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 12544-017 Cellular Module replacement hardware kit contains the components required to replace a legacy Telular family CDMA or GSM cellular terminal module with either the GTRFP8315-011 GSM cellular terminal or GTRFP8315-012 CDMA cellular terminal (each sold separately). The hardware kit consists of the following components:

- No. GTK13031A cellphone bracket.
- No. GTRFP7639-012 SMA (M) to TNC (F) RF adapter.
- No. GTB16002A cellular terminal power lead

Important Safety Instructions

- **Read, follow, and retain instructions**—All safety and operating instructions should be read and followed before operating the unit. Retain instructions for future reference.
- **Heed warnings**—Adhere to all warnings on the unit and in the operating instructions.
- **Attachments**—Attachments not recommended by the product manufacturer should not be used, as they may cause hazards.
- **Servicing**—Do not attempt to service this unit by yourself. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Installation

Refer to Drawing No. B16002C01, Cellular Module Upgrade Kit Outline and Connection Diagram, and the outline and connection diagram supplied with the original equipment requiring upgrade. The existing Telular cellular module should be extracted from the component panel without removing the entire component panel. Do not short the power supply to ground when removing or installing the cellular terminal.
Complete the following steps:

1. Remove the existing cellular module’s power supply cable from the voltage source.
2. Remove the antenna cable from the existing cellular module.
3. Remove the RJ-11 phone cable from the existing cellular module.
4. Remove the #6-32 nuts securing the existing bracket and retain the hardware to re-install the No. GTK13031A bracket.
5. Remove the existing cellular module and the existing module bracket.
6. Install the No. GTB16002A power lead onto the replacement cellular terminal, observing polarities.
7. Install the No. GTRFP7639-012 RF adapter onto the replacement cellular terminal.
8. Re-install the RJ-11 phone cable onto the replacement cellular terminal.
9. Re-install the antenna cable onto the replacement cellular terminal using the No. GTRFP7639-012 RF adapter.
10. Re-install the replacement cellular terminal onto the component panel using the No. GTK13031A bracket and the retained hardware.
11. Connect the spade lugged end of the No. GTB16002A power lead to the 12 V dc cellular module power supply.

**Cellular Terminal Set Up and Configuration**

The end user must contact the cellular provider to request cellular service activation. The service should be setup for standard telephone operation only and should not have call forwarding or voice mail functions.

**CDMA Format**

The provider requires two bits of information:

- MEID (Mobile Equipment Identifier) found on the label applied to the phone-cell terminal.
- The air-interface protocol, which in this case is CDMA/800 MHz/Voice.

The replacement CDMA cellular terminal requires provisioning by the cellular carrier before the device can be used:

1. Provision the cellular terminal by dialing *228 from the connected cellular telephone device
   
   The signal strength should be 3 or 4 LED bars to successfully provision the device.

2. Refer to Section 6 (Provisioning) of the user guide (JA16-EVDO-UM) listed in the Reference Documentation section of this document for detailed operating instructions.

**GSM Format—Sim Card Installation**

The replacement GSM cellular terminal requires a Subscriber Identity Module (SIM) for normal operation. The service provider supplies the SIM card that carries account information needed to operate the phone-cell. Contact the service provider to acquire the SIM cards as these units are shipped without the card from the manufacturer. Please refer to the user guide (JA16-GSM-UM) listed in the Reference Documentation section of this document for detailed operating instructions.
Maintenance

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, repair or replacement will be made in accordance with GAI-Tronics’ warranty policy. 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.

Reference Documentation

Refer to the drawings and standard publications listed below for additional information:

- B16002C01 No. GTB16002 Cellular Module Upgrade Kit Outline and Connection Drawing
- JA16-EVDO-UM POTSwap (CDMA) Cellular Terminal Product User Manual (Rev P09)
- JA16-GSM-UM POTSwap (GSM) Cellular Terminal Product User Manual (Rev P09)
**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.