

All SCG DCU

Product Family(s)

501-9975VERLT1R1-SCG	501-9975VERST1R1-SCG	501-9975ATTLT1R1-SCG	501-9975ATTST1R1-SCG

Product P/N(s) this Document Covers**REVISIONS**

Rev.	Description of Change(s)	ECO/DCN
A	Initial Release	12-00808
B	Add: 11700-CELL-SOL-SCG, redesigned to use compact enclosure. Remove: All references to Ascendant and full size enclosure. Remove: Auxiliary FCC label.	12-02139
C	Add: Reference to Test Procedure 465-11700-02-PTI for security switch hardware. Add: Requirement for operator to stamp switch bracket after successful test. Add: Striker plate for security switch.	13-00361
D	Change: Title reference from 1X700 to SCG. Remove: Reference to 1X700 DCUs. Add: Reference to new 501-9975VER* and 501-9975ATT* DCUs. Add: Placement of SimCard remnant into vinyl pouch.	14-00591

1.0 Scope:

- 1.1 This procedure details the final assembly process for all SoCal Gas (SCG) DCUs.

Section 4.1: Final assembly of plastic box (electronics package).

Section 4.2: Installation of the enclosure cover.

Section 4.3: Placement of product labels.

2.0 General Safety and Work Area Guidelines:



- 2.1 Eye protection shall be worn in the assembly area at all times.



- 2.2 All personnel shall review and follow the requirements documented on the MSDS of any substance used in product assembly.



- 2.3 All personnel performing this procedure must be trained and follow the “ESD Testing and Daily Check Procedure”.



- 2.4 All personnel performing this procedure must be adequately qualified and trained in the safe and proper use of shop tools.



- 2.5 Beware of possible sharp edges and corners on sheet metal parts.

- 2.6 The following graphical symbols are used in this document to bring special attention to certain aspects of the process.



An eye is used to identify notes or inspection items which are important and may be easily overlooked.



The wrench indicates that a tool is required for assembly. This symbol is applied universally, in this document, to represent any tool, not just a wrench.



The symbol is adverse to the wrench/tool symbol. This indicates that the assembly must be by hand and without the aid of a tool.



This symbol is used to point out a surface or area which must be prepared in some way. The text will provide information on how it should be prepared.

2.7 **Table 1** provides a list of tools and materials which are required to perform this procedure. Materials called out here are in addition to those already included on the product bill of material (BOM).

Quantity	Description
As Req'd	Isopropyl Alcohol
1	Screwdriver, flat, 6" long x 5/16" blade or larger
1	Pneumatic Torque Driver
1	Torque Tester, Mountz M-100 or equivalent
1	3/8" Drive Socket Set

Table 1

3.0 Related Documents:

501-9975VERLT1R1-SCG-DWG, Assembly Drawing
501-9975VERST1R1-SCG-DWG, Assembly Drawing
501-9975ATTLT1R1-SCG-DWG, Assembly Drawing
501-9975ATTST1R1-SCG-DWG, Assembly Drawing
465-11700-02-PTI, Door - Switch Test Instruction

4.0 Procedure:

4.1 Complete assembly of plastic box.

4.1.1 Install (10) barbed printed circuit board (PCB) retainers. These are manually pushed into the holes provided in each PCB slide rail.

 Install ALL (10) retainers in the position shown in Figure 2, even if there is no PCB installed.

