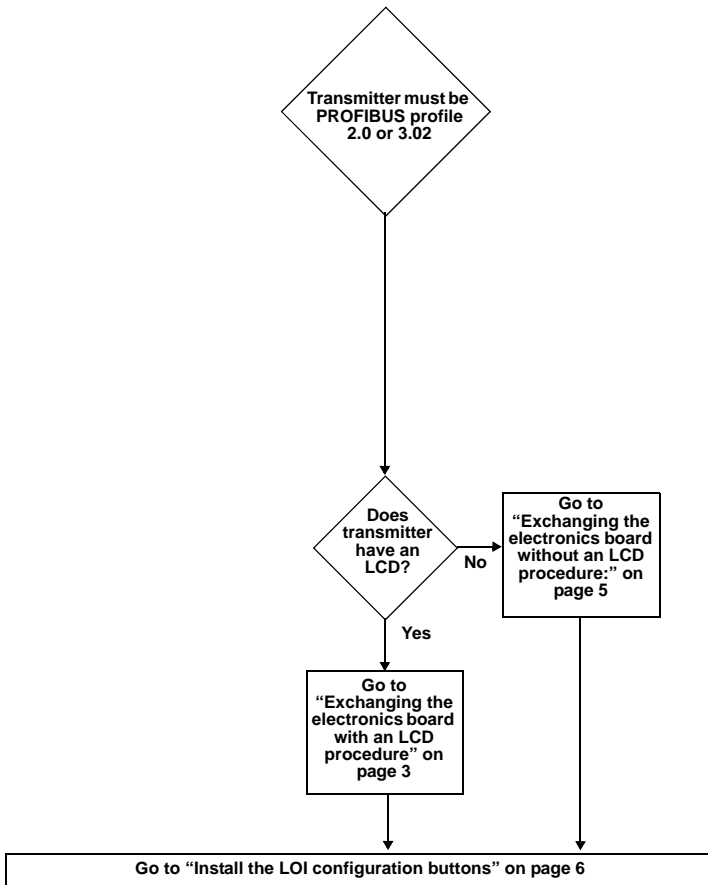


Instructions for Installing the Profibus Local Operator Interface (LOI) Upgrade Kit



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EMERSON
Process Management

Rosemount 3051

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 **IMPORTANT NOTICE**

This installation guide provides basic guidelines for Rosemount 3051 transmitters (reference manual document number 00809-0100-4001). It does not provide instructions for diagnostics, maintenance, service, or troubleshooting. This document is also available electronically on www.rosemount.com.

 **WARNING**

Explosions could result in death or serious injury:

Installation of this transmitter in an explosive environment must be in accordance with the appropriate local, national, and international standards, codes, and practices. Please review the approvals section of the 3051 reference manual for any restrictions associated with a safe installation.

- Before connecting a Field Communicator in an explosive atmosphere, ensure the instruments in the loop are installed in accordance with intrinsically safe or non-incendive field wiring practices.
- In an Explosion-proof/Flameproof installation, do not remove the transmitter covers when power is applied to the unit.

Process leaks may cause harm or result in death.

- Install and tighten process connectors before applying pressure.

Electrical shock can result in death or serious injury.

- Avoid contact with the leads and terminals. High voltage that may be present on leads can cause electrical shock.

Conduit/Cable Entries

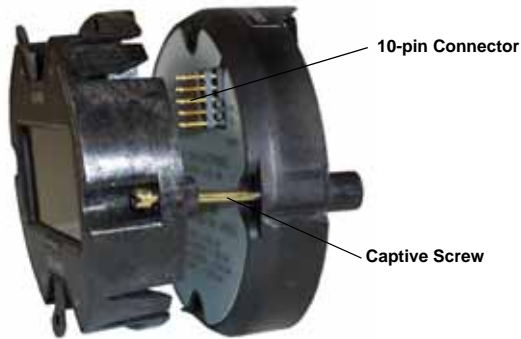
- Unless marked, the conduit/cable entries in the transmitter housing use a 1/2-14 NPT thread form. Only use plugs, adapters, glands or conduit with a compatible thread form when closing these entries.

Exchanging the electronics board with an LCD procedure

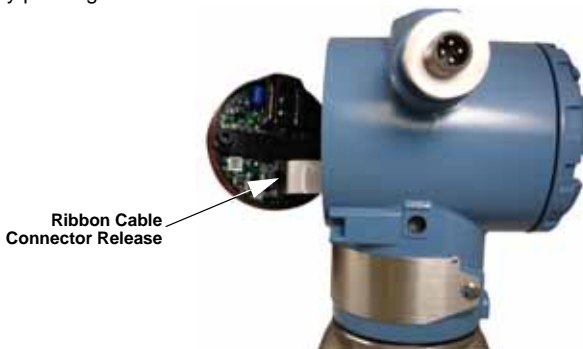
NOTE

Replacing electronics board will upgrade device to Profile 3.02.

