

The following is an instruction procedure for replacement of the Transducer Assembly for your CentriFlow CFL Meter.

## Before Beginning the Procedure

1. Disconnect power to the CentriFlow® CFL Meter.
2. Remove the Back Cover.
3. Disconnect the leads from the Transducer to the Wago connector.
4. Remove the column cap holding the Transducer wire.
5. Remove the Transducer.
6. Make sure the Shipping Locks are not “Locked”.
7. Make sure no product is flowing through the system.

## INSTALLING A TRANSDUCER

1. Make sure that the CentriFlow® CFL Meter is installed properly and secure. If the transducer is being replaced in another location other than the installation point, set the meter at the exact same level so that the balance on the pan is correct.
2. Ensure that the Lock Up Pins are in the sensor (loadcell) during installation as the loadcell may get damaged if they are removed.
3. Fasten the transducer, using the original screws with Removable Loctite, to the mount.
4. Connect the thin wires from the transducer to the Wago connector putting them into their color-coded slots. Note: Red and Black are excitation and Green and White are mV output.
5. Place a 0.005” blue shim between the top overtravel screw and the counterweight on both sides. See Diagram for part identification.
6. Hang the calibration weight from the top lip of the Pan so that the weight hangs over across the Pan.
7. Check that the column wire lays flat on the column and is perpendicular to the Back Plate. If the wire does not sit flat or is not parallel to its surface, adjust the mount to correct this. When the correct position is obtained, tighten the screws holding the mount.
8. Remove the Lock Up Pins from the sensor (Loadcell) at this time.
9. Use a voltage meter to observe the output of the transducer. Read between the Green and White wires. The desirable installation would result in a 0.00 mV output; however, the meter will work within  $\pm 0.35$  mV of 0.00 mV.
10. Install the new column cap over the column wire. Tighten the screws working back and forth between them to evenly tighten the screws so as not to distort the column wire. Tighten equally in steps until fully tight and monitor the mV meter to maintain under  $\pm 0.35$  mV.
11. Remove the test weight(s) and shims and ensure that the mV output is  $\pm 0.35$  mV.
  - a. If the output is not within the parameters, replace the shims and weight(s) and loosen the column cap and repeat tightening a few times. If this still does not correct the output, repeat steps 6 & 7.
12. With Step 11 complete, lightly press on the Measurement Pan until you get a 10 mV output and then release the Pan, ensuring that the meter returns to the mV output found in step 9. If the meter does not return to its previous zero or cannot reach full scale output, remove the Transducer and repeat the Installation Procedure.
13. Perform the Zero and Static Calibration Procedures as found in your mechanical manual.

**CFM-12 SHOWN WITH PARTS  
REMOVED FOR CLARITY**

Please note that there are two styles of loadcells, one of which will look different than the one pictured. If your meter has the alternate style of loadcell, the procedure mentioned above will remain the same, however, the loadcell will be mounted to a mount bracket that will be mounted to the cellmount. Remove the old loadcell from this mount bracket and proceed with the instructions above.