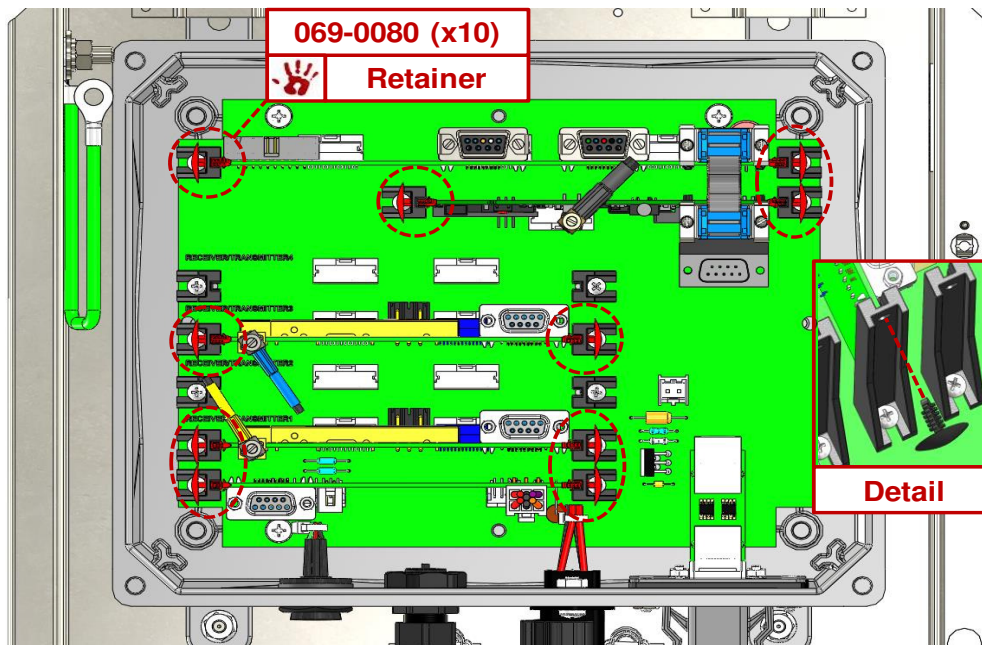


Figure 2: Install Barbed PCB Retainers

4.1.2 Place clear plastic box cover p/n **056-9975** over the top of the plastic box.

 Insure the (4) corner screws for the plastic cover are in place, but **DO NOT** tighten them down at this time. They will be tightened by QA upon completing final inspection/audit.

4.2 Assemble and install the DCU cover.**4.2.1** Install the strike plate (056-9975X-2) as shown in **Figure 3**.

Using a clean cloth and Isopropyl Alcohol, clean the surface where the strike plate is to be installed.

Orient fixture **FIX-1X700-002** as shown, holding the corner of the fixture firmly into the inside corner of the enclosure cover.

Remove the paper backing of the strike plate and place using the inside corner of the fixture as a guide.

Remove the fixture press the strike place firmly to insure complete adhesion to the stainless steel cover.

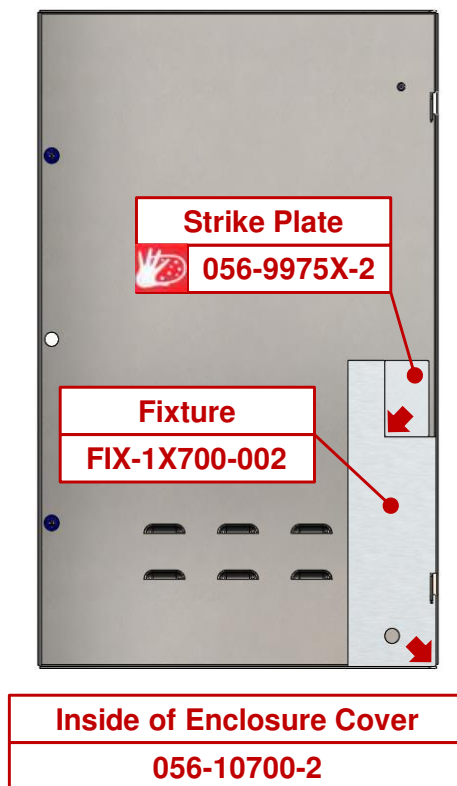


Figure 3: Install Strike Plate

- 4.2.2** Add the Installation & Maintenance Record form with vinyl sheet protector to the inside of the enclosure cover as shown in **Figure 4**.

Clean the inside surface of the enclosure cover with Isopropyl Alcohol to remove any oil or contaminants.

Remove paper backing from the sheet protector.

With the red zipper seal towards the top edge of the cover, center the sheet protector on the inside of the cover as shown and smooth down by hand.

- 4.2.3** Check form F-700-0100 provided with the DCU by the Test Technician:



- DCU ID on form and ALL (3) ID Labels inside DCU match.
- Model on form matches the Item Number on the work order.
- Final test date and technician must be filled out.

- 4.2.4** Insert form F-700-0100 into the sheet protector.

- 4.2.5** Check that the Test Technician provided the remaining portion of the SimCard similar to the one shown in **Figure 4B**. Cards from different service providers, such as Sprint or Verizon, may look different.



- Verify the DCU ID is written on the back of the card with black permanent marker and matches up with the appropriate DCU.

- 4.2.6** Insert the remaining portion of the SimCard into the sheet protector on top of the maintenance form, so that it is clearly visible.

- 4.2.7** Fully seal the the zip lock top of the sheet protector.



Figure 4: Installation Record



Figure 4B: Sample Sim Card

4.2.8 On the top left edge of the enclosure are (2) slots for mounting the cover; see **Figure 5-I**.

Holding the cover as shown in **Figure 5-II**, place both tabs, on the covers edge, into the slots of the enclosure. With the tabs in both slots, the cover should slide about ¼” toward the bottom of the enclosure.

