trimmer
- C45 470 uF ± 10% GP2, 500V. Tubular Ceramic
- C46 33 uF ± .99 uF N330, 500V. Tubular Ceramic
- C47 25 uF Variable, APC
- \*C48 50 uF ± 10% NPO, 500V. Tubular Ceramic
- \*C49 .01 uF GMV 500V. Disc Ceramic

- R5 4.7K ½ watt
- R6 10 ohm ½ watt
- R7 2.7K ½ watt
- R8 1.0 megohm ½ watt
- R9 680 ohm ½ watt
- R10 100K ½ watt
- R11 2.2 megohm ½ watt
- R12 27K ½ watt
- R13 10K ½ watt
- R14 2.7K ½ watt
- R15 470 ohm ½ watt
- R16 2.2 megohm ½ watt
- R17 47K ½ watt
- R18 18K 1 watt
- R19 2.7K ½ watt
- R20 Deleted
- R21 2700 ohm ½ watt
- R22 27K ½ watt
- R23 2.7K ½ watt
- R24 2.2 megohm ½ watt
- R25 270K ½ watt
- R26 270K ½ watt
- R27 1.0 megohm ½ watt
- R28 1.0 megohm ½ watt
- R29 470 ohm 1 watt
- R30 2.2 megohm ½ watt
- R31 470K ½ watt
- R32 2.2 megohm ½ watt

- R33 100K ½ watt
  - R34 4.7K ½ watt
  - R35 27K ½ watt
  - R36 4.7K ½ watt
  - R37 6.8 ohm 1 watt
  - R38A 1.0 megohm
  - R38B 10K
  - R39 18K ½ watt
  - R40 30 ohm Varic
  - R41 1-1ctd
  - R42 3.5K 7 watt
  - R43 1000 ohm ½ watt
  - \*\*R44 1.0 megohm ½ watt
  - \*\*R45 27K ½ watt
  - \*\*R46 3.9K ½ watt
  - \*\*R47 1ctd
  - \*\*R48 68K ½ watt
- NOTE: ALL RESISTORS 10% TOLERANCE
- J1 BC Antenna Co
  - J2 SW Antenna Co
  - J3 Phone Jack, ½
  - S1 Busswitch, ½
  - S2 Receiver Fun
  - S3 04 - OFF Swi
  - SO1 8 Prong Male
  - PL1 8 Prong Foam

GONSI  
G66B MOBILE

CODE **E**



GONSET  
G66B MOBILE RECEIVER

CODE **E**, Fig. 1

NOTE: PLUG CONNECTIONS SHOWN ABOVE ARE FOR USE WITH POWER SUPPLIES OTHER THAN GONSET G66  
NOTE: ALL RED WIRES ARE B\*

- R33 100K ½ watt
- R34 47K ½ watt
- R35 27K ½ watt
- R36 47K ½ watt
- R37 6.8 ohm 1 watt, Comp. or Wire-wound
- R38A 1.0 megohm Volume Control, Special
- R38B 10K
- R39 13K ½ watt
- R40 30 ohm Variable, Wire-wound
- R41 Deleted
- R42 3.5K 7 watt
- R43 1000 ohm ½ watt
- \*\*R44 1.0 megohm ½ watt
- \*\*R45 27K ½ watt
- \*\*R46 3.9K ½ watt
- \*\*R47 Deleted
- \*\*R48 680K ½ watt

