

# Replace 1700/2700 Analog Integral-Mount Transmitter with a 5700 Transmitter and Adapter





**Note**

Only intended for use by Micro Motion Qualified Service Personnel familiar with the hazards involved in the replacement of the internal electronics contained in an Explosion Proof Enclosure. This includes the inspection and identification of damage to threads and use of suitable lubricants to be used on flameproof joints.

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To prevent conduit connectors from seizing in the threads of the conduit openings, apply a conductive anti-galling compound to the threads or wrap threads with PTFE tape a minimum of two wraps per standard installation practices. Wrap the tape in the opposite direction that the male threads will turn when inserted into the female conduit opening.

**For Zone 2, Div 2, or Safe Area**

To maintain the ingress protection in a Hazardous Area or Safe Area; a thread sealant, a sealing washer, or O-ring must be applied to any fittings, adapters, or blanking elements used on conduit entries/threaded joints. Selection and installation must be carried out by qualified personnel and in accordance with EN/IEC 60079-14 for ATEX/IECEX, NEC/CEC for North America, or for other world areas please follow their applicable installation instructions.

**For Zone 1 or Div 1**

Where these fittings, adapters, or blanking elements are a part of flame proof joints (for Zone 1 or Division 1), they must comply with the requirements of EN/IEC 60079-1 & 60079-14, CSA C22.2 No 30 & UL 1203 for Europe/International and North America respectively, or for other world areas please follow their applicable installation instructions.

- For Zone 1 applications thread sealant must also comply with the requirements of EN/IEC 60079-14 and thus must be non-setting, non-metallic, non-combustible, and maintain earthing between the equipment and conduit.
- For Class I, Div. 1 applications thread sealant must also comply with the requirements of UL 1203/CSA C22.2 No. 30.
- For other world areas please utilize their applicable Zone 1/Div. 1 standards for any potential requirements pertaining to thread sealants.

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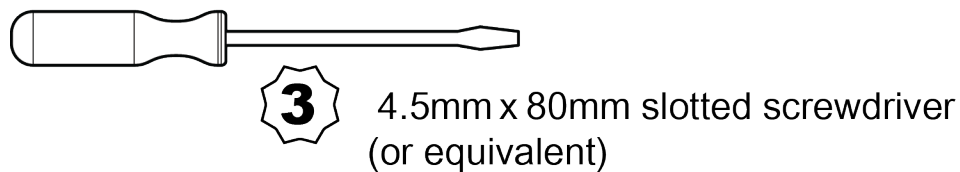
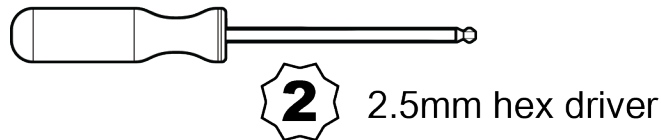
**NOTICE**

Ensure any selected thread sealant is acceptable with your local jurisdictional authority.

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## Required tools



## Hazard messages

This document uses the following criteria for hazard messages based on ANSI standards Z535.6-2011 (R2017).

 **DANGER**

Serious injury or death will occur if a hazardous situation is not avoided.

 **WARNING**

Serious injury or death could occur if a hazardous situation is not avoided.

 **CAUTION**

Minor or moderate injury will or could occur if a hazardous situation is not avoided.

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**NOTICE**

Data loss, property damage, hardware damage, or software damage can occur if a situation is not avoided. There is no credible risk of physical injury.

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## Physical access



### **WARNING**

Unauthorized personnel can potentially cause significant damage and/or misconfiguration of end users' equipment. Protect against all intentional or unintentional unauthorized use.

Physical security is an important part of any security program and fundamental to protecting your system. Restrict physical access to protect users' assets. This is true for all systems used within the facility.

## Safety messages

### WARNING

To prevent ignition of flammable or combustible atmospheres, ensure that all covers and seals are tightly closed. For hazardous area installations, applying power while housing covers are removed or loose can cause an explosion, resulting in injury or death.

Unauthorized personnel can potentially cause significant damage and/or misconfiguration of end users' equipment. Protect against all intentional or unintentional unauthorized use.

Physical security is an important part of any security program and fundamental to protecting your system. Restrict physical access to protect users' assets. This is true for all systems used within the facility.