Close the enclosure cover and observe that the tab and slot mate up as shown in **Figure 5-III**.

Place the blade of a large screwdriver behind one of the cover tabs as shown in **Figure 5-IV** and bend the tab to a 20-30° angle as shown in **Figure 5-V**.

Bend the second tab in the same manner.

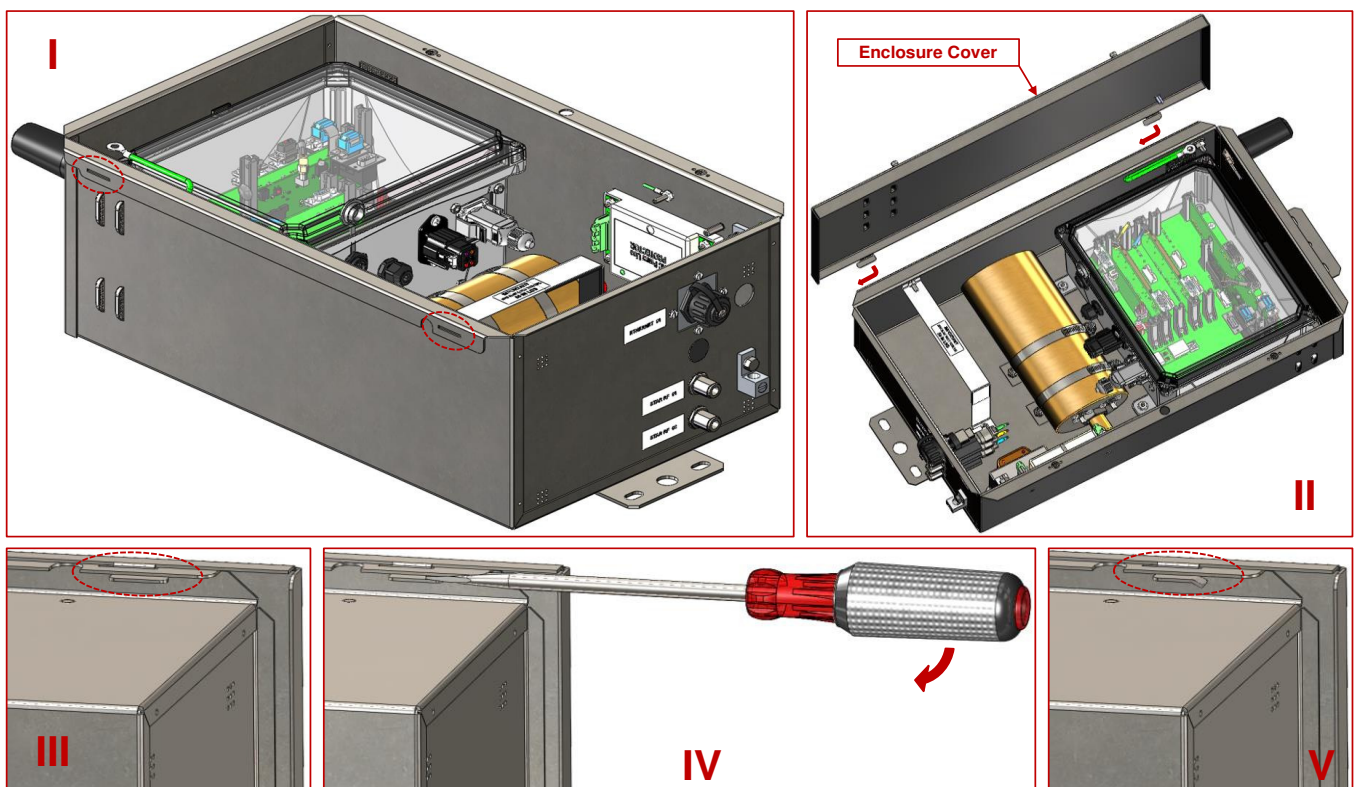


Figure 5: Install Enclosure Cover

4.2.9 Connect the bonding jumper to the enclosure cover as shown in **Figure 6**.

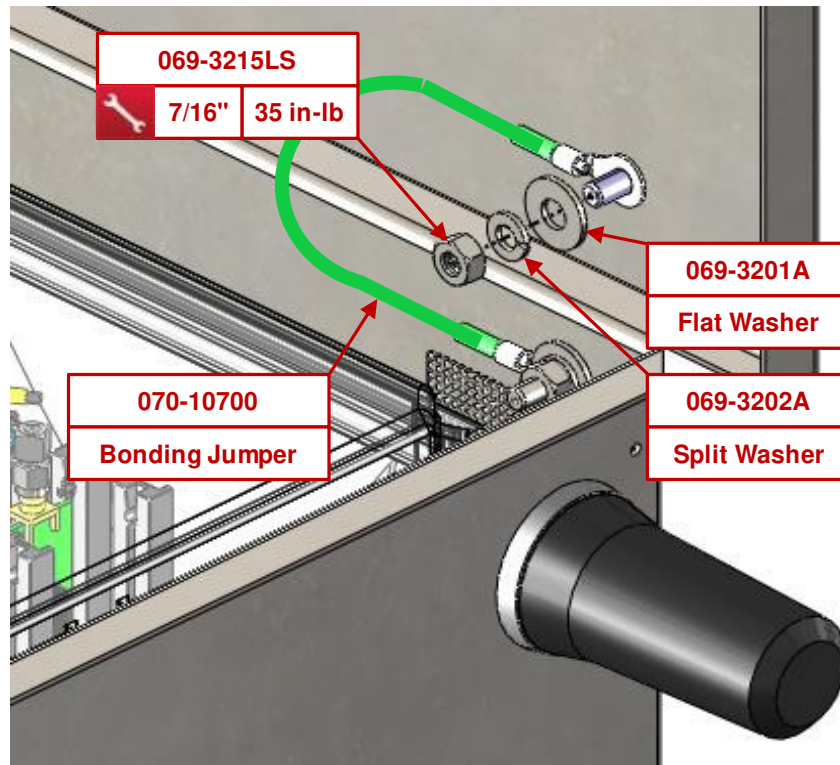


Figure 6: Connect Bonding Jumper

4.2.10 Test security switch hardware per procedure 465-11700-02-PTI.



Upon successful completion of test, the operator shall place their stamp on a clearly visible location of the switch bracket. The mark may be used by QA as a visual queue that the security switch hardware was verified to function properly after the DCU cover was installed.

