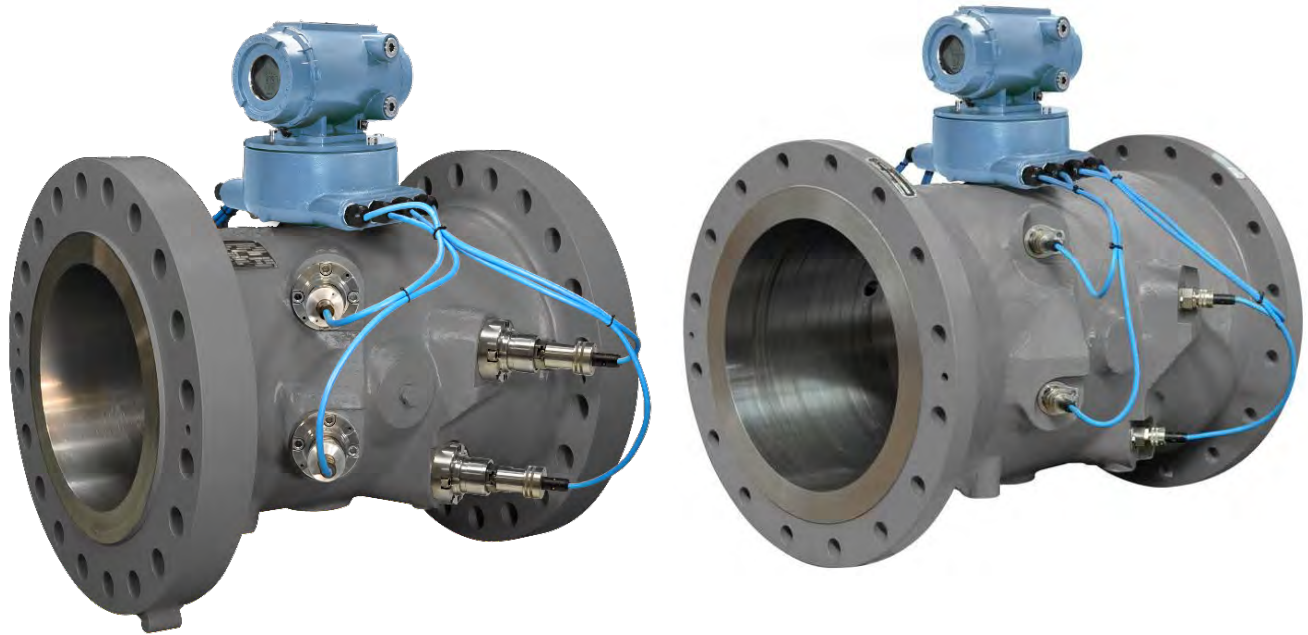


Quick Install Guide

3-9000-780 Rev A

September 2014

3410/3810 Series Local Display Field Install Kit



Daniel customer service

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Asia Pacific (Republic of Singapore)	+65.6777.8211	+65.6777.0947.0743
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E-mail

- Customer Service: tech.service@emersonprocess.com
- Customer Support: daniel.cst.support@emerson.com
- Asia-Pacific: danielap.support@emerson.com
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Return Material Authorization (RMA)

A Return Material Authorization (RMA) number must be obtained prior to returning any equipment for any reason. Download the RMA form from the Support Services web page by selecting the link below.

www2.emersonprocess.com/EN-US/BRANDS/DANIEL/SUPPORT-SERVICES/Pages/Support-Services.aspx?

Signal words and symbols

Pay special attention to the following signal words, safety alert symbols and statements:



This is a safety alert symbol. It is used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

Danger indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

Warning indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Caution indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Notice is used to address safety messages or practices not related to personal injury.

Important

Important is a statement the user needs to know and consider.

Tip

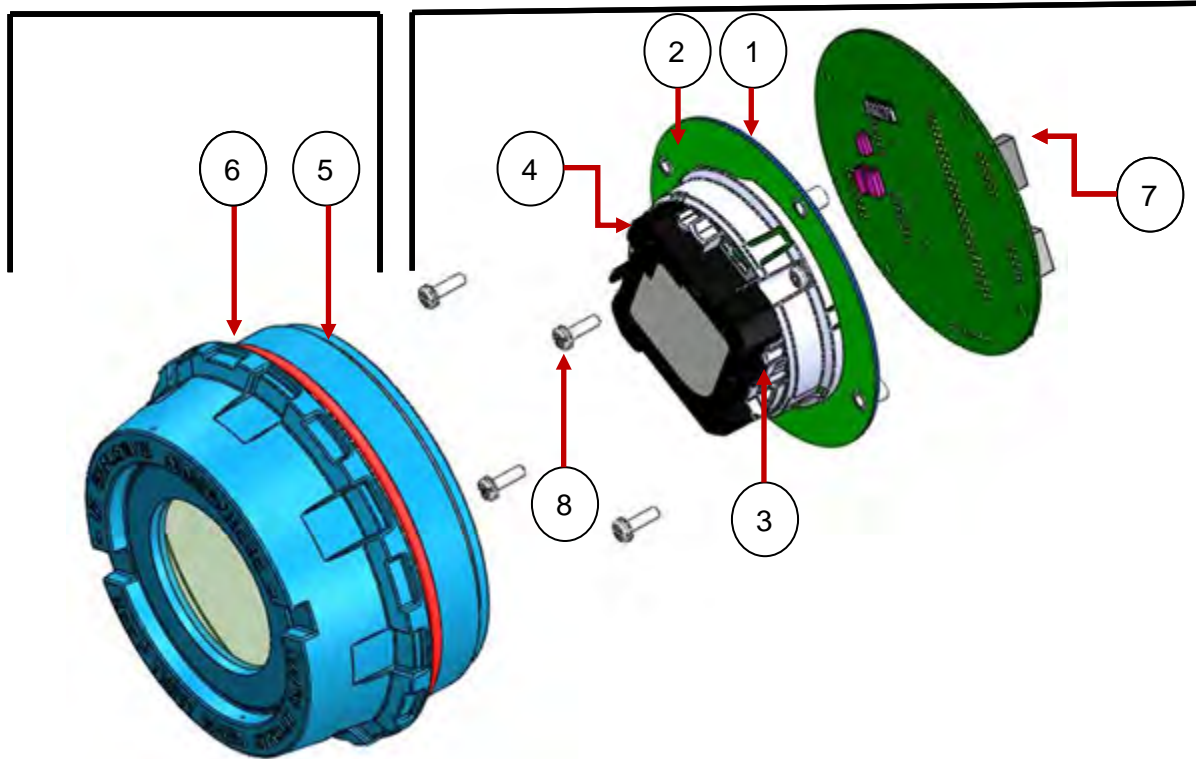
Tip provides information or suggestions for improved efficiency or best results.

