Confidentiality Notice

This manual is provided solely as an installation, operation, and maintenance guide and contains sensitive business and technical information that is confidential and proprietary to GAI-Tronics. GAI-Tronics retains all intellectual property and other rights in or to the information contained herein, and such information may only be used in connection with the operation of your GAI-Tronics product or system. This manual may not be disclosed in any form, in whole or in part, directly or indirectly, to any third party.

General Information

The Model 12514-40x Division 1 telephone handset replacement kit is a direct replacement for the PVC or Hytrel® corded handset used in Division 1 analog, VoIP, and VoIP/WiFi page-phones and telephones. This handset replacement kit is applicable to the following Division 1 telephones/page-telephones:

Table 1. Applicable Division 1 Telephone Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>352-001</td>
<td>Division 1 telephone</td>
</tr>
<tr>
<td>352-002</td>
<td>Division 1 telephone with ring relay</td>
</tr>
<tr>
<td>352-701</td>
<td>Division 1 VoIP telephone (PoE or 24–48 V dc)</td>
</tr>
<tr>
<td>352-712</td>
<td>Division 1 VoIP ac page-telephone</td>
</tr>
<tr>
<td>352-722</td>
<td>Division 1 VoIP dc page-telephone</td>
</tr>
<tr>
<td>352-732</td>
<td>Division 1 VoIP PoE page-telephone</td>
</tr>
<tr>
<td>352-812</td>
<td>Division 1 VoIP WiFi ac page-telephone</td>
</tr>
<tr>
<td>352-822</td>
<td>Division 1 VoIP WiFi dc page-telephone</td>
</tr>
</tbody>
</table>
The kit includes the following components:

<table>
<thead>
<tr>
<th>Qty</th>
<th>Kit Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>All 12514-401</td>
<td>screw, 6-32×5/16-inch PHMS (Pan Head Machine Screw)</td>
</tr>
<tr>
<td>1</td>
<td>All 12514-402</td>
<td>washer, red fiber—for cable gland</td>
</tr>
<tr>
<td>1</td>
<td>of 12514-403</td>
<td>handset assembly with 6-foot PVC coil cord and cable gland</td>
</tr>
<tr>
<td>1</td>
<td>of 12514-404</td>
<td>handset assembly with 15-foot PVC coil cord &amp; cable gland</td>
</tr>
<tr>
<td>1</td>
<td>of 12514-405</td>
<td>handset assembly with 25-foot PVC coil cord &amp; cable gland</td>
</tr>
<tr>
<td>1</td>
<td>of 12514-406</td>
<td>handset assembly with 6-foot Hytrel® coil cord &amp; cable gland</td>
</tr>
</tbody>
</table>

**Installation**

This kit must be installed by trained, qualified and competent personnel. Installation must comply with state and national regulations, as well as safety practices for this type of equipment.

⚠️ **WARNING** ⚠️—Do not disconnect equipment while energized. Insure proper grounding to protective earthing.

⚠️ **ATTENTION** ⚠️—Installation must be performed by qualified personnel and only in accordance with the National Electrical Code or applicable local codes.

⚠️ **WARNING** ⚠️—Observe precautions for handling electrostatic sensitive devices.

**Handset Removal**

⚠️ **WARNING** ⚠️—The front cover is not hinged to the rear enclosure. Support the cover when removing the cover bolts.

Complete the following steps to remove the old handset:

1. Remove the ten cover bolts that secure the cover to the enclosure.
2. Turn the cover over to expose the PCBA mounted to the back of the front cover.
3. **Analog telephones**: Remove the four screws securing the telephone PCB to the stand-offs mounted to the back of the front cover (see Figure 1).
   
   **VoIP telephones and VoIP page-telephones**: Remove the four screws securing the VoIP carrier or VoIP WiFi carrier PCB to the stand-offs mounted to the back of the front cover (see Figure 2 for VoIP telephones or Figure 3 for VoIP page telephones).
   
   Keep the VoIP circuit PCB installed on top of the VoIP carrier PCBA.

4. **Analog telephones**: Move the telephone PCB to the side, keeping all wires connected.
   
   **VoIP telephones and VoIP page-telephones**: Move the VoIP carrier/VoIP WiFi carrier PCB with VoIP Circuit PCBBA attached to the side, keeping all wires connected.
5. Remove the two screws securing the handset barrier assembly to the front cover.
6. Turn the handset barrier over.
7. Loosen the terminal block screws securing the four wires from the handset to the barrier.
8. Remove the four wires from the handset barrier terminal block.
9. Remove the 6-32×5/16 PHMS anti-rotation screw from the handset cable gland on the front cover of the enclosure (see Figure 4).
10. Unscrew the handset cable gland from the front cover of the enclosure and remove the handset.

Figure 1. Division 1 Analog Telephone—Internal View
Figure 2. Division 1 VoIP Telephone—Internal View

Figure 3. Division 1 VoIP Page Telephone—Internal View (VoIP WiFi similar)
Handset Replacement Kit for Division 1 Telephones

Handset Coil Cord with Fiber Washer and Anti-rotation Screw

Figure 4

Handset Installation

Complete the following steps to install the new handset:

1. Insert the four handset wires through the threaded hole in the front cover.
2. Place the red fiber washer onto the handset cable gland and thread the cable gland into the front cover (see Figure 4).
3. Securely tighten the handset cable gland.
4. Install and securely tighten the 6-32 x 5/16-inch PHMS anti rotation screw (see Figure 4).
5. Insert each of the four color-coded wires into the handset barrier terminal block and tighten the terminal block screws to 12 in∙lb (1.4 N∙m) (see Figure 5).
6. Position the handset barrier on the back of the front cover and reinstall the two screws previously removed.
7. Position the telephone, VoIP carrier, or VoIP WiFi carrier PCBA over the four stand-offs on the back of the front cover.
8. Reinstall the four screws previously removed to secure the PCBA assembly to the front cover stand-offs.

Figure 5

Handset Barrier Assembly
Front Cover Installation

1. Inspect the machined flange flame joint surfaces of both the cover and the box.
   Surfaces must be smooth, free of nicks, scratches, dirt, or any foreign particle build-up that may prevent a proper seal. Surfaces must seat fully against each other to provide a proper explosion-proof joint.

2. Clean the surfaces by wiping them with a clean lint-free cloth.

3. Apply a light coating of Killark “LUBG” lubricant to the flange surfaces and place the cover on the rear enclosure.

4. Install all 10 cover bolts.
   Use only the bolts supplied with the enclosure. Do not omit any bolts.

5. Torque the cover bolts to 17 ft·lb (23 N·m).
**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.

**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.

**Limitations / Exclusions.** 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.