4.3 Placement of product labels.

4.3.1 Refer to **Figure 7** for installation of the DCU FCC/IC ID label.

Clean the surface of the enclosure with Isopropyl Alcohol.

Place the fixture in the orientation shown. Align the fixture square with the top-left corner of the enclosure cover using the guide rail and the top edge of the fixture as shown.

Remove the paper from the adhesive back of the label.

Hold the fixture firmly in place and use the reference edges of the fixture to position the DCU FCC/IC ID label.



Verify the label position is square to the corner of the cover then press down all edges of the label firmly by hand.

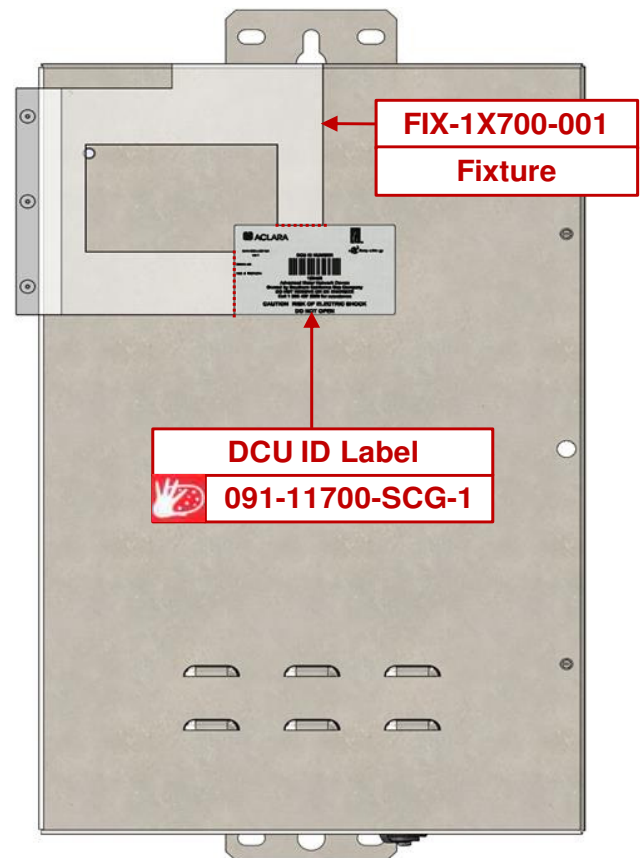


Figure 7: Install DCU FCC/IC ID Label

4.3.2 Refer to **Figure 8** for installation of the Hazard label.

Clean the surface of the enclosure with Isopropyl Alcohol.

