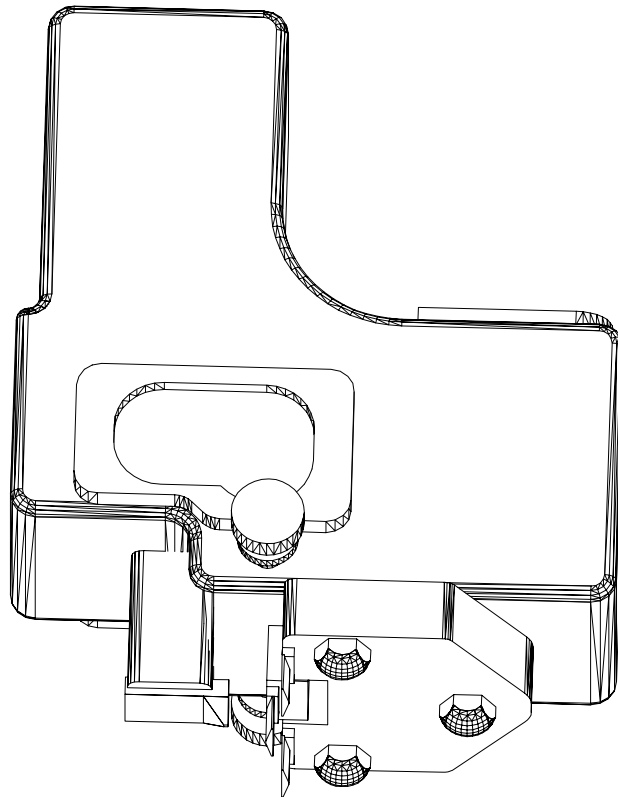


# LMI 241-BW

## Flush & Gap Transducer



# Instruction Manual

## **LMI 241-BW, Simultaneous Flush and Gap Gage**

The following information is broke down into two sections. The first section contains the basic instructions on how to apply the gage to make measurements with the second section containing the necessary information on how to attach and adjust the many accessories available for the LMI 241-BW.

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## SECTION 1:

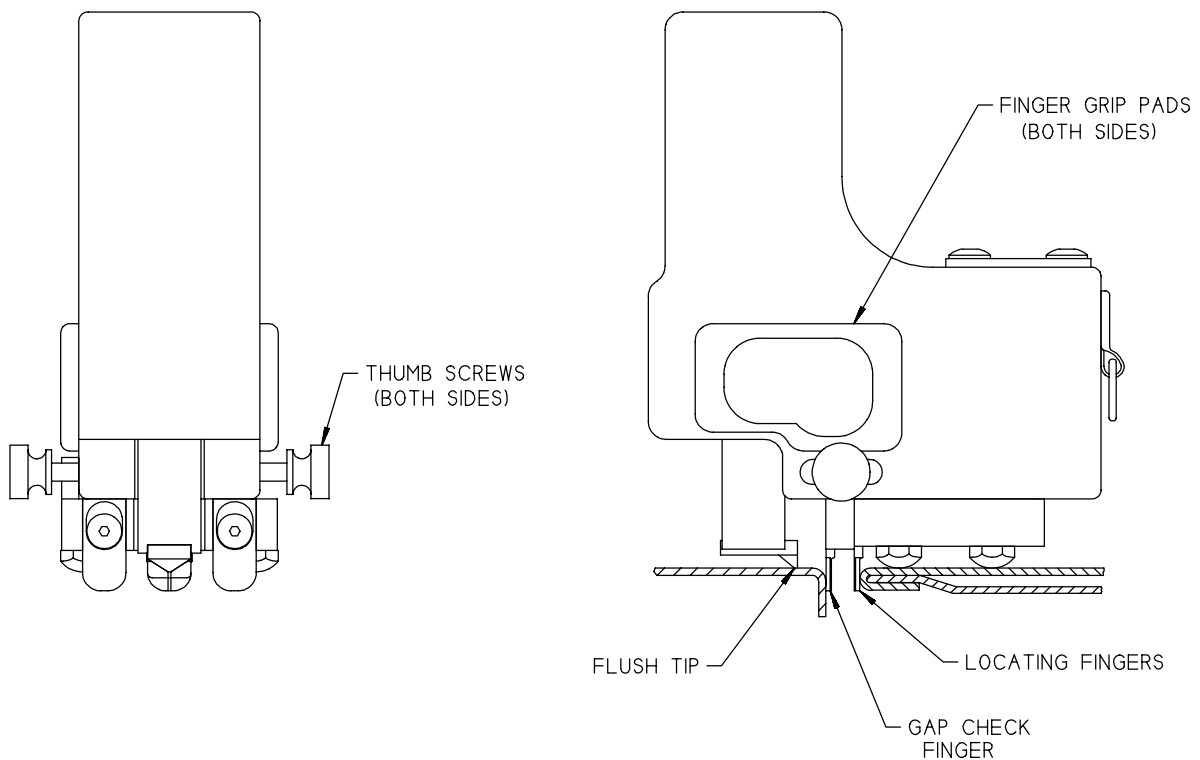
### Making Flush and Gap Checks

1. Properly calibrate and master the LMI 241-BW with your specific data collection system.

Note: The LMI 241-BW requires a three point calibration procedure for both the flush and the gap readings. The 10mm span of the flush and the gap travel is internally preset and represents the two outer points of calibration. The third point of calibration is the master position and is set by using an LMI 3030 or LMI 3015 Master Block. Due to the large variety of data collection systems on the market, please contact LMI for specific calibration instructions.

