



Flexure Replacement

PROTECTING THE TRANSDUCER

1. Power down the electronics and VibraWeigh® (if equipped). Please follow all proper LOTO procedures for safety.
2. Remove the Rear Access Panel from the meter and install the Shipping Lock Bolts.
3. It is recommended that the Transducer be removed in order to protect the Transducer from being pulled or pushed as the meter is being moved.

REMOVING THE METER FROM THE INSTALLATION POINT

1. Disconnect the Transducer Cable & other power connections from their Wago (connection terminals). Note: Take notes on the connections to help with reinstallation. There should be nothing connected to the meter that could hinder the removal of the meter from its installation point.
2. Unscrew the eight screws holding the meter to the customer's installation location. When moving the meter, try to keep the Measurement Pan from coming into contact with anything.

Note: NEVER SUPPORT THE METER BY THE MEASUREMENT PAN!

3. Place the CentriFlow® Meter on a stable surface for repairs.
4. Remove the ten Socket Head Cap Screws holding the Rear Access Panel to the Meter Casing and remove the Rear Access Panel, exposing the inner components of the meter.

PREPARING THE METER FOR FLEXURE REPLACEMENT

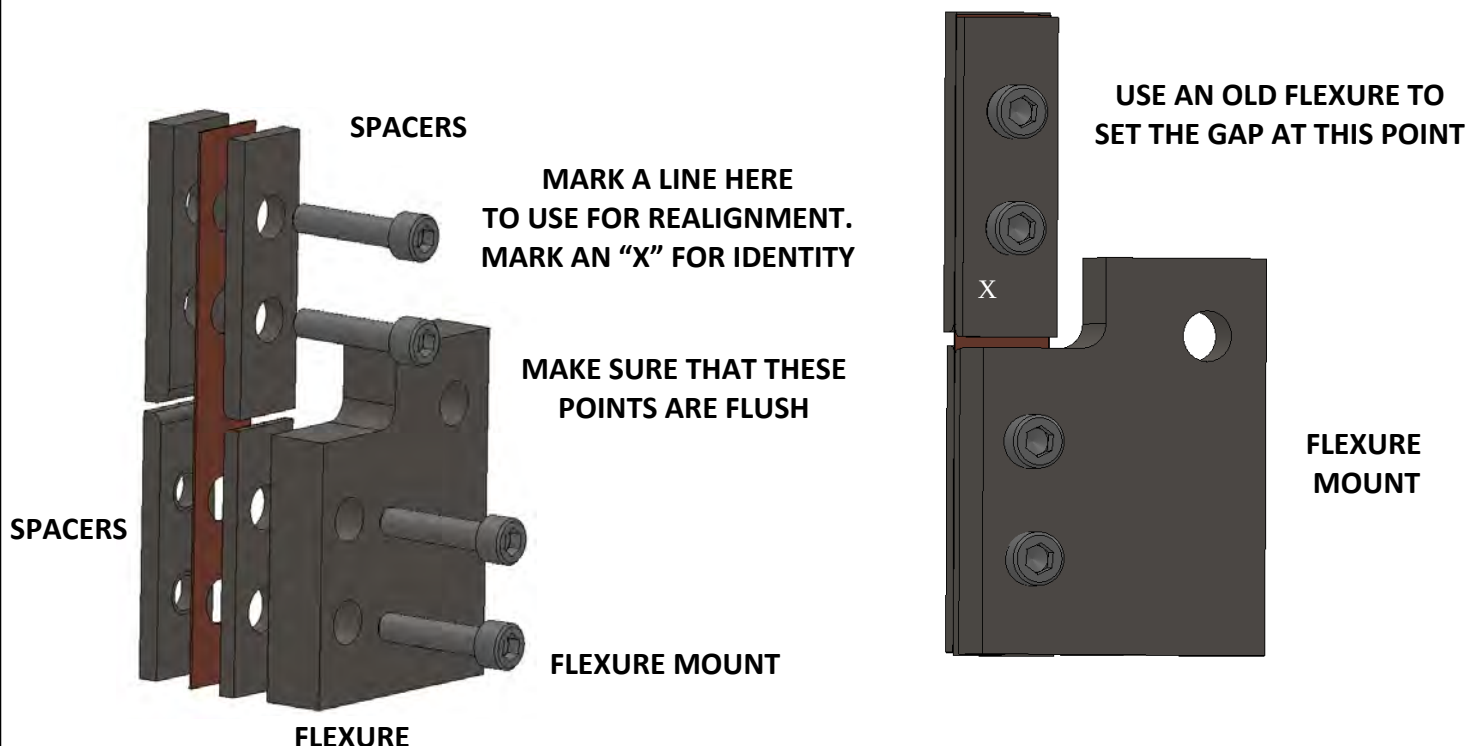
1. Remove the Shipping Lock Bolts.
2. Locate the Overtravel stops that encompass the Counterweight arm.
3. Place the 0.015" (pink) shims provided in the kit on the top of the Counterweight. Slide these shims between the Counterweight and the Overtravel screws.
4. Push up on the Counterweight and place the 0.010" (brown) shims between the bottom of the Counterweight and the Lower Overtravel screws. This should be a good fit.
5. Using a marker, mark the Spacers beside the top screw of each Flexure assembly as seen in the picture. Also, put an "X" on the top Spacer for identification. This will allow you to line up the Spacers correctly in the next few steps.