Note

Note is a “general by-the-way” content not essential to the main flow of information.

Component disassembly

1. Local Display Field Install Kit Includes.



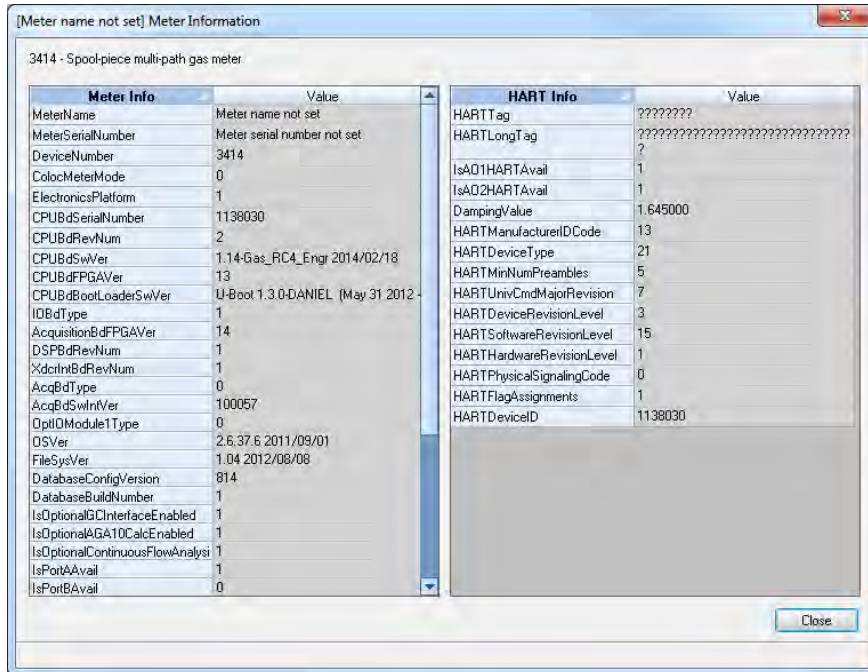
- Preassembled assemblies and parts:
 - LCD Display Board, Shroud, LCD Module
 - Cover – Housing (glass end cap) with O-Ring
 - Backplane board
 - Pan HD Screws #6-32 X .88

2. Local Display Field Install Kit Parts List.

ITEM *	QTY	DESCRIPTION
1	1	Preassembled: LCD Display Field Install Kit <ul style="list-style-type: none"> • LCD Display Board • LCD Display Shroud • Pan HD Screw PH SEMS #6-32 X .38 M/S W/410 EXT 18-8 SST • LCD Module
2	1	
3	2	
4	1	
5	1	Preassembled: Cover – HSG LCD Type FB100 <ul style="list-style-type: none"> • O-Ring #2-245
6	1	
7	1	Backplane Board 3410/3810
8	4	Pan HD Screw PH SEMS #6-32 X .88

*Note: Item numbers correlate with DMC-009079 - 3410/3810 Series LCD Module

3. Check firmware version before powering off the meter.



Application options:

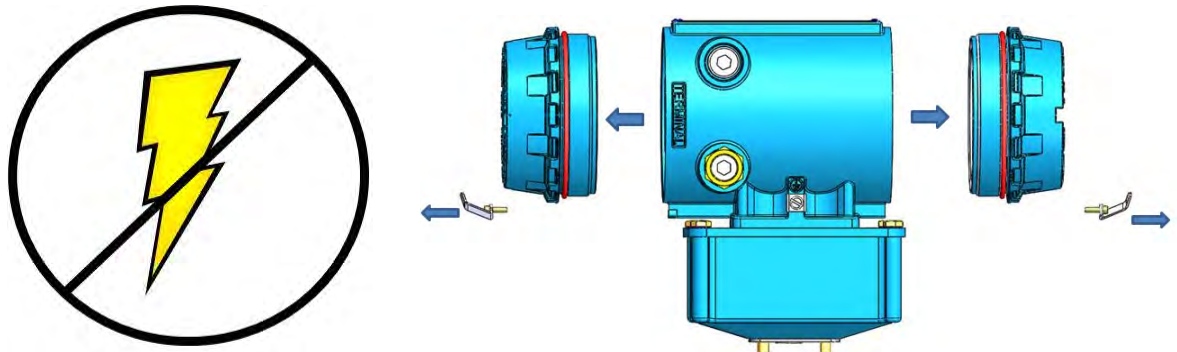
- Daniel MeterLink™
- AMS® Device Manager
- Field Communicator
- Requirements: Firmware Version 1.06 and Uboot Version January 31, 2013 or later.
- If necessary to upgrade firmware,
 - Open Daniel MeterLink and connect to the meter.
 - Open an Internet browser.
 - Navigate to the Daniel website: www.Daniel.com.
 - Use Quick Links and click **MeterLink Registration and Download** to access the latest firmware.



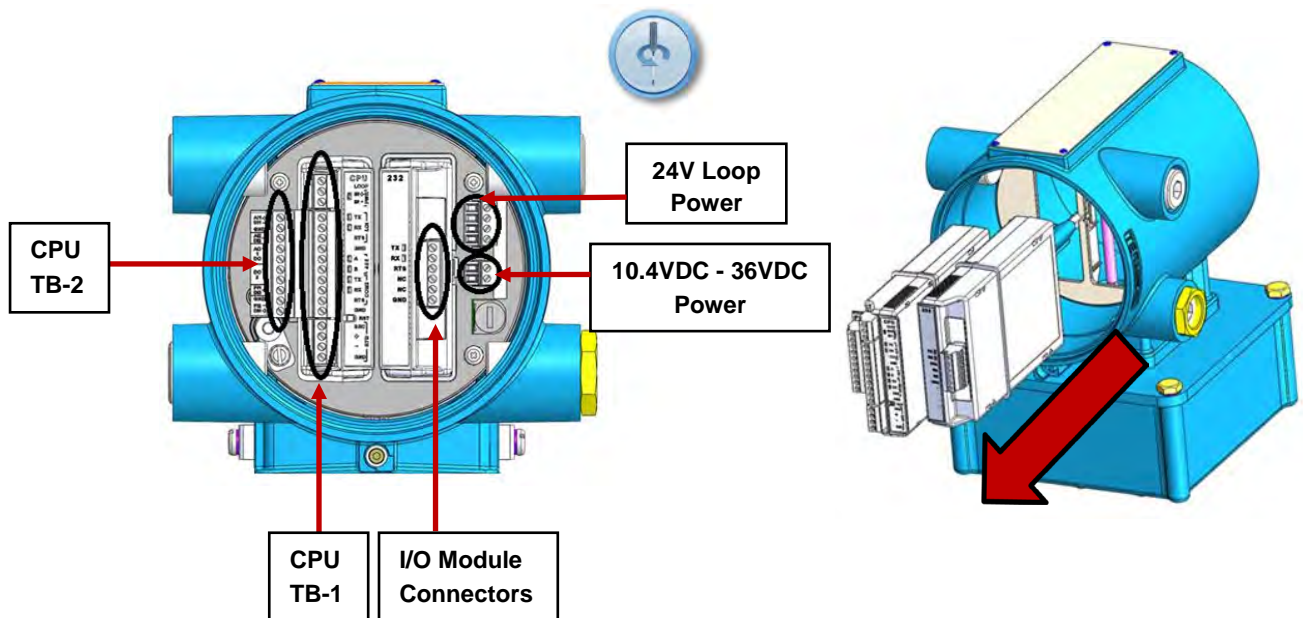
Quick Links
[MeterLink Registration and Download](#)
[Sizing Tools](#)

- Go to Daniel MeterLink and use the **Tools|Program Download** menu to download a file to the meter. Click **Open** to display an **Open Download File** dialog. Select the desired file and click **Open**. Daniel MeterLink™ only downloads components that are different than what is currently installed in the meter.

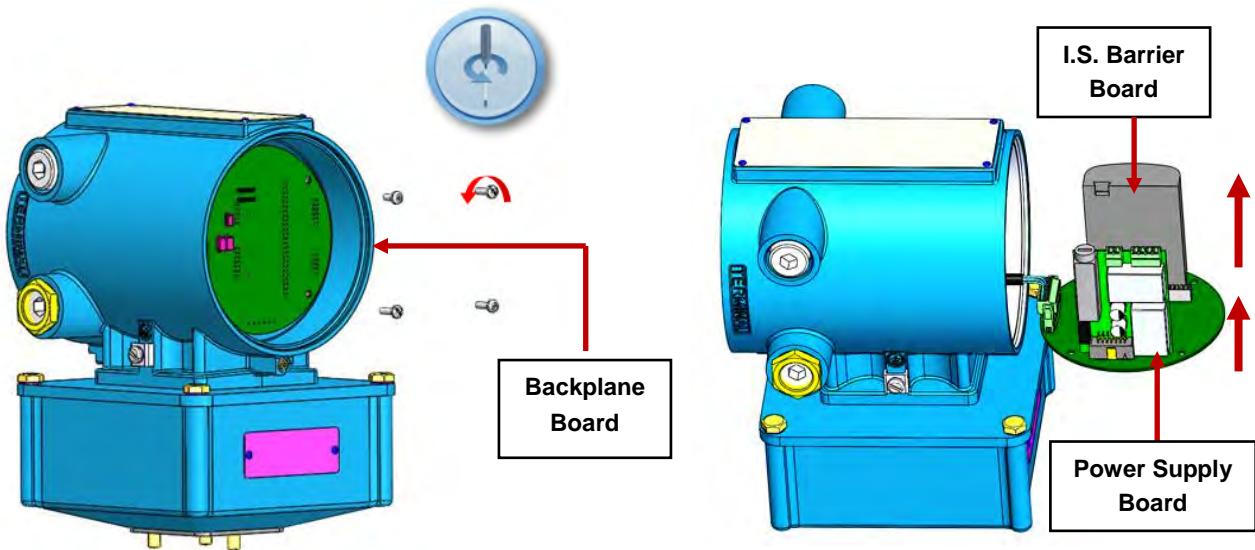
4. Remove power to the equipment and remove transmitter electronics enclosure endcaps.