2. Retract the GAP CHECK FINGER with the aid of the thumb screw on the side of the gage. Refer to figure 1.
3. Insert the three fingers into the gap of the part and set the three STABILIZING PADS onto the part.
4. Release the thumb screw so the GAP CHECK FINGER makes contact with the adjacent part.
5. Position the gage so that the two LOCATING FINGERS are making contact with the part the gage is resting on.
6. At this time the FLUSH TIP and the GAP CHECK FINGER should be in contact with the part and ready to make a check. Refer to figure 1.

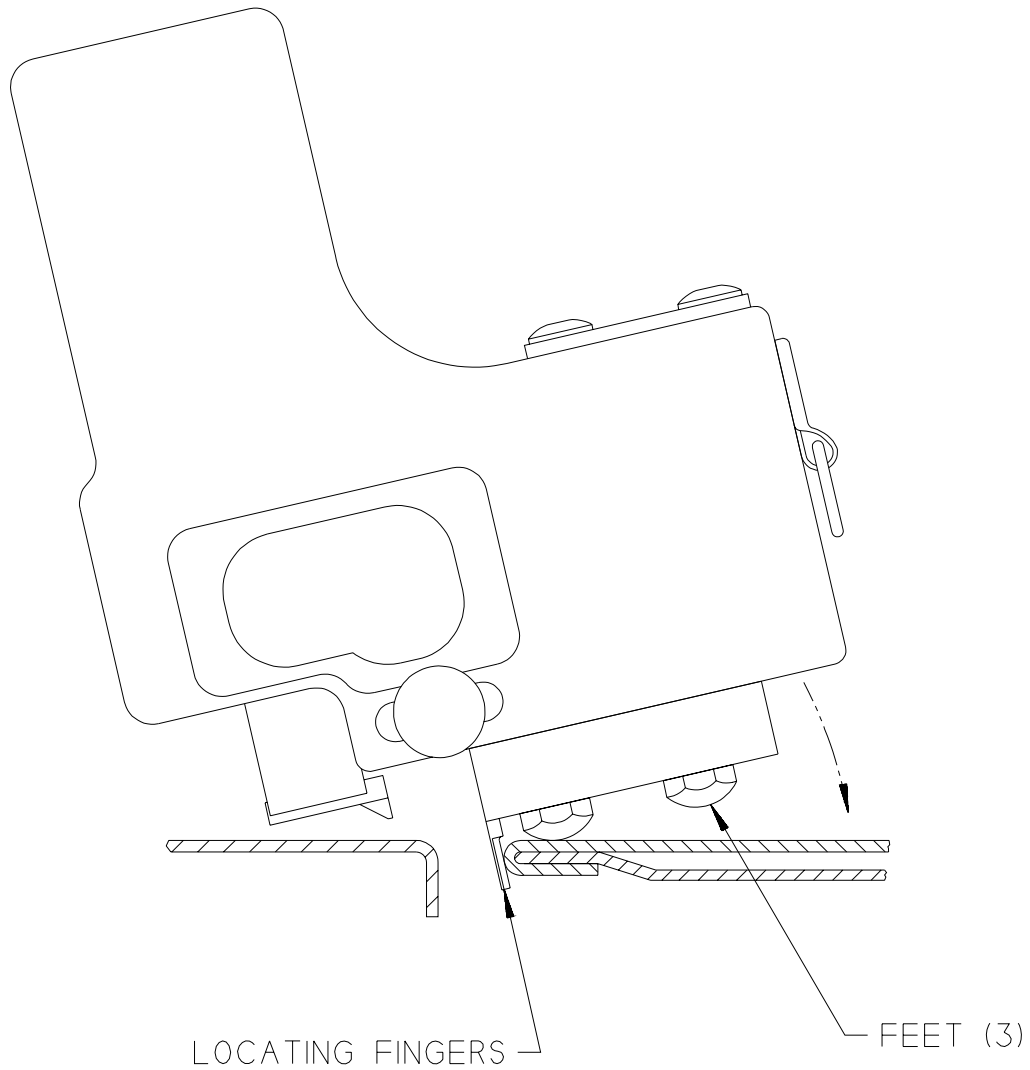
Note: The LMI 241-BW comes equipped with finger grip pads. To maximize repeatability, it is important that all operators utilize the gage in the same manner.



**FIGURE 1**

## **Gage Locating Tip:**

Insert the transducer into the gap as shown in figure 2. Pull the locating fingers against the surface that the gage is resting on while pivoting the gage back to sit on all three feet. You will be able to “feel” the gage seat itself on and against the part.



