#### INSTRUCTIONS FOR CG MODEL T-12 TONE TRANSMITTER

The CG T-12 tone transmitter is a compact, economical tone modulated unit for use with receivers equipped to operate on single channel audio tone. The transmitter has a power input of 1.5 watts and is modulated by 700 cycles at approximately 95%. The T-12 is crystal controlled to conform to FCC requirements. The circuit is such that it is virtually impossible to damage the crystal even with no antenna on the transmitter. A short antenna (about 2 inches extended above the cabinet) is ideal for bench testing and a range of 25 feet with this short antenna corresponds approximately to 1/4 mile with the full antenna.

Be certain to contact your nearest FCC field office to obtain a permit for use of this equipment. It is unlawful to operate this unit without a permit. No examination is required as this is a class "C" station operating on 27.255 Mcs.

The transmitter filament battery drain is 250 MA and the plate battery drain is 10 MA. Check the batteries after every 6 hours of operating time.

Replace the 1-1/2 volt battery when the voltage drops below 1.1 volts and the 135 volt batteries when the voltage drops below 100 volts.

### ASSEMBLY

Remove the six screws holding the back in place and slide back cover free. Make certain that the tube and the crystal are seated firmly in their respective sockets. Insert the antenna through the grommet in the top of the cabinet and thread the antenna on the screw mounted on the chassis base. Tighten antenna by turning it clockwise. Install one large D size flashlight battery in holder Ray-O-Vac 2LP or equivalent. Install two Burgess type -XX-45 or equivalent as shown in sketch. Replace the cover and install the screws to hold it secure.

### TUNING

Your T-12 transmitter comes tuned and ready for operation. No further adjustments should be necessary. The audio tone is fixed tuned and no adjustment is provided to alter it. If for any reason your transmitter does get out of tune, the following procedure applies. It should never be necessary to vary the tune screw more than a half turn in either direction.

It is possible to tune the transmitter by using a field strength meter, or by using your receiver and plate current meter.

With the field strength meter, use an insulated screw driver and adjust the screw marked TUNE until the field strength meter indicates maximum field strength. The receiver can be used in place of the field strength meter in which case the meter connected to the receiver will indicate a minimum current reading when the transmitter is in tune. Be sure the antenna is fully extended and the transmitter removed from the receiver by at least 25 feet while adjusting the TUNE screw. The OFF-ON switch must be turned ON and the Key Button depressed while tuning the transmitter.

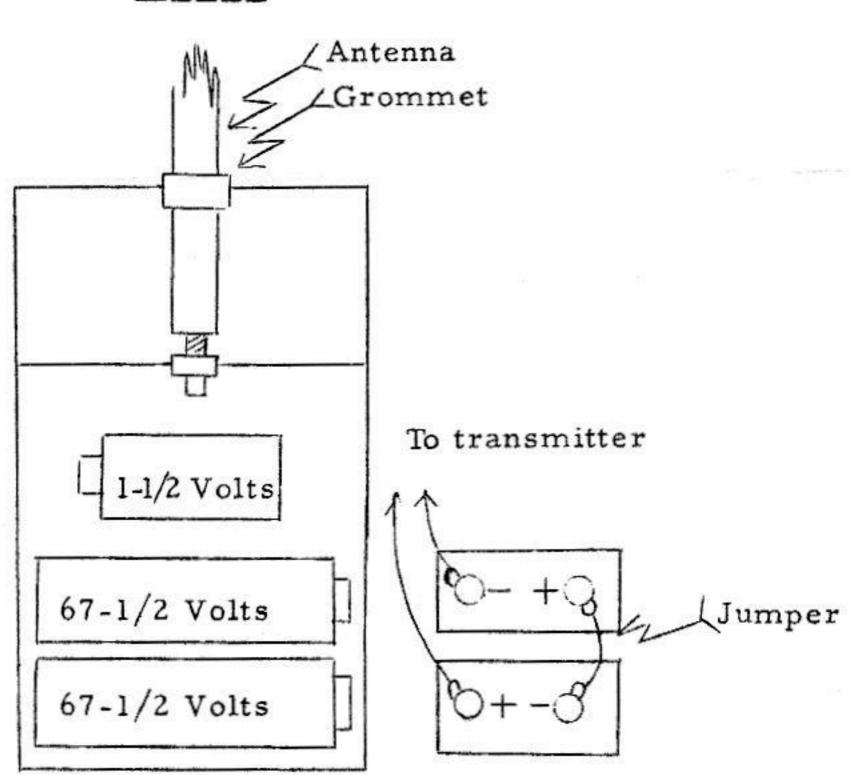
### WARRANTY

The CG T-12 transmitter is guaranteed against defective parts and workmanship for a period of 30 days from the date of purchase. If for any reason the transmitter fails to operate send it directly to the manufacturer for inspection and repair. If the transmitter has been tampered with or shows evidence of abuse the warranty is void. The tube is not guaranteed against burn-outs or breakage.

## REPAIR SERVICE

CG Electronics Corporation will repair your transmitter and check it for a minimum charge of one dollar and thirty five cents. Send the damaged transmitter to: CG Electronics Corporation, 305 Dallas Street, N. E., Albuquerque, New Mexico. Include one dollar and thirty five cents (\$1.35) with the transmitter and if for any reason the charge is to be more, you will be advised before the transmitter is repaired.

## SKETCH



# T-12 PARTS PACKAGE

Quantity	Description	Quantity	Description
1	Can and Back	1	3A4 Tube
1	Rubber Grommet 1/2"	1	100 uh RFC Coil
1	Slide Switch	1	5 m mfd Ceramic Capacitor
1	Push Button Switch	1	10 m mfd " "
1	1½ Volt Battery Box	1	50 m mfd " "
2	4-40 x 1/4 Machine Screws	2	.01 mfd " "
4	6-32 x 1" Machine Screws	1	.05 mfd " "
4	6-32 Nuts	1	10K ohm 1/3 Watt Resistor
4	6 Lockwashers	1	47K " " " "
2	#4 11	1	82K " " " "
2	4-40 Huts	1	330K " " "
6	#4 Sheet Metal Screws	1	11153 Transformer
4	3" Spacers	4"	Bare Wire
1	Printed Circuit Board	1	Battery Wire with Lug
1	Antenna Bracket (short)	1	" " Clip
1	Loading Coil	1	Battery Jumper Lead
2	7 Pin Min. Tube Sockets	1	5" Green Wire
1	Crystal Socket	1	5" White "
1	27,255 MC Crystal	1	5" Black "
1	10 m mfd Variable Cap.	2	3" " "
1	1L4 Tube		

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