- Remove endcap security seals, if installed, and security latches.
- Remove power from equipment before removing endcaps if possible and/or ensure explosive atmosphere is not present before opening the transmitter electronics enclosure.
- Unplug CPU Module terminal board connectors (TB-1 and TB-2).
- Unplug I/O Module, and Power Supply terminal board connectors.
- Pull the CPU and I/O Modules from the enclosure.

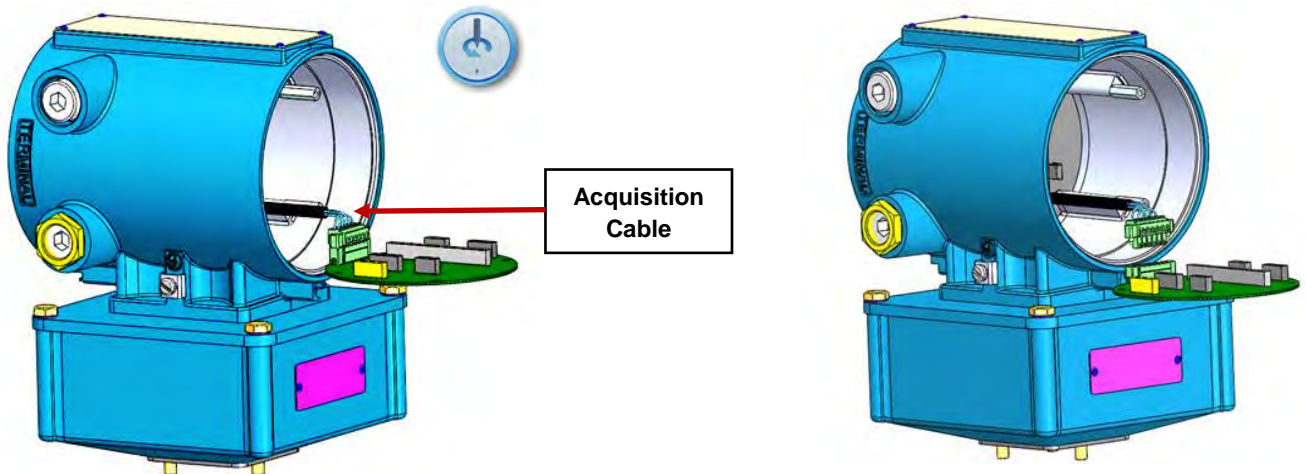


5. Remove the Backplane board.



- Remove four screws with lock washers.
- Pull Backplane from housing.
- Remove Power Supply and I.S. Barrier boards from Backplane.

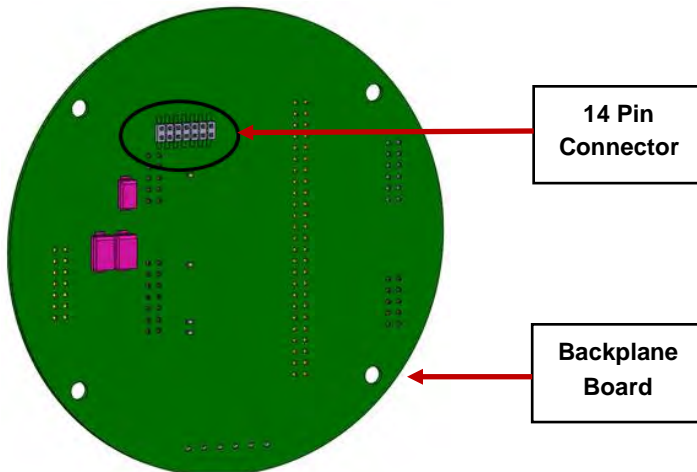
6. Disconnect the Acquisition cable.



