

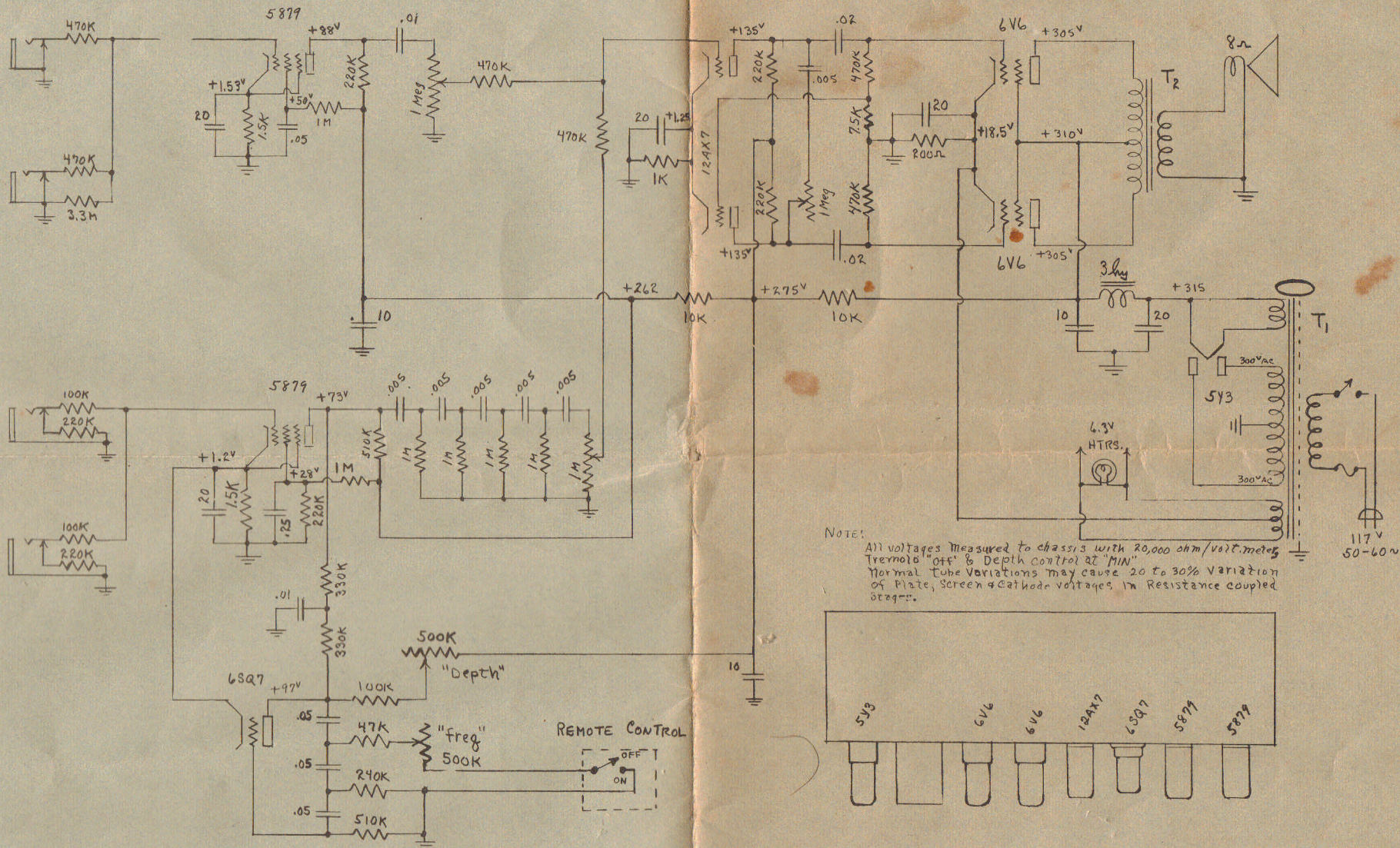
**GIBSON**

**MODEL GA-40 AMPLIFIER**

**INSTRUCTIONS**

**GIBSON INC., KALAMAZOO, MICH.**







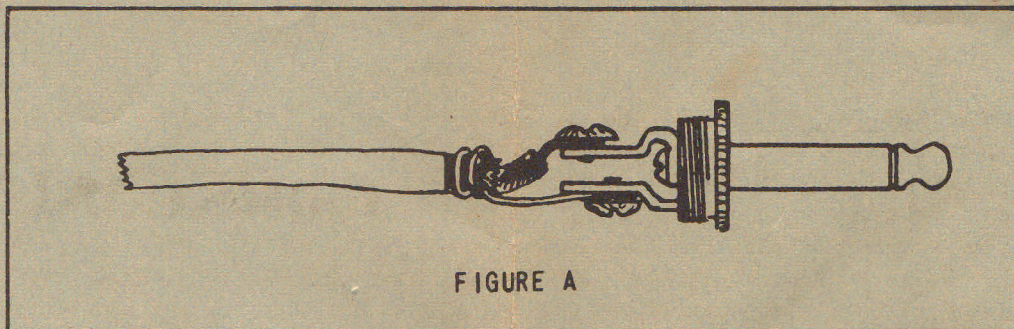


FIGURE A

#### OPERATION OF INSTRUMENT

When one or two instruments are plugged into the jacks marked "Instruments," three stages of amplification are used. The total gain of both circuits being set with the control marked "Instruments."

The two jacks marked MICROPHONE or INSTRUMENTS may also be used with any of the GIBSON electrical instruments. When used this way a careful setting of the volume control marked MICROPHONE must be made to avoid overload and consequent distortion. This adjustment can be easily made by turning the volume control on the guitar or other instrument all the way on and setting the MICROPHONE control at the point where no distortion occurs when the strings are struck with maximum force. By utilizing the MICROPHONE socket in this way two more instruments can be plugged in, making a total of four electrical instruments which may be used and blended.

The voicing control circuit for this amplifier has been designed to give the player an extremely wide range of tonal coloring.

#### OPERATION OF THE MICROPHONE

Because of the high power output, high gain and high fidelity characteristics of the GIBSON GA-40 Amplifier it makes an exceptionally fine public address system when used with either the crystal, dynamic or velocity types of microphones.

While the amplifier will operate very well with any of the crystal, medium or high impedance dynamic or velocity (ribbon) microphones, it is recommended that, before investing in a microphone, you consult your GIBSON dealer. Authorized GIBSON dealers can supply you with a microphone which has been selected and matched to the amplifier, thus insuring the most faithful reproduction of voice and music.

When using a microphone it is important that the GIBSON 75A or similar shielded plug be attached to the cord. The ordinary phone plug with bakelite or other non-shielded cover is not suitable because the leads from the microphone must be completely shielded. Otherwise objectionable hum will result. Figure A illustrates the proper way to connect the plug to the microphone cable. To use the microphone, insert the plug in the MICROPHONE jack and advance the MICROPHONE volume control until a feedback squeal or howl is produced in the loudspeaker. Reduce the volume control to just below the feed-back point. This setting will vary considerably depending upon the size of the room, its acoustical properties and the distance between the microphone and loudspeaker. Feedback is the limiting factor in all public address