REPLACING THE FLEXURES

1. Unscrew the four Socket Head Cap Screws that hold the Flexure Assembly together. Note: Replace only one side at a time, broken ones first. Generally, all the Flexures are replaced to ensure meter integrity even if they aren't broken.
2. Remove the old Flexures and reassemble with the new Flexures. Using the markings that you created on the Spacers, line up the Spacers in their original state. Replace the screws using Removable Loctite 242 (Blue), but do not tighten.
3. The Flexure Assembly needs to be flush on the sides so that the Spacers have equal pressure on the Flexure. Also, there needs to be a gap on the inside of the Flexure Mount assembly between the top Spacers and the Flexure Mount. To create this gap and to keep the sides flush, use the old Flexure. Run the old Flexure down the side of the assembly to ensure that the Spacers and the new Flexure are flush. Then, wedge the old Flexure into the space between the Flexure Mount and the top Spacer Assembly to establish a gap in which the Flexure Mount will be able to move. Tighten the screws when the gap is set and the assembly is flush on both sides. Remove the old Flexure shim for making the gap.
(Please see the illustrations below)
4. Repeat the replacement steps for all other Flexure Assemblies one at a time.

FLEXURE MOUNT ASSEMBLY





REBALANCING AND MOUNTING OF THE CENTRIFLOW® METER

1. First, visually inspect the inner components to make sure all of the Flexure assemblies look correct and there is no debris left in the casing.
2. Put the meter at the installed angle 0°, 10°, or 20° (this is crucial).
3. Since the Transducer is not attached at the Column Wire, the Pan Assembly should be free floating. The meter is a perfectly balanced system and must be mechanically balanced at the Overtravels. There must be a 0.015" gap on the Upper Overtravels and 0.010" on the Lower Overtravels.
4. Adjust the Overtravels to the correct gaps and test by lightly touching the Pan. You will see the meter's Pan Assembly and Counterweight move freely and balanced to those gaps. If they don't balance or move freely, find the rubbing spot and fix. If the Overtravels have to be changed significantly, check the angle that the meter is at and make sure you are at the factory angle of installation. Call the factory for questions.
6. Reinstall the Shipping Locks.
7. Ensure that seal gasket is secure around the entire Meter Casing perimeter. The seal gasket is important to keep out dust or any other particles that may affect the meter's performance.
8. Realign the Meter Casing and the Rear Access Panel and tighten in place with the original screws.
9. Remount using the original screws and Removable Loctite 242 (Blue).
10. Reattach the Transducer Cable and Power Supply to their original positions.
11. Now the meter is ready for the Transducer to be reattached. See the Transducer Replacement Procedure for instructions on reinstalling or replacing the Transducer.