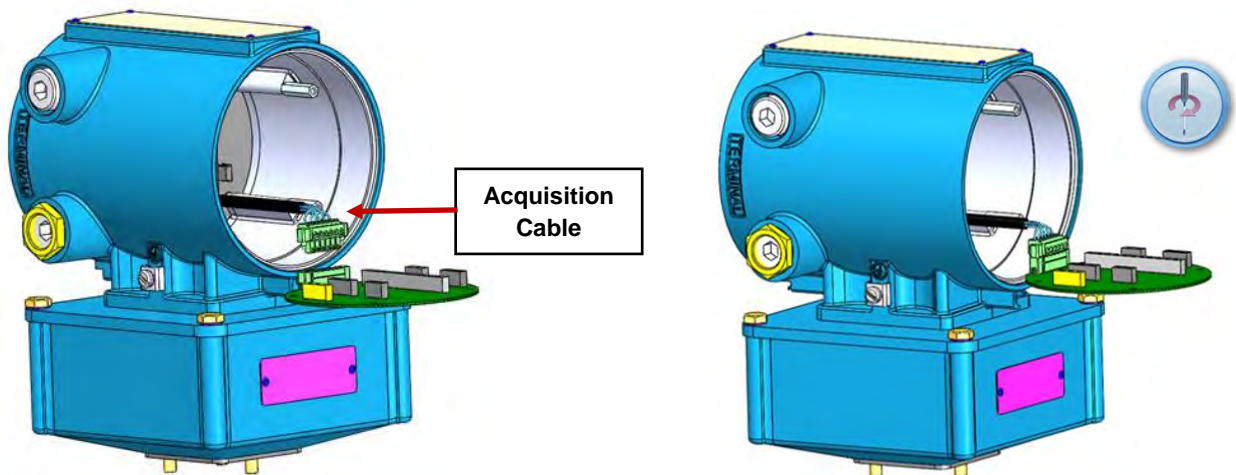
7. Components disassembly complete.

Component assembly

1. Backplane Board with 14 pin connector.

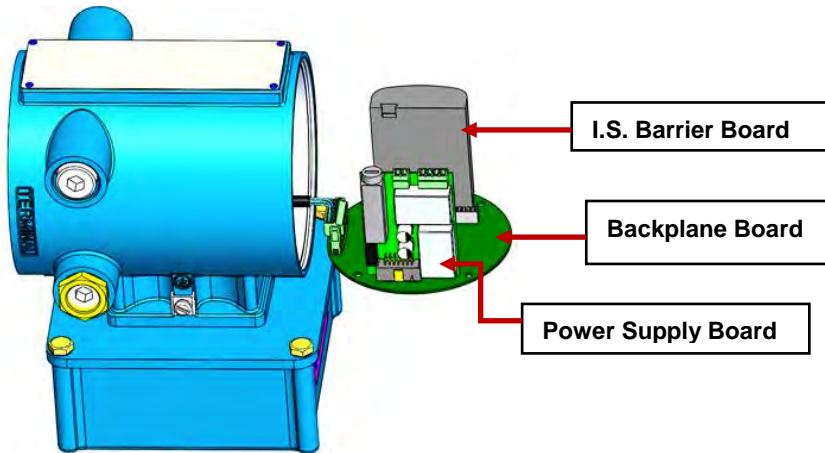


Note: Check existing 3410/3810 Series Backplane board (P/N 1-360-03-007) Rev D minimum for 14 pin connector (J8). If equipped, use this board. If not, use board included with the Local Display Field Install Kit.

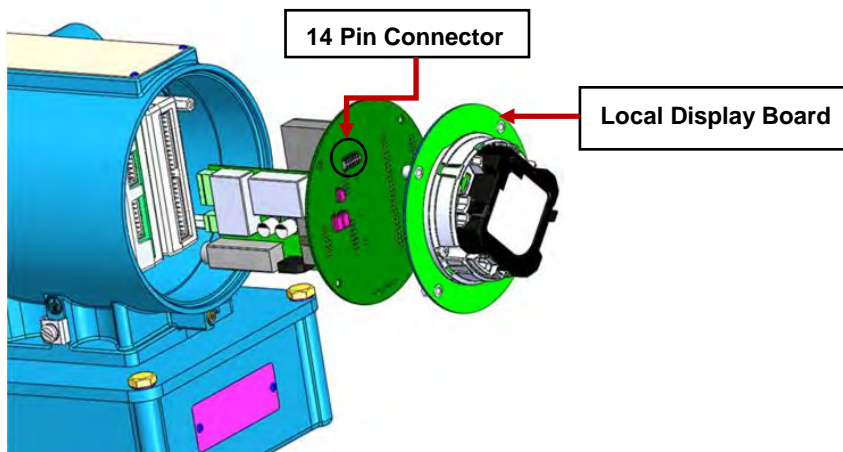


- Attach Acquisition cable to Backplane.
- Tighten connector screws.