(over)



#### OPERATION OF THE MICROPHONE (Cont'd)

installations and is caused when the level of sound from the loudspeakers is sufficient to actuate the microphone. The general rule when setting up the equipment is to place the loudspeaker as far from the microphone as possible.

The volume controls INSTRUMENTS and MICROPHONE, being completely independent of each other, allow the inputs from the various sources to be "mixed" or blended. Because of this flexibility many unusual effects can be easily worked out.

If the MICROPHONE jacks are not in use turn the MICROPHONE volume control all the way off.

#### TREMOLO

The tremolo effect is turned on and off by means of a foot switch of the push button type. The "Tremolo" frequency of the amplifier is controlled by the pointer knob marked "Frequency." The minimum and maximum speed has been carefully set to cover a wide range of tremolo effects. The depth of the tremolo may be varied by the pointer knob marked "Depth".

#### GENERAL

Amplifiers are carefully packed to prevent damage in shipment. However, upon receipt of the amplifier, look it over carefully to make sure there has been no breakage of tubes or parts. If you find that damage has occurred during shipment, we suggest the Transportation Company be called immediately, and a claim placed.

#### CAUTION

Damage to the amplifier will result if it is connected to an improper power source. This amplifier is designed to be operated on 105-125 volt, 50-60 cycle alternating current only. Make sure the voltage from the power lines is not over 125, and that the frequency of the current is either 50 or 60 cycles. When ready to turn on power, plug the power cord into the electric outlet and turn on the switch. Wait approximately one minute for the tubes to heat, and the amplifier is ready for use.

#### TUBES

Be sure tubes are in their proper positions before placing the amplifier in operation. All tubes have been tested and proved satisfactory before shipment.

#### SERVICE

If the amplifier is in need of servicing, we suggest it be taken to a reliable radio man. The electrical diagram attached should be shown the repairman to assist him in servicing the amplifier.

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The fuse used in the GA-40 amplifier is a type AG of three ampere rating. DO NOT USE FUSES OF HIGHER RATING.