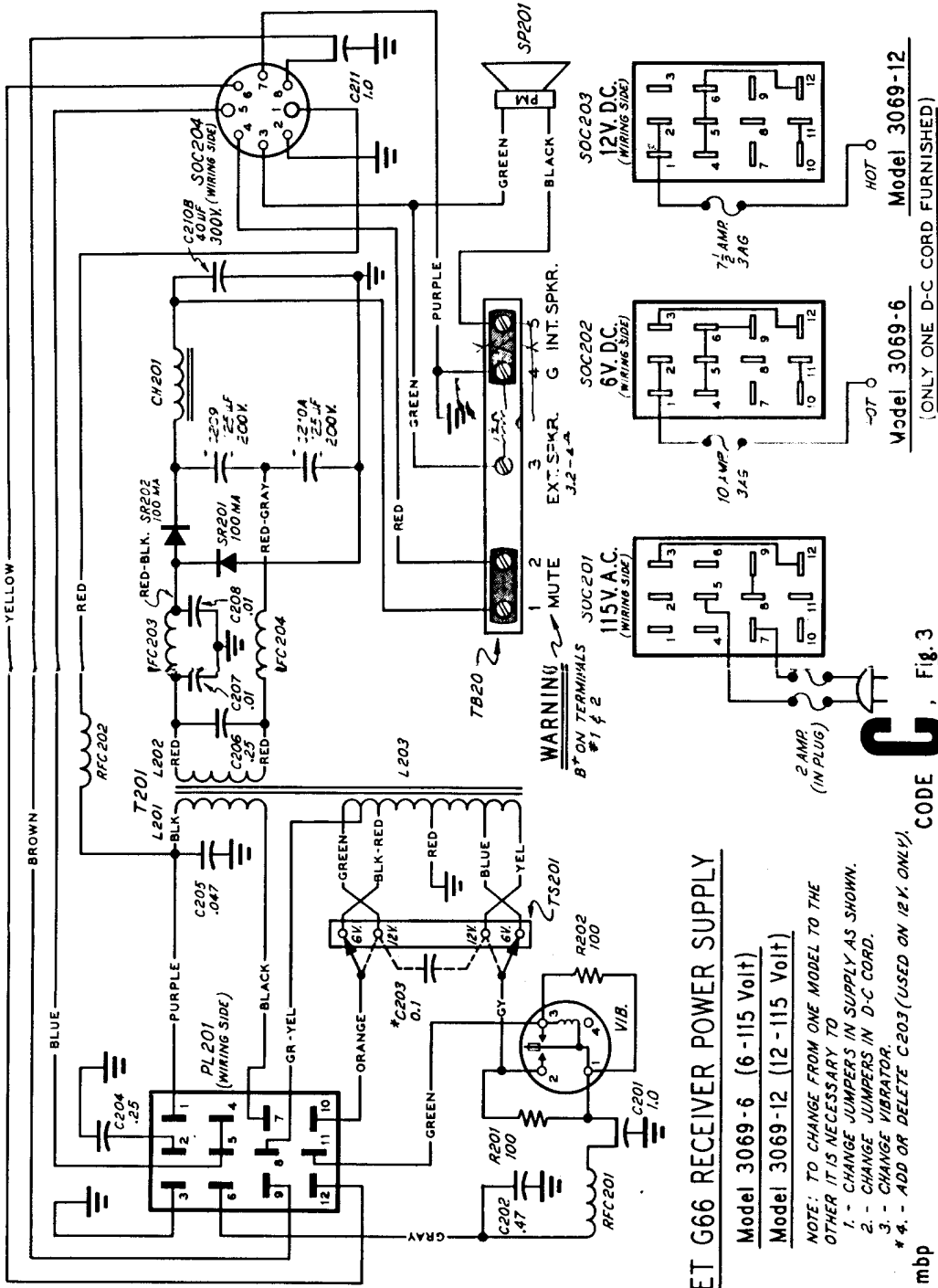
- L1 5.6 uH RFC
- L2 110 uH Permeability Tuned Trap, 2580 KC.
- L3 200 uH RFC
- L4 50 uH RFC
- T1 2050 KC. I-F Transformer, Special
- T2 265 KC. I-F Transformer, Special
- T3 265 KC. I-F Transformer, Special
- T4 265 KC. I-F Transformer, Special
- T5 265 KC. I-F Transformer, Special
- T6 265 KC. BFO Transformer, Special
- T7 Output Transformer, Foster #5L866

\* Used only in G66-A Models.  
\*\* Used only in G66-B Models.

NOTE: ALL RESISTORS ARE COMPOSITION AND 10% TOLERANCE EXCEPT AS NOTED.

