



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

# Mine Dial Page/Phone Upgrade Kit

MODEL 12650-001

## Confidentiality Notice

This manual is provided solely as an operational, installation, 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

**⚠ NOTE ⚠** This Upgrade Replacement Kit may only be installed by a GAI-Tronics technician or by a GAI-Tronics authorized service center. Installation by any other service center or personnel will void MSHA approval.

**⚠ DANGER ⚠** Any changes in the intrinsically safe circuitry or components may result in an unsafe condition.

The Model 12650-001 Mine Dial Page/Phone Upgrade Replacement Kit is provided to upgrade the following models:

491-101

491-102

491-103

491-104

491-204

### Kit Components

Qty	Description
1	Solder Turret
1	Fused-Current Limit Assembly
1	Replacement MSHA Label Insert
1	69491-401 Printed Circuit Board Assembly (PCBA)
1	Replacement Battery Connection Label

### Required Tools

- ¼-inch wrench
- Wire cutter/stripper
- Needle-nose pliers
- Soldering iron and solder
- Phillips head screwdriver, size #1 (*¼-inch flat blade screwdriver maybe required for older units*)

# Installation

Before installing this kit, inspect the Mine Dial Page/Phone to ensure the unit is in original factory condition with no unauthorized modifications or revisions. This kit should only be installed in clean, undamaged units.

## Removing the Old Fuse Assembly

1. Unscrew and remove the red wire from the positive terminal post of the battery.
2. Cut the orange wire at the top of the fuse holder.
3. Remove the screw in the center of the fuse holder.
4. Discard the fuse holder, fuse, and screw.
5. Remove ½ inch of insulation from the end orange wire.
6. Tin the bare end of the orange wire.

## Installing the New Fused-Current Limit Assembly

1. Replace the fuse holder with the solder turret and secure tightly.
2. Form a “J” hook on the orange wire.
3. Solder the “J” hook to the lower section of the solder turret.
4. Form a “J” hook on the lead end of the fused-current limit assembly.
5. Solder the “J” hook to the upper section of the solder turret.
6. Fasten the lugged end of the fused-current limit assembly to the positive terminal post of the battery.

#### Updating MSHA Approval Label

1. Make sure the MSHA Approval label on the 491 unit is clean and free of grease. Wipe the label with a clean cloth and alcohol if necessary.
2. Remove the protective covering from the adhesive on the new label insert.
3. Carefully align the line on the label insert with the top line of the MSHA Approval label on the front panel of the 491 unit. The left edge of the label insert should be aligned with the left edge of the MSHA Approval label.

When properly installed, the label insert will cover the existing MSHA Approval number and associated information. The MSHA logo should still be visible below the label insert.

#### Replacing the Battery Connection Label

1. Open the front door of the 491 Station.
2. Disconnect and remove the battery.
3. Carefully Install the Battery Connection label provided with this kit over existing Battery Connection label.
4. Install the battery.

#### Replacing the Existing PC Assembly with 69491-401 PC Assembly

1. Unplug and discard the existing Mine Dial Page Phone PCBA (Model 69491-301) from its socket in the top of the enclosure.
2. Install the 69491-401 assembly provided with this kit.

# 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.

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

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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.