Place the fixture in the orientation shown. Set the fixtures guide rail to the right edge of the enclosure cover, then slide the fixture up until it stops against the upper screw used to hold the cover closed.

Remove the paper from the adhesive back of the label.

Hold the fixture firmly in place and use the reference edges of the fixture to position the Hazard label.

-  Insure the top/bottom edges appear perpendicular to the right edge of the enclosure and free of wrinkles and bubbles.

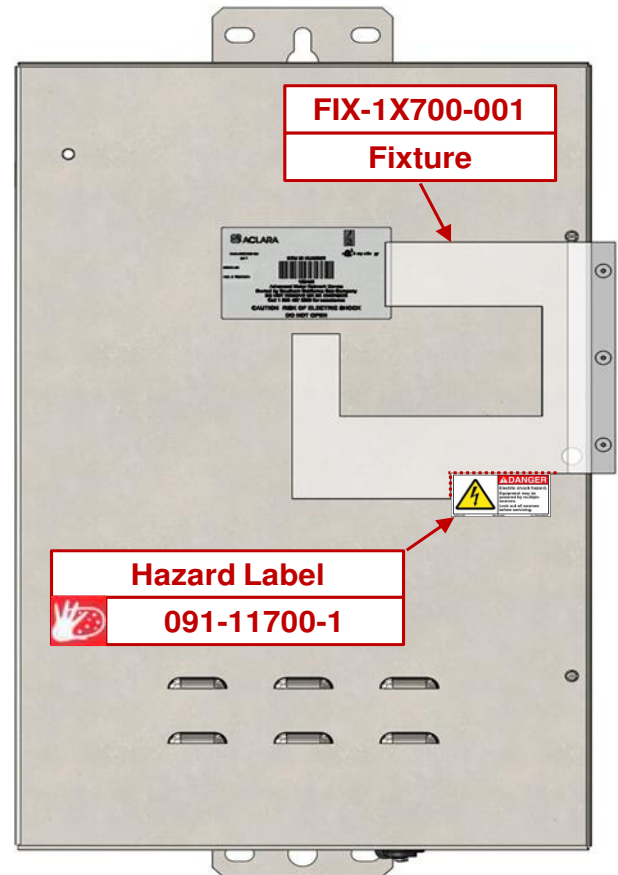


Figure 8: Install Hazard Label

4.3.3 Refer to **Figure 9** for installation of the info label.

Clean the surface of the enclosure with Isopropyl Alcohol.

- There is a unique info label for every model DCU. The Model# on the label must match the item number on the work order. Refer to the current work order or assembly print to identify the label part number.

Place the fixture in the orientation shown. Set the fixtures guide rail to the left edge of the enclosure, then slide the fixture down until it stops against the enclosure mounting plate.

Remove the paper from the adhesive back of the label.

Holding the fixture firmly in place, use the reference edges of the fixture to position the info label.

- Insure the top/bottom edges appear parallel to the bottom edge of the enclosure.

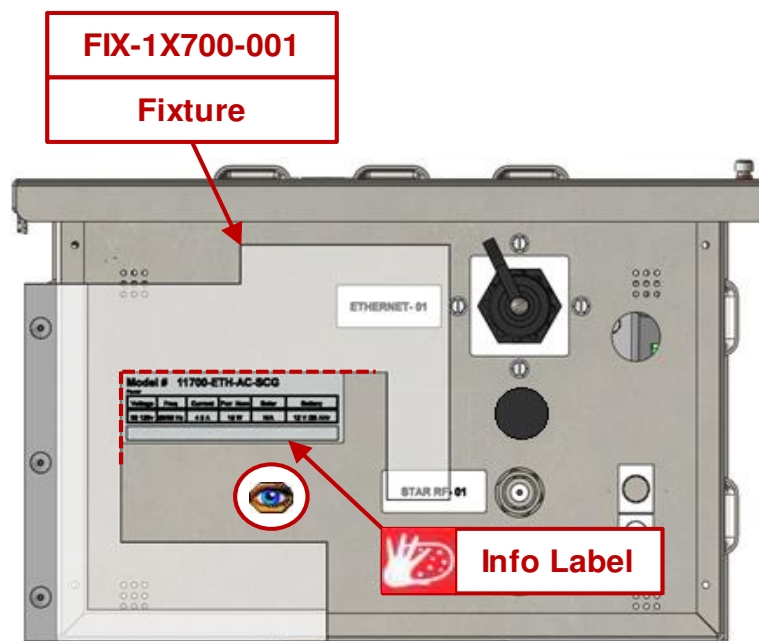


Figure 9: Install Info Label

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