If you plan to mount the transmitter in a hazardous area:

- Refer to Micro Motion approval instructions shipped with the product or available from the Emerson website ([Emerson.com/global](https://emerson.com/global)). Improper installation in a hazardous area can cause an explosion resulting in injury or death.
- Verify that the transmitter has the appropriate hazardous area approval. Each transmitter has a hazardous area approval tag attached to the transmitter housing.
- Ensure that any cable used between the transmitter and the sensor meets the hazardous area requirements.
- Do not remove the housing cover while the transmitter is powered up. Failure to follow these instructions could result in an explosion causing death or injury.
- Do not reapply power to the transmitter with the housing cover removed. Reapplying power to the transmitter while the housing cover is removed could cause an explosion.
- For ATEX/IECEX installations, strictly adhere to the safety instructions documented in the ATEX/IECEX approvals documentation available on the product documentation DVD shipped with the product or at [Emerson.com/global](https://emerson.com/global).
- Wait five minutes after disconnecting the power. Failure to do so could result in an explosion causing death or injury.

Improper grounding could result in an explosion causing death or serious injury.

Improper grounding could cause inaccurate measurements or meter failure..

Do not use the service port if the transmitter is in a hazardous area because using the service port means that you must open the transmitter wiring compartment. Opening the wiring compartment in a hazardous area while the transmitter is powered up can cause an explosion resulting in injury or death.

Meter installation and wiring should be performed only by suitably-trained personnel using the appropriate government and corporate safety standards.

Improper wiring in a hazardous environment can cause an explosion. Install the transmitter only in an area that complies with the hazardous classification tag on the transmitter.

To prevent ignition of flammable or combustible atmospheres, ensure that all covers and seals are tightly closed. For hazardous area installations, applying power while housing covers are removed or loose can cause an explosion.

Wire the Discrete Input in explosion-proof, nonincendive, or nonhazardous installations.

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### NOTICE

Over rotating the housing can lead to damaging the feedthrough cable.

ESD protection methods required to avoid damage to sensitive electronics.

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### NOTICE

Improper grounding could cause inaccurate measurements or meter failure.

Do not use Discrete Output Source as a fault indicator. If you do, you may not be able to distinguish a fault condition from a normal operating condition. If you want to use the Discrete Output as a fault indicator, see Fault indication with a Discrete Output.

Do not use the conduit specified for power supply wires for input/output wiring to avoid pinched wires when the display cover is closed.

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**Figure 4-1: Micro Motion 1700 /2700 Transmitter with the Camlock Design**



