



MODEL 793-A AMPLIFIER

INSTALLATION AND OPERATION INSTRUCTIONS

Model 793-A is a multi-purpose monaural all silicon solid state amplifier with an audio output of 30 watts sine wave (RMS). The amplifier is designed for use with up to three microphones in paging or public address installations, also with a ceramic or crystal phono cartridge, a tuner, or other auxiliary equipment. The amplifier has speaker outputs of 8 ohms, 25 volt line, 70 volt line. Provision is made for matching low or high impedance microphones to the respective inputs of the amplifier by means of individual selector switches. Included is a microphone precedence circuit to permit suppression of the music channel while paging.

UNPACKING:

The unit is to be removed carefully from the carton and inspected for any possible damage in transit. If there is any evidence of any damage which might have occurred in shipment, notify your dealer at once, or the transportation company which delivered it. Claims for damage sustained in transit must be made upon the Carrier. Save all packing material for inspection by the claim agent who will furnish you with the proper forms and will also give you the necessary instructions for filing a claim. In addition to the Unit, there should be a warranty card included in the carton.

To insure proper servicing and to protect your rights under the warranty, be sure to fill in the warranty registration card without delay and mail to the factory.

WARRANTY

This unit has been very carefully inspected and should require no further service. Each unit is warranted to be free from defects in material and workmanship under normal use and service for a period of one year from date of delivery to the original purchaser. If this unit appears to be defective, the factory will repair any unit returned within said one year, providing all transportation charges are pre-paid, and which our examination shall disclose to our satisfaction to be defective.

This Warranty does not include free labor, nor is it applicable to any unit which shall have been subject to accident, tampered with, mis-used, abused, or altered in any manner whatsoever. Further, this Warranty shall not apply to any unit which has been connected improperly.

It is recommended that any unit on which service is required, be processed through your dealer wherever possible.

This Warranty is expressly in lieu of all other Warranties, expressed or implied, and of all other obligations or liabilities on our part. We neither assume nor authorize any other person to assume for us any other liability in connection with the products manufactured by Trutone Electronics, Inc.

INSTALLATION:

Because of its attractive appearance, the Amplifier may be placed on a table or shelf. DO NOT PLACE it on top of vacuum tube equipment. DO NOT STORE OR OPERATE it in areas where the ambient temperature exceeds 140 degrees Fahrenheit. If installed in a cabinet, ample ventilation must be allowed around the unit.

Plug the AC line cord in any outlet furnishing 105 to 120 volts, 60 cycles AC.

An AC receptacle is located on the back of the chassis to supply power to other components such as tuner, phono-graph motor, etc. The auxiliary equipment connected to the AC receptacle is controlled by the POWER on-off switch so that turning off the amplifier turns off all equipment.

Optimum performance of any transistor amplifier depends upon the proper current delivered at the output terminals. Four output impedance taps are available: 8 ohms, 21 ohms (25 volt line) and 166 ohms (70 volt line). Connecting a total load impedance at any tap less than the impedance indicated will cause the transistors to deliver more current than they were designed for and will deteriorate the performance of the unit and cause damage to the transistors. To prevent this from occurring and to protect the components, the unit is equipped with a circuit breaker that will trip if the output impedance is below the specified rated value; for example, if two 8 ohm speakers are connected in parallel (resulting in a 4 ohm impedance), and in turn connected to the 8 ohm output terminal, the circuit breaker will trip as soon as the volume control is turned up to the unit's maximum output.

When output leads are run near an unshielded microphone input plug, or when run together with the microphone precedence leads, a supersonic oscillation may occur. When this does occur, it will appear as a distortion in the amplifier output, and oftentimes will cause the circuit breaker to "trip".

To prevent this oscillation from occurring, it is recommended that shielded microphone plugs be used wherever possible. In the event that an unshielded plug or a molded cable assembly is used, keep the output leads away from the Microphone input(s) and Microphone precedence leads.