2. Plug Power Supply Board and I.S. Barrier Module onto Backplane Board with 14 pin connector.

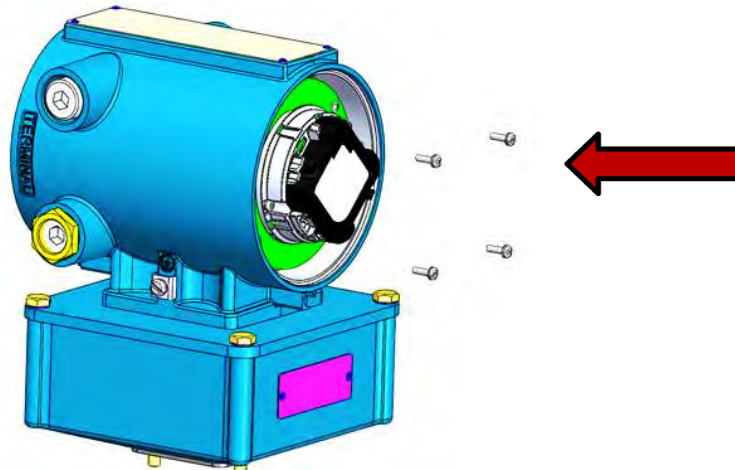


3. Plug Local Display Board into the Backplane 14 Pin connector.



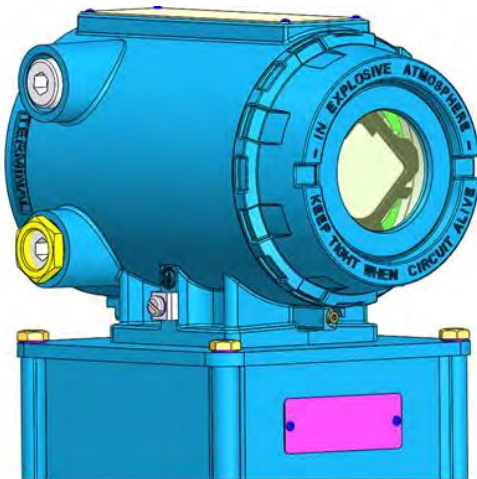
- Make sure LCD Board is fully seated to Backplane 14 pin connector.

4. Slide Backplane, Power Supply, I.S. Barrier Module and Local Display Module assembly into transmitter enclosure and fasten with 4 Pan Head screws.



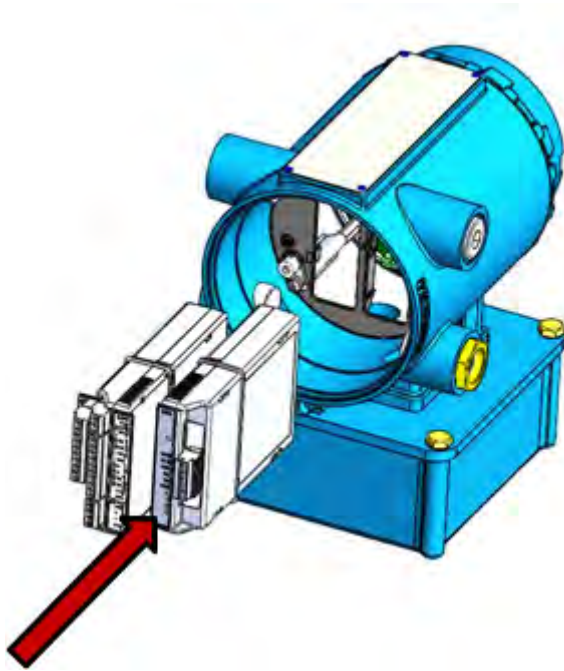
- Make sure boards are aligned in the enclosure and I.S. Barrier Board is inside the guide plate key retainer.
- Use the long Pan HD Screws #6-32 X .88 provided with the kit.

5. Install endcap with sight glass.

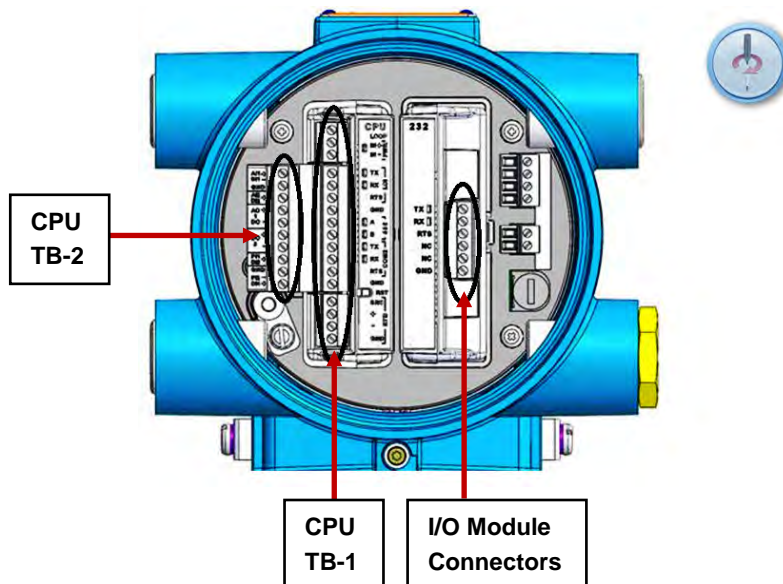


- Make sure endcap O-ring is installed.