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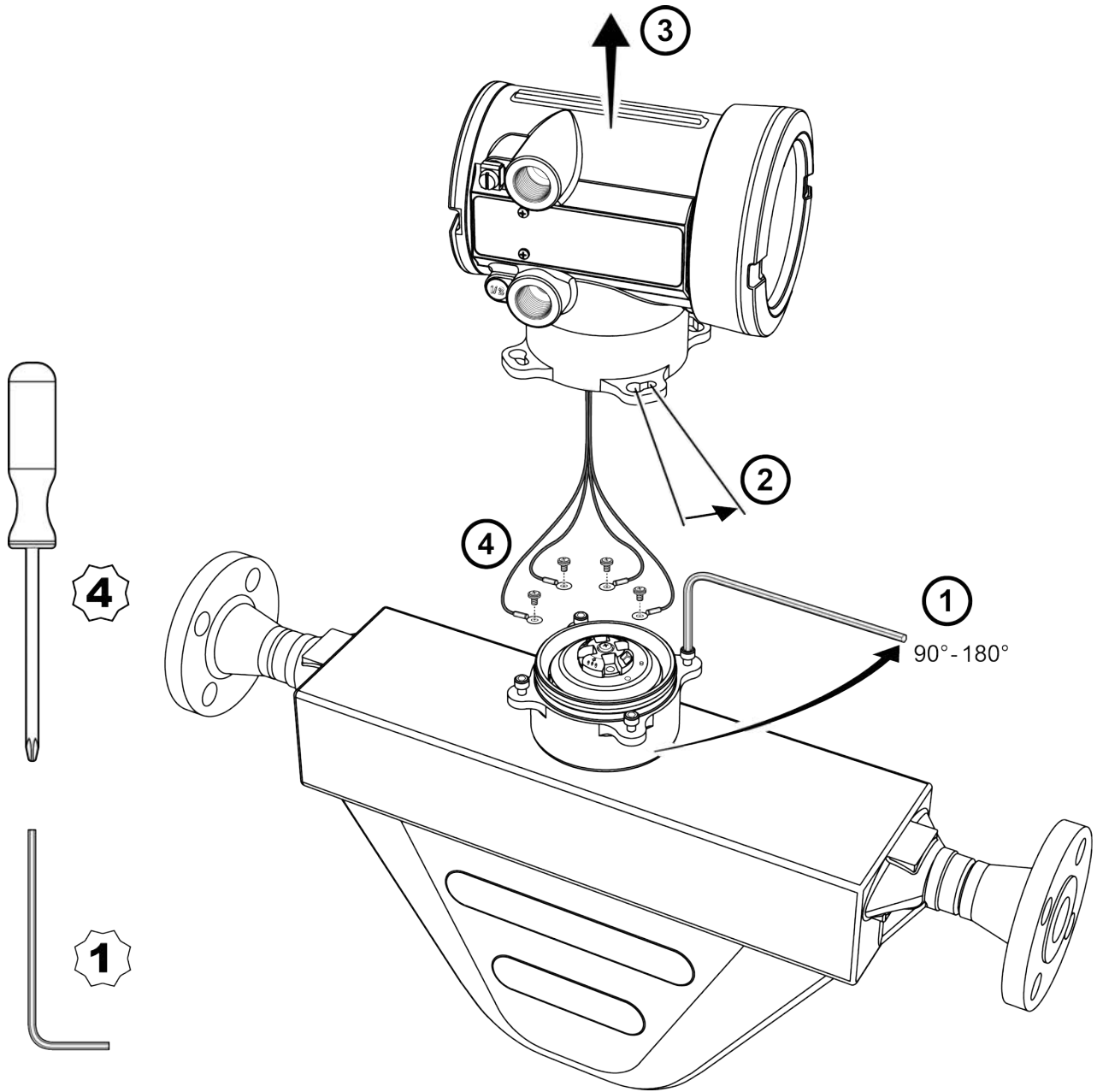
**Note**

If your configuration has the camlock design shown above, you need a hardware upgrade before proceeding with this installation. Please contact [flow.support@emerson.com](mailto:flow.support@emerson.com) for further details.