In installations where there is no alternative but to run both output and microphone precedence lines together, a .1 Mfd capacitor is to be connected from one side of the Microphone Precedence terminal to ground. This will shunt out the feedback signal and more than likely prevent the supersonic oscillation.

The power transistors are mounted on the back panel. In the event it becomes necessary to replace these transistors, be certain that:

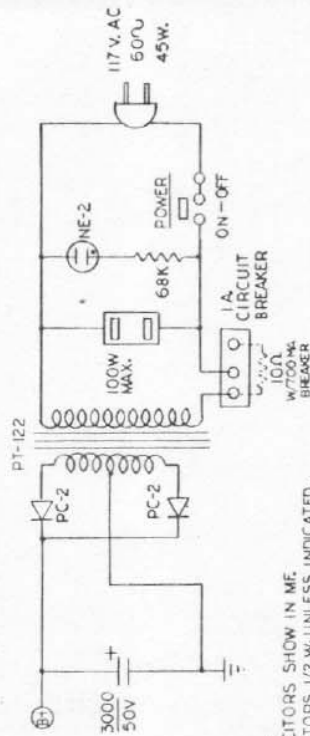
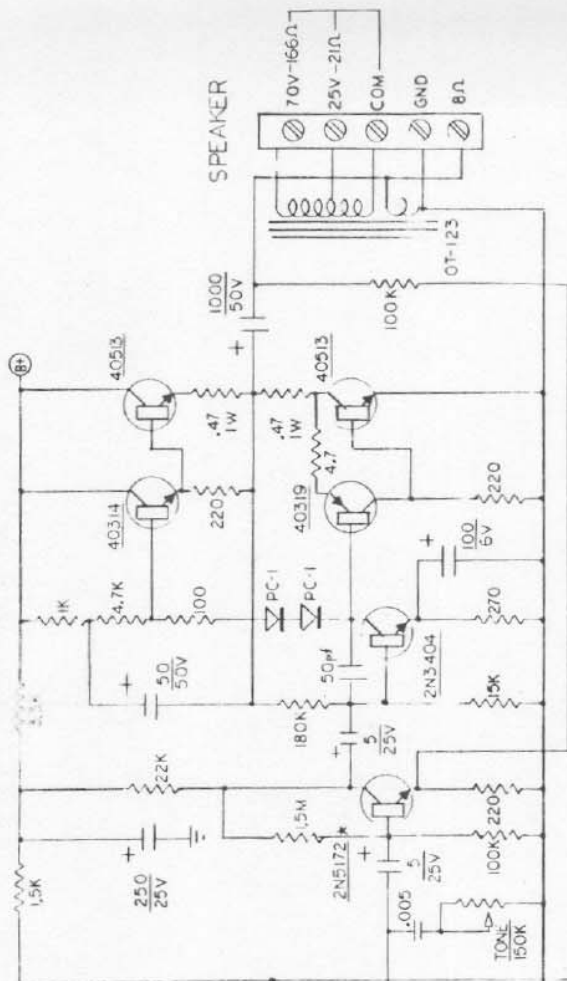
1. No grit or metal particles are lodged between the transistor and the mica or back panel.
2. The mica insulator is not damaged.
3. Both sides of the mica insulator are covered with Dow Corning 7 Silicone Grease or equivalent.
4. The mounting screws are tight, and also that the protective cover does not touch the transistor.

CAUTION:

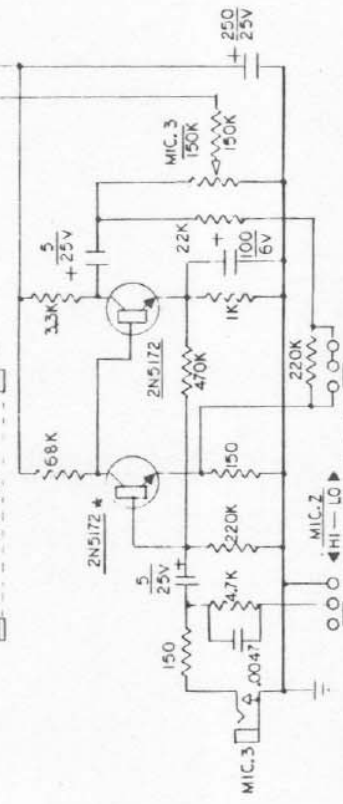
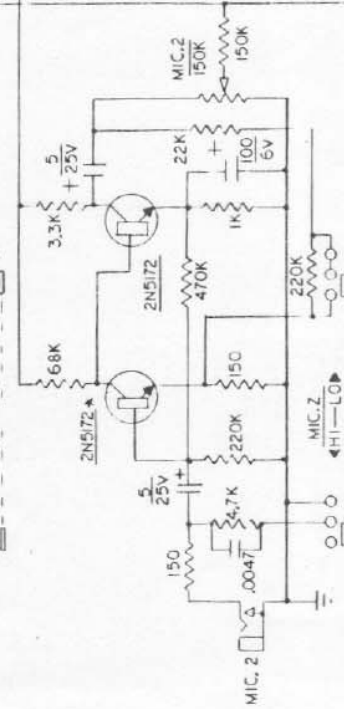
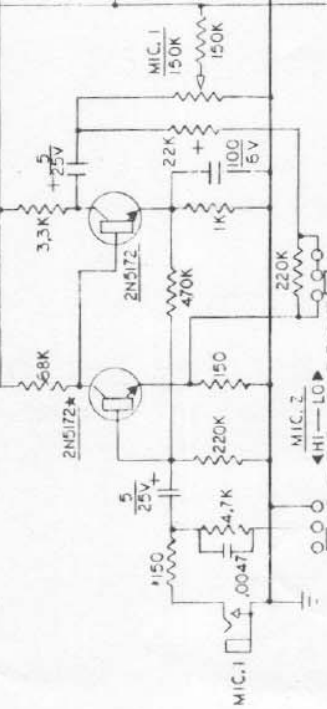
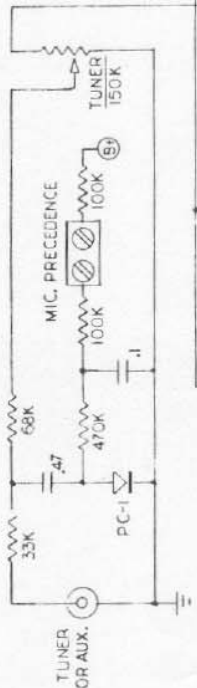
THIS UNIT IS EQUIPPED WITH A CIRCUIT BREAKER DESIGNED TO PROTECT THE TRANSISTORS AGAINST OVERLOAD. IN THE EVENT THAT THE CIRCUIT BREAKER CONSTANTLY "KICKS OUT", CHECK THE LOAD ON THE OUTPUT OF THE AMPLIFIER FOR EITHER A SHORT CIRCUIT OR AN IMPEDANCE LOWER THAN THE VALUE RECOMMENDED. IF THERE IS NO SHORT CIRCUIT AND THE LOAD IS CORRECT, CHECK TO SEE IF POSSIBLY THE INPUT AND OUTPUT OR MICROPHONE PRECEDENCE LEADS ARE RUNNING CLOSE TOGETHER. IF THEY ARE, THEY SHOULD BE SEPARATED AND TREATED AS INDICATED ABOVE. IN THE EVENT THAT THE LOAD IS CORRECT AND THE LEADS ARE NOT RUNNING TOGETHER, DO NOT ATTEMPT TO DEFEAT THE FUNCTION OF THE CIRCUIT BREAKER BUT HAVE THE UNIT CHECKED FOR OTHER DEFECTS.

TRUTONE ELECTRONICS, INC.

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NOTES:
 1. CAPACITORS SHOW IN MF.
 2. RESISTORS 1/2 W. UNLESS INDICATED.
 3. * INDICATES SELECT TRANSISTOR.



TRUTONE ELECTRONICS INC.
 VAN NUYS CALIFORNIA
 MODEL ~~882~~-793A
 30 W. AMPLIFIER

ENGINEER: KOGGE DATE: 2/26/69