1. Remove the housing cover opposite the field terminal side. Field terminals are identified on the certifications label.
2. Loosen the two captive screws on the right and left side of the LCD to release the electronics board / LCD assembly.
3. Using the two captive screws, slowly pull the electronics board / LCD assembly out of the housing. The assembly is electrostatically sensitive; observe handling precautions for static-sensitive components. Use caution when removing the assembly as there is a 10-pin Connector that joins the two components.



4. Detach the sensor module ribbon cable that holds the electronics board to the housing by pushing the connector release.



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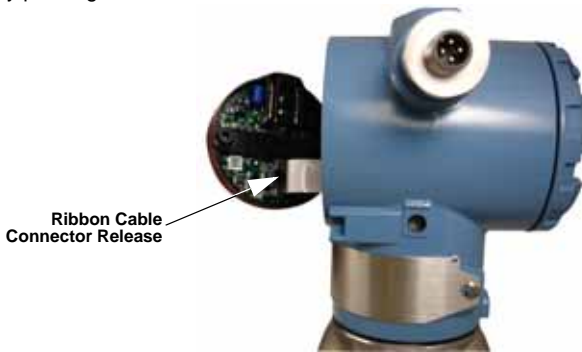
5. Disassemble the electronics board / LCD assembly by removing the LCD, screws, and 10-pin connector from electronics board by following these steps:
 - a. Remove the captive screws from the electronics board plastic shroud by turning them counter-clockwise while pulling slightly.
 - b. Slide off the LCD, careful not to damage 10-pin connector holding the two pieces together.
 - c. Remove 10-pin connector from electronics board.
 - d. Do not discard the captive screws, 10-pin connector, or LCD. These will be re-assembled to the new electronics board in Step 6. Set aside the electronics board.
6. Assemble the new electronics board / LCD assembly:
 - a. Insert 10-pin connector on new electronics board.
 - b. Slide LCD on to 10-pin connector, connecting the LCD to the new electronics board
 - c. Engage the captive screws through the new electronics board / LCD assembly to help hold the two pieces together.
7. Assemble the new electronics board / LCD assembly to the ribbon cable by removing the cable connector from its position inside of the internal black cap and attaching it to the electronics board.
8. Using the two captive screws as handles, insert the electronics board/LCD assembly into the housing. Make sure the posts from the electronics housing properly bond to the receptacles on the electronics board. Do not force. The electronics board should slide gently on the connections.
9. Tighten the captive mounting screws to torque value 3 in.-lbs.
10. Replace the electronics housing cover. The transmitter covers must be engaged metal-to-metal to ensure a proper seal and to meet explosion-proof requirements.
11. Proceed to "Install the LOI configuration buttons" on page 6.

Exchanging the electronics board without an LCD procedure:

NOTE

Replacing electronics board will upgrade device to Profile 3.02.

1. Remove the housing cover opposite the field terminal side. Field terminals are identified on the certifications label.
2. Loosen the two captive screws on the right and left side of the electronics to release the electronics board.
3. Using the two captive screws, slowly pull the electronics board out of the housing. The electronics board is electrostatically sensitive; observe handling precautions for static-sensitive components. The sensor module ribbon cable holds the electronics board to the housing.
4. Detach the sensor module ribbon cable that holds the electronics board to the housing by pushing the connector release.

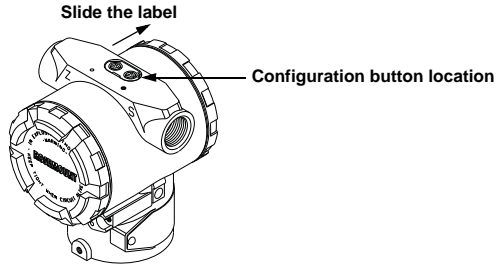


5. Connect the new electronics board/LCD assembly to the ribbon cable by removing the cable connector from its position inside of the internal black cap and attaching it to the electronics board.
6. Using the two captive screws as handles, insert the electronics board/LCD assembly into the housing. Make sure the posts from the electronics housing properly bond to the receptacles on the electronics board. Do not force. The electronics board should slide gently on the connections.
7. Tighten the captive mounting screws to torque value of 3 in.-lbs.
8. Install the enclosed electronics housing cover. The transmitter covers must be engaged metal-to-metal to ensure a proper seal and to meet explosion-proof requirements.
9. Proceed to "Install the LOI configuration buttons" on page 6.

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Install the LOI configuration buttons

1. Loosen the screw holding the certifications label. Slide the label to expose the configuration button location.



2. Remove blank retainer and gasket
 - a. Insert small screwdriver in the retaining tabs and lift out the retainer.
 - b. Take out gasket with the screwdriver.
 - c. Discard retainer and gasket.
3. Assemble new LOI configuration buttons
 - a. Insert one spring into each hole.
 - b. Insert one magnet, magnet end down, into each spring.
 - c. Insert gasket around the magnets.
 - d. Place the retainer on top of the gasket.
 1. Tilt the retainer so one clip goes into the groove.
 2. Then press firmly to fully secure retainer.
 - e. Slide certification label to final closed position. Tighten the screw on the certification label.