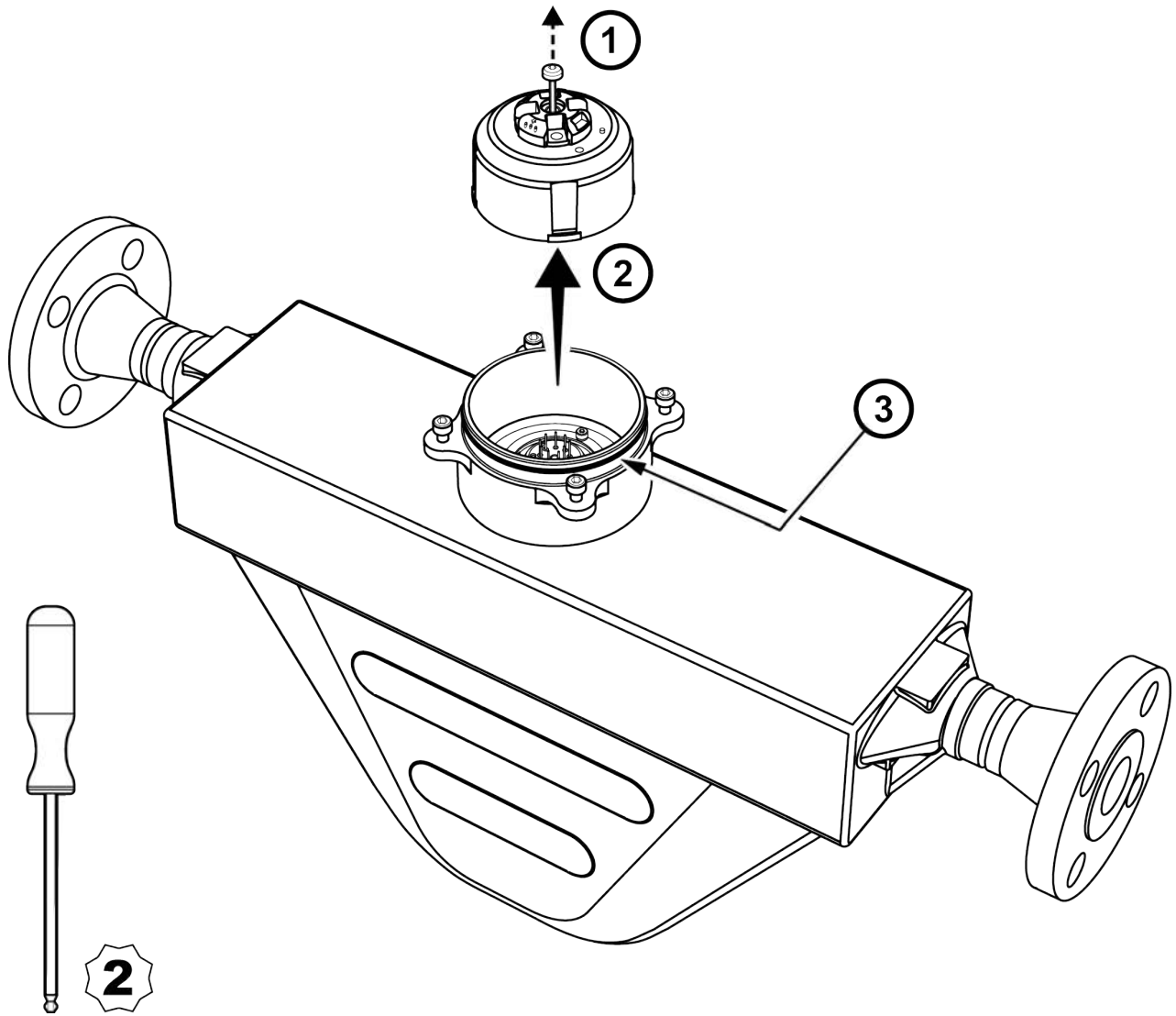
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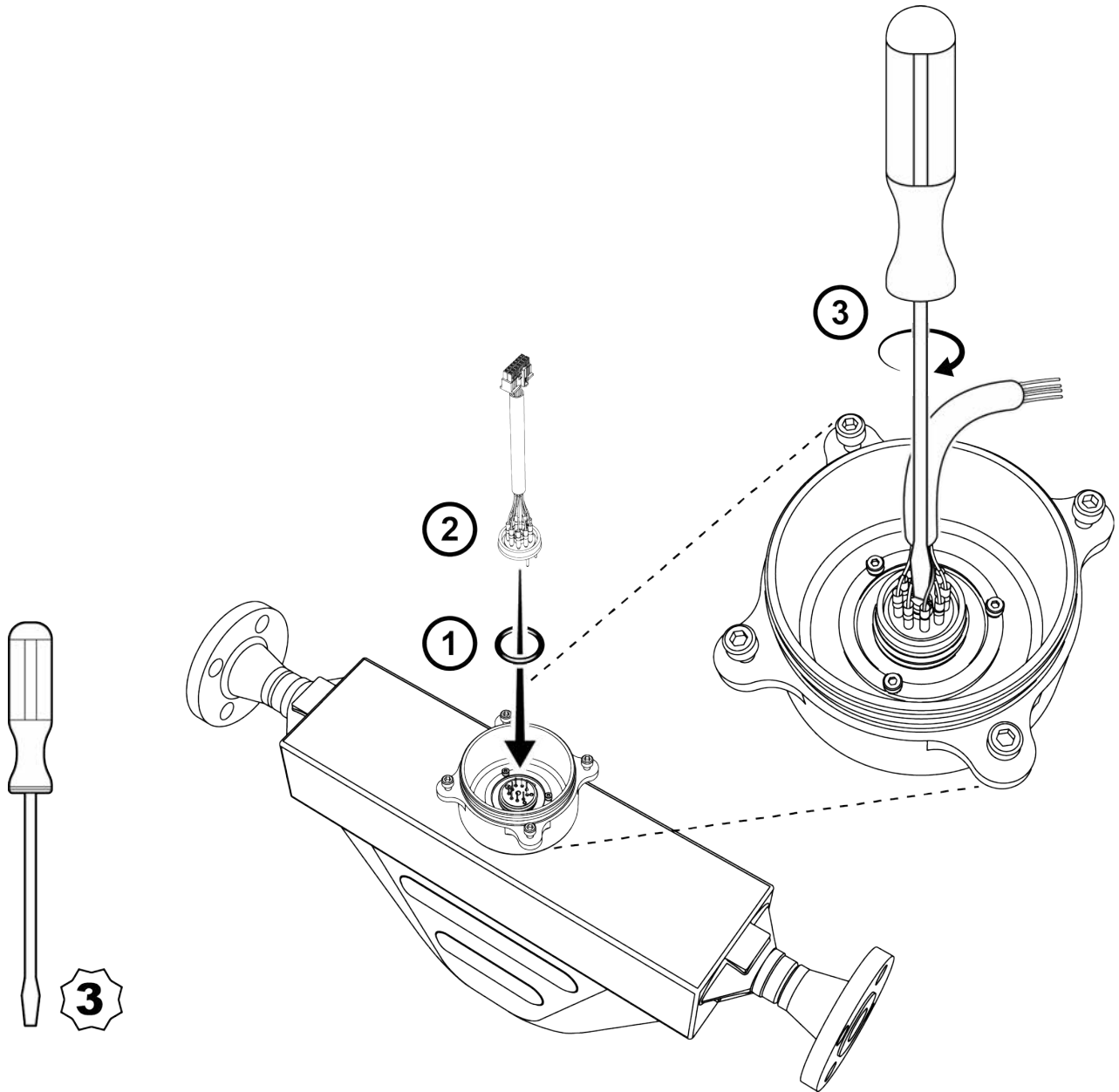
