Model 12509-001 **Resistor Installation Kit**

Introduction

This kit is used with the following GAI-Tronics Models: 9000, 9001, 9005, 9081, 9085. By design, these models have a protection circuit which will shut the amplifier down if it is over-driven. This circuit protection may be set off in several different ways: during power-up of the amplifier; if it is overdriven by the page line levels (perhaps someone shouting into the receiver); or by a momentary loss of power. In current models, the station will shut down for a period of 14-16 minutes. This resistor kit, once installed, will reduce the shutdown period to a maximum of 60 seconds. The resistor included in this kit is a 1.2M ohm 5%, 1/4 watt resistor.

CAUTION: When the volume level is set at maximum, audible (clipping) or measurable (with a scope) distortion may occur. When distortion is present, the current limiting circuit may be activated. If this occurs, we recommend the volume level be adjusted lower to eliminate the distortion.

NOTE: You will need a de-soldering tool, a soldering iron and a standard screwdriver to install this kit. If you wish to have this resistor installed, and do not want to perform the installation at your facility, contact our Field Services Division to obtain a Return Authorization number. You can then send the board to Field Services and a technician will perform this service free of charge.

Field Services Numbers: Reading, PA: 1-800-523-4303; New Orleans: 1-800-452-7666; Houston: 1-800-882-1980.

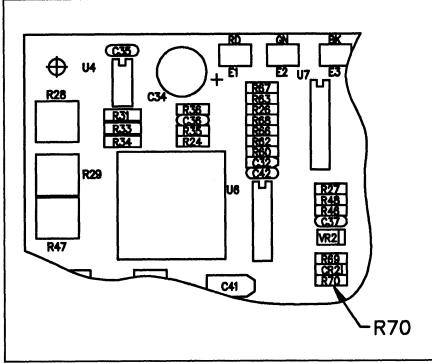


Figure 1. PC Board Detail

Removal of Old Resistor

- 1. Open the unit to access the shield on the back of the front panel. Unplug the ribbon cable connector from the rear enclosure.
- 2. Remove the five screws securing the shield to the front panel.
- 3. Carefully remove the PC Board from the unit.
- 4. The resistor to be replaced is R70. Figure 1 depicts the upper left hand side of the PC Board. Note the square opening in the PC Board. These landmarks should help you locate R70.



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- 5. Once you have located R70, turn the board over and place it on a flat surface.
- 4. Remove the solder using a de-soldering tool.
- 5. Straighten the crimped wires of R70 coming through the board and remove the resistor.

Installation of New Resistor

NOTE: The new resistor will be installed at the SAME location as the one you have removed.

- 1. Take the new resistor and gently bend the wires so they will feed through the holes of the PC Board.
- 2. Use resin core solder and a soldering iron to carefully solder the new resistor in place.
- 3. Once the new resistor is secure, re-install the PC Board in the unit and replace the shield.

Warranty

Equipment. GAI-Tronics warrants for a period of one (1) year from the date of shipment, that any GAI-Tronics equipment supplied hereunder shall be free of defects in material and workmanship, shall comply with the then-current product specifications and product literature, and if applicable, shall be fit for the purpose specified in the agreed-upon quotation or proposal document. If (a) Seller's goods prove to be defective in workmanship and/or material under normal and proper usage, or unfit for the purpose specified and agreed upon, and (b) Buyer's claim is made within the warranty period set forth above, Buyer may return such goods to GAI-Tronics' nearest depot repair facility, freight prepaid, at which time they will be repaired or replaced, at Seller's option, without charge to Buyer. Repair or replacement shall be Buyer's sole and exclusive remedy. The warranty period on any repaired or replacement equipment shall be the greater of the ninety (90) day repair warranty or one (1) year from the date the original equipment was shipped. In no event shall GAI-Tronics warranty obligations with respect to equipment exceed 100% of the total cost of the equipment supplied hereunder. Buyer may also be entitled to the manufacturer's warranty on any third-party goods supplied by GAI-Tronics hereunder. The applicability of any such third-party warranty will be determined by GAI-Tronics.

<u>Services.</u> Any services GAI-Tronics provides hereunder, whether directly or through subcontractors, shall be performed in accordance with the standard of care with which such services are normally provided in the industry. If the services fail to meet the applicable industry standard, GAI-Tronics will re-perform such services at no cost to buyer to correct said deficiency to Company's satisfaction provided any and all issues are identified prior to the demobilization of the Contractor's personnel from the work site. Re-performance of services shall be Buyer's sole and exclusive remedy, and in no event shall GAI-Tronics warranty obligations with respect to services exceed 100% of the total cost of the services provided hereunder.

<u>Warranty Periods.</u> Every claim by Buyer alleging a defect in the goods and/or services provided hereunder shall be deemed waived unless such claim is made in writing within the applicable warranty periods as set forth above. Provided, however, that if the defect complained of is latent and not discoverable within the above warranty periods, every claim arising on account of such latent defect shall be deemed waived unless it is made in writing within a reasonable time after such latent defect is or should have been discovered by Buyer.

<u>Limitations / Exclusions.</u> The warranties herein shall not apply to, and GAI-Tronics shall not be responsible for, any damage to the goods or failure of the services supplied hereunder, to the extent caused by Buyer's neglect, failure to follow operational and maintenance procedures provided with the equipment, or the use of technicians not specifically authorized by GAI-Tronics to maintain or service the equipment. THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES AND REMEDIES, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Return Policy

If the equipment requires service, contact your Regional Service Center for a return authorization number (RA#). Equipment should be shipped prepaid to GAI-Tronics with a return authorization number and a purchase order number. If the equipment is under warranty, repairs or a replacement will be made in accordance with the warranty policy set forth above. Please include a written explanation of all defects to assist our technicians in their troubleshooting efforts.

Call 800-492-1212 (inside the USA) or 610-777-1374 (outside the USA) for help identifying the Regional Service Center closest to you.