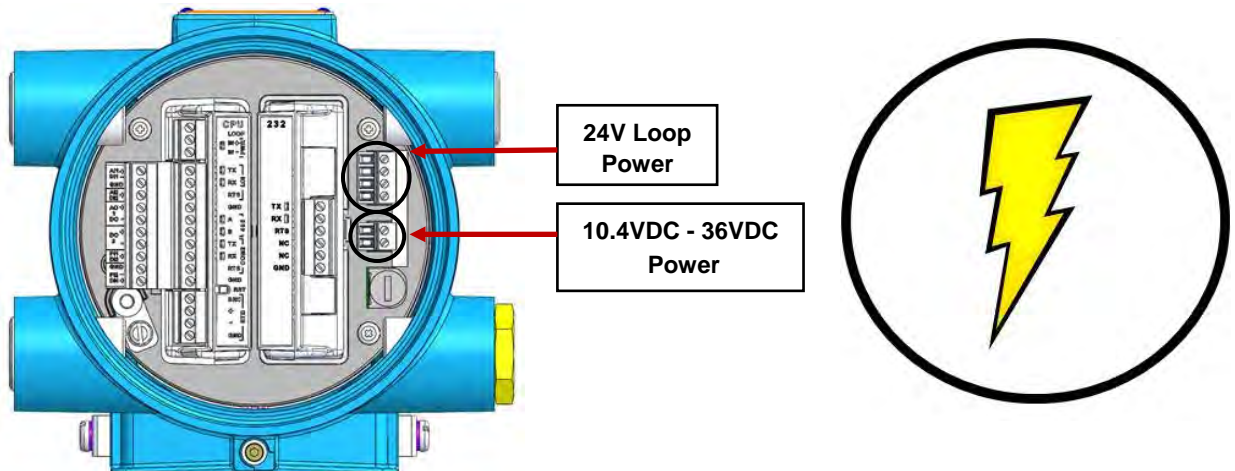
6. Reinstall CPU Module and I/O Module in the enclosure.



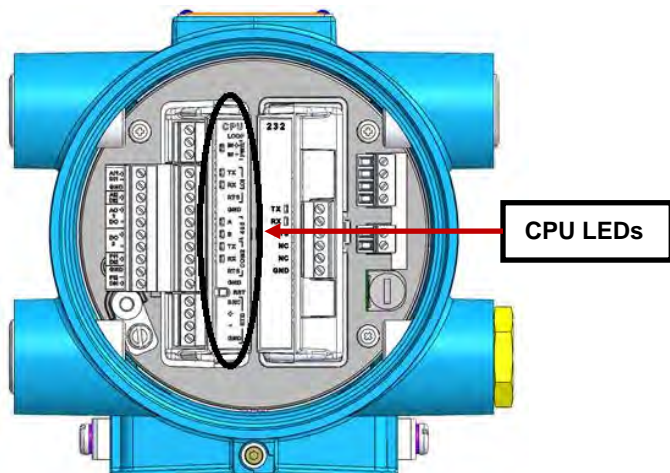
7. Install CPU Module TB-1 and TB-2 and I/O Module terminal connectors.



8. If explosive atmosphere is not present, connect the Power Supply terminal connectors and apply power to the unit.

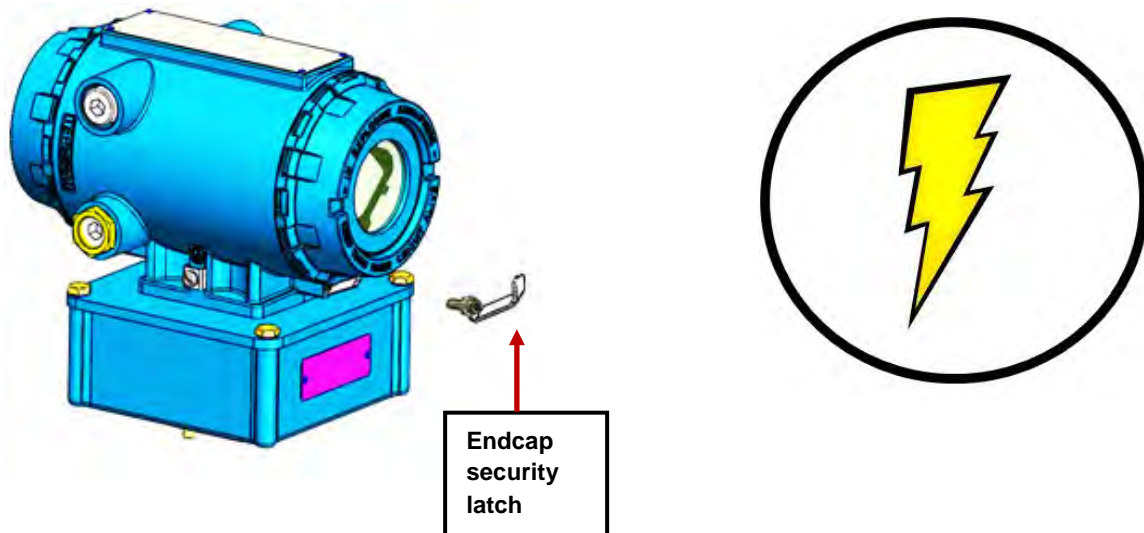


- Ensure all CPU LEDs are green.



- Observe Local Display startup sequence (see [Step 10](#)).