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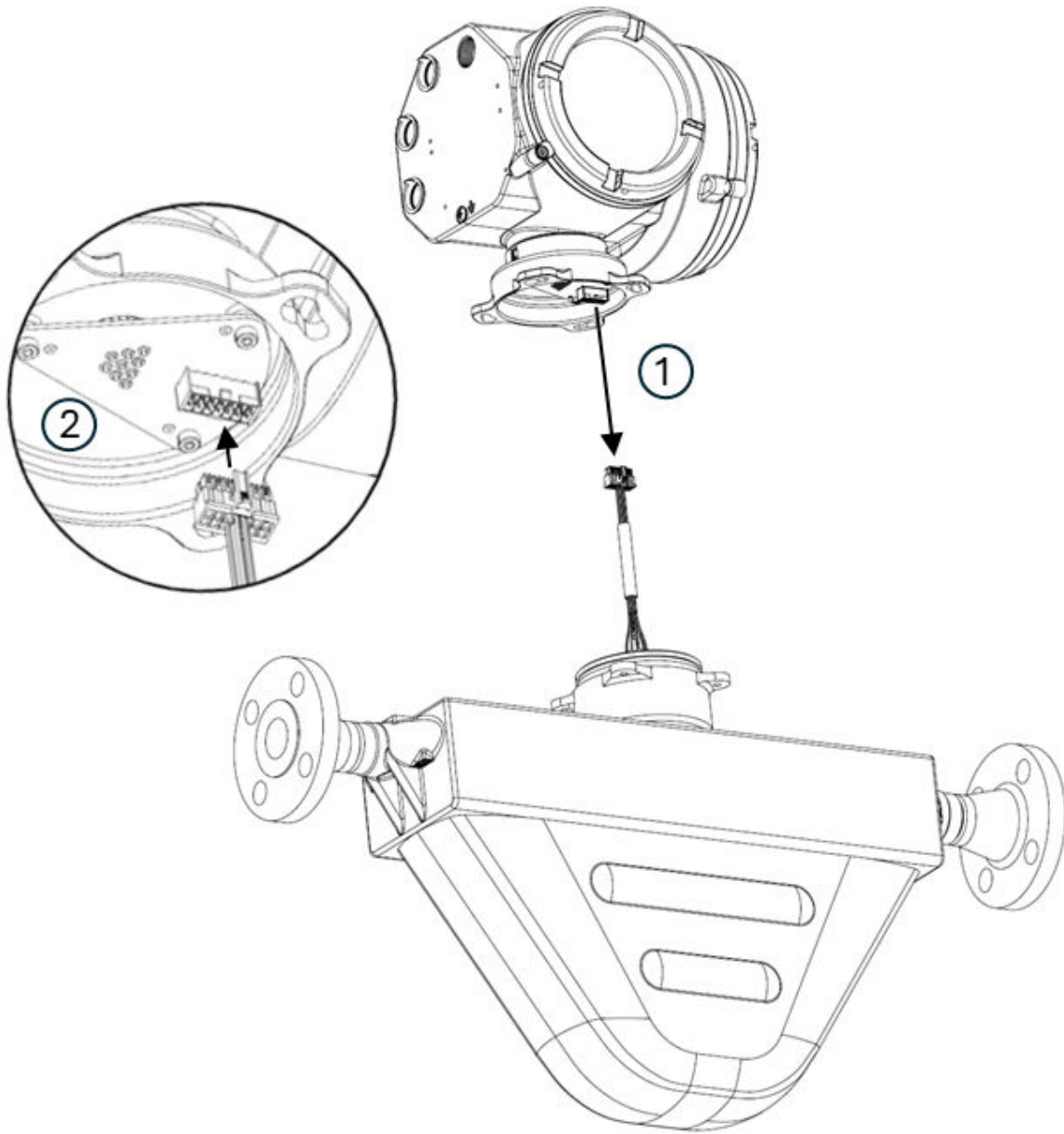
**Note**

