PCBA Replacement Kit  
for SmartHandset™ Stations and SmartAmplifier™ Stations  

MODEL 12557-001

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Instructions

The Model 12557-PCBA Replacement Kit contains one Model 9241-002 PCBA for use in GAI-Tronics SmartHandset™ stations and SmartAmplifier™ stations.

⚠️ WARNING ⚠️
Remove the power from the station prior to servicing. This assembly contains large capacitors which could potentially retain a charge. Please use caution.

Removing the Old PCBA

NOTE: When disassembling the unit, be sure to save all the hardware, as it will be needed when the unit is re-assembled.

1. Loosen the four screws at the corners of the front panel, and pull the plug-in amplifier from the enclosure. All maintenance work from this point on should be performed at a work bench with the operator properly grounded to avoid static discharge.

2. Loosen the four chassis screws (Phillips) on the top and bottom of the unit.

3. Carefully slide the chassis to the left, and separate it from the front panel.

⚠️ CAUTION ⚠️
The power supply harness inside is short; do not pull it apart abruptly.

4. Remove the power supply harness from J6 on the Model 69241 PCBA by pressing the tab on the locking connector.
5. Remove the aux/subset connector at J2 from the Model 69228 PCBA (for Model 701-804 only).

6. Disconnect the spade terminals at E1 through E7. Needlenose pliers may be required.

7. Remove the four screws that secure the PCBA. Disconnect the Model 69228 assembly by grabbing the PCBA at the sides near the J1 connector. Unplug it from the PCBA below it, and set it aside.

8. Remove the four ¼-inch hex standoffs from the corners of the Model 69227 PCBA.

9. Unplug the Model 69227 PCBA from the baseboard by grabbing at the sides near the J1 connector. Set the PCBA aside.

10. Remove the two screws at the top of the chassis, and remove the transformer.

⚠️ CAUTION ⚠️

Hold onto the transformer to prevent damaging the baseboard.

11. Unplug the transformer harness from J2 of the baseboard, and set it aside.

12. Remove the four ¼-inch hex standoffs and two screws at the corner of the baseboard.

13. Remove the two screws which secure the Amphenol connector to the back of the chassis; note the ground wire at one location.

14. Carefully slide the baseboard out of the chassis. Before discarding the PCBA, note the S1 and S2 settings, and transfer them to the new PCBA.

15. Remove the programmed IC U2 from the old PCBA, and place it in the new PCBA. Do this carefully. An IC puller is required (the suggested part is a Techni Tool 560PR291).

**Installing the New PCBA**

1. Slide the replacement Model 69241 PCBA to allow the Amphenol to be properly positioned in the chassis.

2. Install the two corner screws.

3. Install the four standoffs.

4. Fasten the green ground wire under the left screw (which connects the Amphenol), and install the right screw.

5. Bend the lug away from the PCBA at approximately a 60° angle.

6. Reattach the transformer to the chassis with the existing thread, cutting the screws.

   **NOTE:** The three conductors face the baseboard.

7. Plug the transformer connector into the baseboard at J2.

8. Plug Model 69227 into the Model 69241 baseboard at the J1 connector.
9. Secure the PCBA with the existing standoffs.

10. Plug the Model 69228 PCBA back into J1 on the Model 69227 PCBA, and secure it with the existing screws.

11. Reconnect the spade lugs. See Figure 1.

12. Reattach the aux/subset connector at J2 on the Model 69228 PCBA (for Model 701-804 only).

13. Reconnect the 12-conductor wire harness from the Model 69241 baseboard to Model 69242 on the front panel at J1.

14. Reattach the chassis to the front panel; secure the top and bottom chassis screws.

15. Plug the amplifier into the enclosure, and tighten the four front panel screws.

16. Reapply the power to the station.
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**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.

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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.