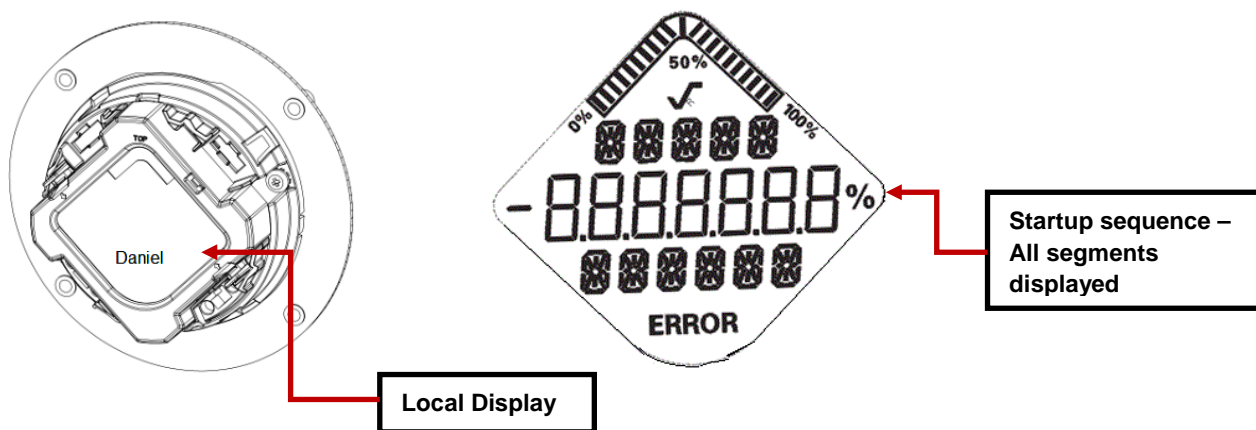
9. If explosive atmosphere is present, install endcaps and apply site power to equipment.



- Reinstall endcap security latches.
- Apply site power.

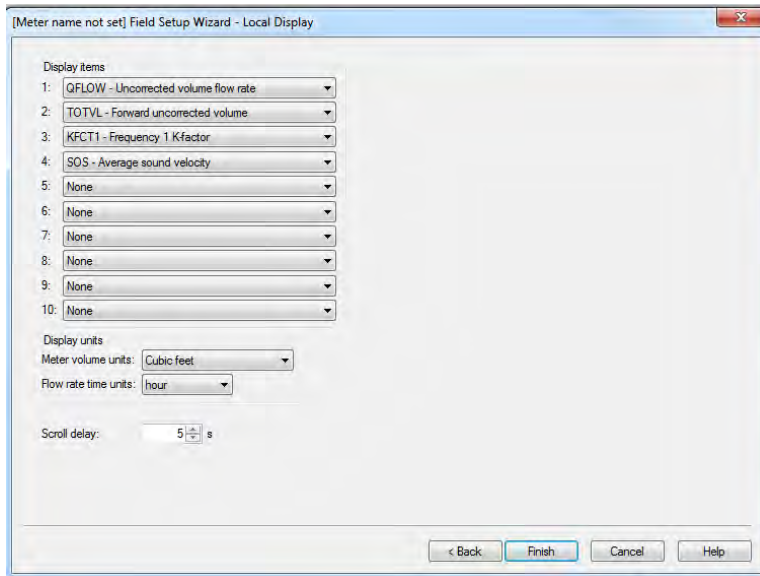
Note: If explosive atmosphere is present and site power initializes the unit, a Service technician should observe the Local Display startup sequence (see [Step 10](#)).

10. Observe Local Display startup sequence.



- 2 seconds after power up, the "DANIEL" logo appears at the bottom of the LCD screen.
- The Checksum displays.
- Make sure all segments are displayed (all the segments will come on and stay on for about 4 seconds). Pay careful attention and make sure that all segments are functioning and no segments are missing.
- The **Wait** command displays, and then the four default Display Items scroll on the display.

11. Configure display items, measurement units and scroll delay.

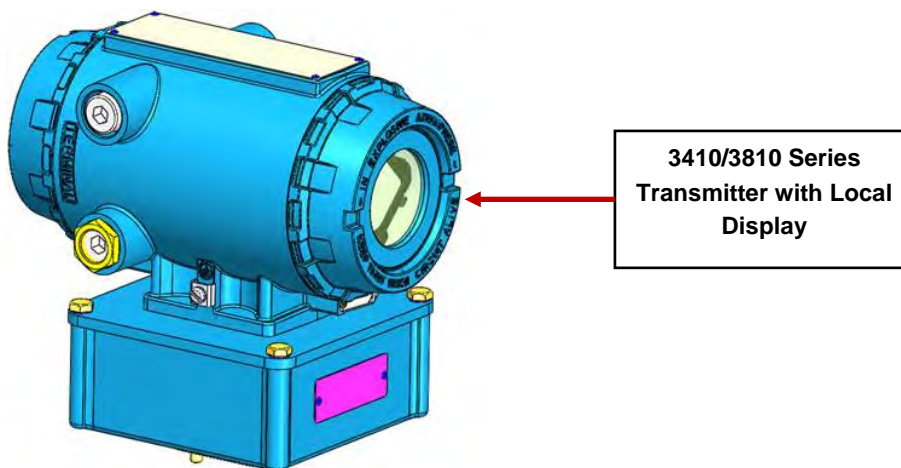


Configuration applications options:

- Daniel MeterLink™ - Field Setup Wizard (see image above)
- AMS® Device Manager ([AMS Suite: Intelligent Device Manager](#))
- Field Communicator ([Field Communicator](#))
- Reference manuals:
 - 3-9000-761 Rev 4 HART® Field Device Specification 3410 Series Gas Ultrasonic Meters
 - 3-9000-762 Rev 4 HART® Field Device Specification 3810 Series Liquid Ultrasonic Meters
 - 3-9000-759 Rev D 3410 Series Gas Ultrasonic Meters Installation Manual
 - 3-9000-760 Rev C 3810 Series Liquid Ultrasonic Meters Installation Manual
 - 3-9000-765 Rev C 3812 Liquid Ultrasonic Meters Installation Manual

12. Reinstall wire security seals on the endcaps, if necessary.

13. Installation complete.



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