Make sure you replace the existing O-ring with the O-ring provided with the transmitter retrofit kit.

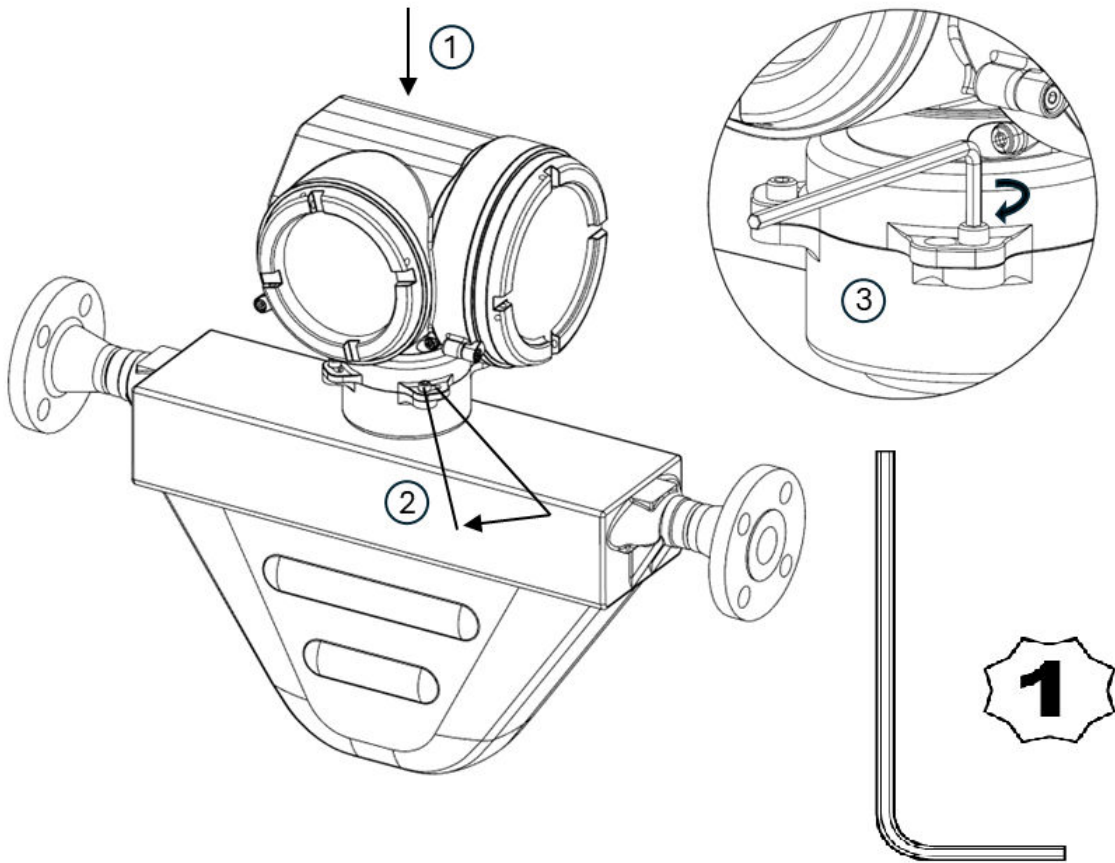
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