



**GAI-TRONICS® CORPORATION**  
A HUBBELL COMPANY

# Microphone Assembly Replacement Kit

Model 12521-001

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## General Information

The Model 12521-001 Microphone Assembly Replacement Kit is used for the following models: Model 280, 280AL, 281, 281AL, 281KS, 281ALKS, 283, 283AD, 283AL, 283AL-AD, 284AL, 284AL-AD, 287RP, 287RP-AD, and 296. This kit includes the following components:

Qty	Description	Item Number
1	Gasket Assembly	1
1	Microphone with Leads	2
1	Microphone Gasket	3
1	Microphone/Gasket Bracket	4
1	Microphone Mounting Bracket	5
2	Screw	6
1	Tie Wrap	7

## Installation

### Removing the Old Microphone Assembly

1. Use a Model 233 Tamper-Resistant Screwdriver to loosen the 4 front panel tamper-resistant screws. Open the front panel of the telephone by swinging the panel to the left. Remove the front panel.
2. Cut the tie wrap that secures the speaker, hookswitch, and microphone wires together.
3. Unplug all connections from the printed circuit board.
4. Remove the 2 screws from the microphone assembly.
5. Remove the wire harness with the microphone bracket.

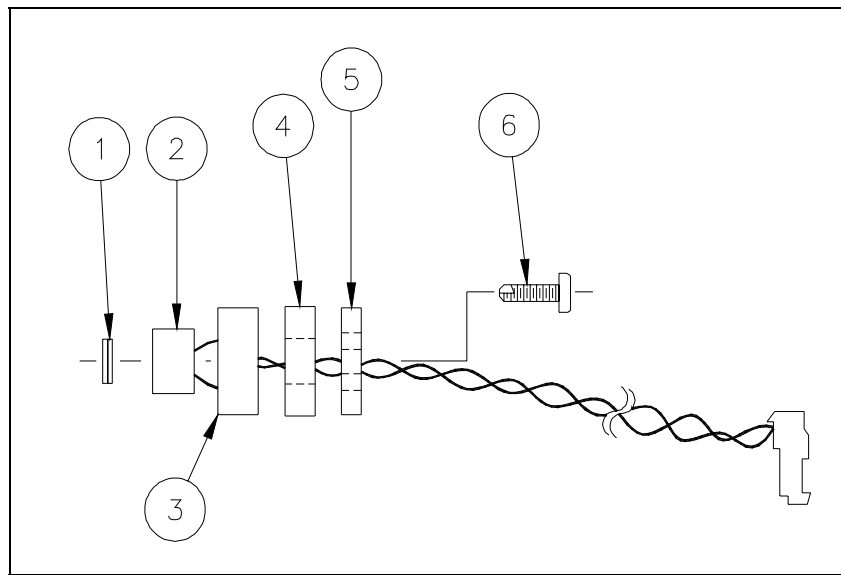


Figure 1. Microphone Assembly

## Installing the New Microphone Assembly

Refer to Figure 1.

1. Remove the backing from the gasket assembly (Item 1), and attach it to the front of the microphone (Item 2).
2. Lay the gasket/microphone assembly in place on the rear of the front panel.
3. Feed the microphone leads through the microphone gasket (Item 3), microphone/gasket bracket (Item 4), and microphone mounting bracket (Item 5).
4. Insert and tighten the 2 new screws (Item 6).
5. Replace the door by aligning the interior hinge plugs with the rear enclosure and pushing firmly straight back.
6. Reattach the microphone assembly connector to the PCBA at J5.
7. Reattach the speaker assembly connector to the PCBA at J6.
8. Reattach the push-button connector to the PCBA at J4.
9. Use the new tie wrap to tie the wires together. Make sure the push-button wire is positioned between the speaker and microphone wires; this will eliminate feedback between the speaker and microphone wires.
10. Swing the front panel closed, tighten the tamper-resistant screws, and make a test call from the unit.

**Note:** Installation of a new microphone may require the volume level to be readjusted. In this case, see the unit's original installation manual for adjustment instructions.

# Warranty

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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.

Services. 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.

Warranty Periods. 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.

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## Return Policy

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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.