# Indicates value changed from that used in receivers with a Code prior to "E".

- J1 BC Antenna Connector Jack
- J2 SW Antenna Connector Jack
- J3 Phone Jack, ½ inch size, closed circuit
- SW1 Buzswitch, Special
- SW2 Receiver Function Switch, Special
- SW3 ON - OFF Switch on R38
- SO1 8 Prong Male Socket, CINCH # 9158
- PL1 8 Prong Female Plug, CINCH #781-S with #720-S Shell



# GONSET G66 RECEIVER POWER SUPPLY

Model 3069-6 (6-115 Volt)

Model 3069-12 (12-115 Volt)

NOTE: TO CHANGE FROM ONE MODEL TO THE OTHER IT IS NECESSARY TO

1. - CHANGE JUMPERS IN SUPPLY AS SHOWN.
2. - CHANGE JUMPERS IN D-C CORD.
3. - CHANGE VIBRATOR.

\* 4. - ADD OR DELETE C203 (USED ON 12V. ONLY).

1091-C mbp

CODE

Model 3069-12

Model 3069-6

(ONLY ONE D-C CORD FURNISHED)

- |        |   |      |   |
|--------|---|------|---|
| C201   | 1.0 μF - 50V.                                 | C207 | .01 μF - 500V. Disc CERAMICON                 |
| C202   | 0.1 μF - 200V.                                | C208 | .01 μF - 500V. Disc CERAMICON                 |
| C203   | 0.1 μF - 200V. (USED ON 12V. MODEL ONLY)      | C209 | 125 μF - 200V. ELECTROLYTIC w/PAPER INS. TUBE |
| C204   | 0.25 μF - 1000V.                              |      |   |
| C205   | .01 μF - 1000V.                               |      |   |
| C206   | .01 μF - 1000V.                               |      |   |
| C207   | .01 μF - 1000V.                               |      |   |
| C208   | .01 μF - 500V. Disc CERAMICON                 |      |   |
| C209   | 125 μF - 200V. ELECTROLYTIC w/PAPER INS. TUBE |      |   |
| C210A  | 125 μF - 200V. ELECTROLYTIC, 85°C             |      |   |
| C210B  | 1.0 μF - 300V. ELECTROLYTIC, 85°C             |      |   |
| C211   | 1.0 μF - 50V.                                 |      |   |
| R201   | 100 OHM 2 WATT                                |      |   |
| R202   | 100 OHM 2 WATT                                |      |   |
| RFC201 | 4 μH, MILLER #221                             |      |   |
| RFC202 | 4 μH, MILLER #221                             |      |   |
| RFC203 | 2.1 μH, MILLER #1666                          |      |   |
| RFC204 | 2.1 μH, MILLER #1666                          |      |   |
| T201   | 5 H10 100 MA, FOSTER #F2161                   |      |   |
| T202   | 115V AC TRANSFORMER, FOSTER #F2160-A          |      |   |
| L201   | 115V AC TRANSFORMER, FOSTER #F2160-A          |      |   |
| L202   | 115V AC TRANSFORMER, FOSTER #F2160-A          |      |   |
| L203   | 115V AC TRANSFORMER, FOSTER #F2160-A          |      |   |
| PL201  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP201  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP202  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP203  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP204  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP205  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP206  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP207  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP208  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP209  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP210  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP211  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP212  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP213  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP214  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP215  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP216  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP217  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP218  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP219  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP220  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP221  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP222  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP223  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP224  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP225  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP226  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP227  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP228  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP229  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP230  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP231  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP232  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP233  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP234  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP235  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP236  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP237  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP238  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP239  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP240  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP241  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP242  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP243  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP244  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP245  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP246  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP247  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP248  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP249  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |
| SP250  | 100 MA, 130V. SARKES-TARZIAN                  |      |   |

REPLACEMENT VIBRATORS  
 6 VOLT - MALLORY #59, 5301, 5326, 5302  
 12 VOLT - MALLORY G-859, CORNELL-DUBILIER

REPLACEMENT VIBRATORS  
 6 VOLT - MALLORY #59, 5301, 5326, 5302  
 12 VOLT - MALLORY G-859, CORNELL-DUBILIER

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 6 VOLT - MALLORY #59, 5301, 5326, 5302  
 12 VOLT - MALLORY G-859, CORNELL-DUBILIER