**FIGURE 2**

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## SECTION 2:

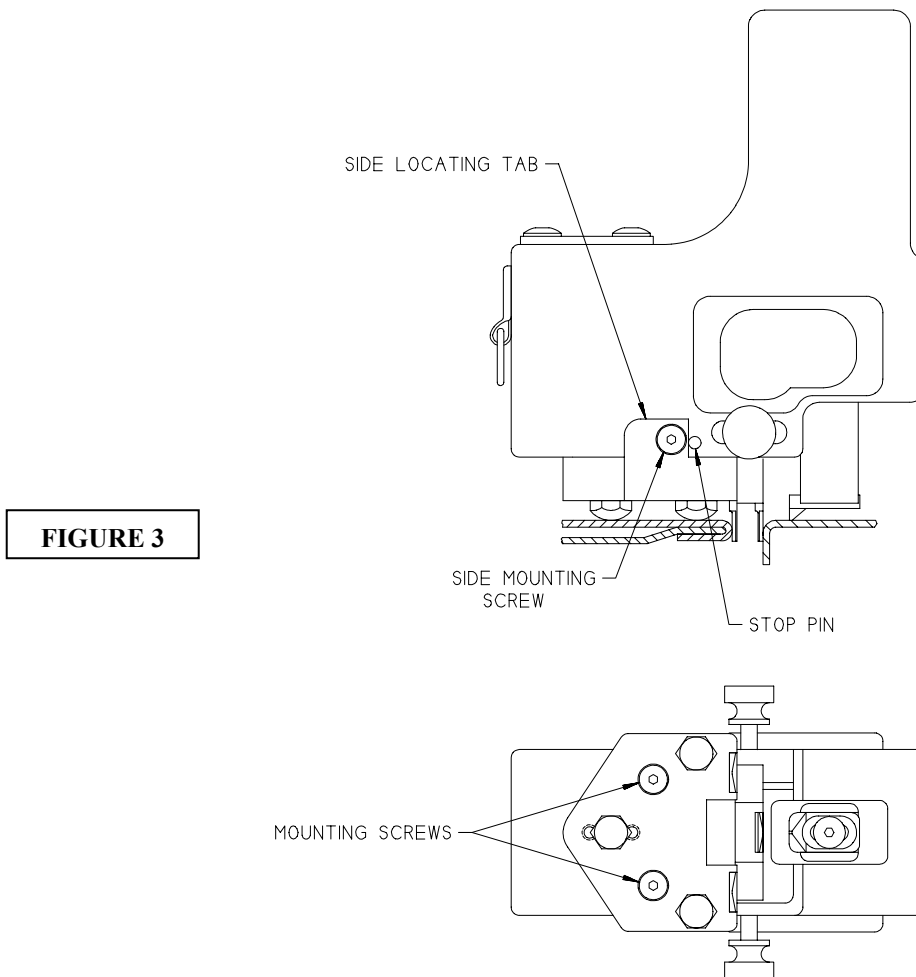
### Accessories and Gage Adjustments

LMI offers a variety of extension pad kits, flush tips and different length gap check fingers and locating fingers to meet the customer's needs. The following, provides information on LMI's accessories as well as instructions on how to replace or adjust them. Contact LMI for specific model information for ordering purposes.

Note: All of the following modifications require a 1/16" Hex ball driver that is supplied with the gage.

### Extension Pads:

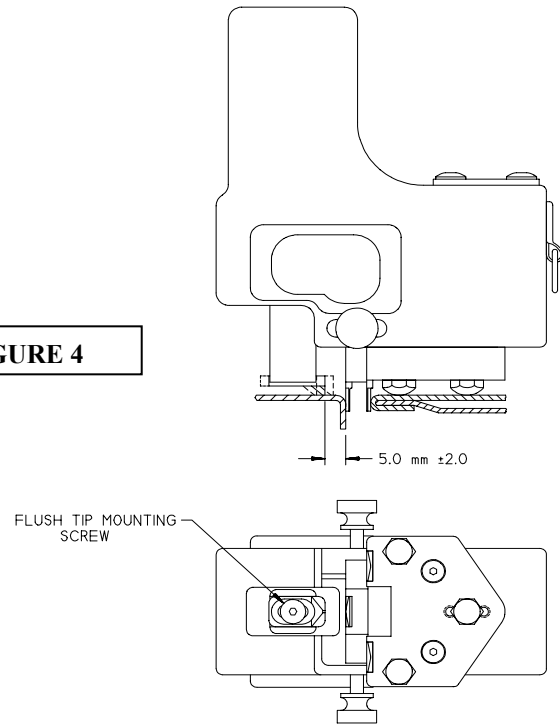
Extension pad kits are available with nylon, stainless steel or magnetic stabilizing feet to optimize repeatability for each particular application. To change extension pads the three screws that attach the pad to the gage need to be removed. The new pad can easily be attached using the same mounting hole pattern. Make sure that the side locating tab makes contact with the stop pin and that the side mounting screw is tightened first. Refer to figure 3.



## **Flush Tips:**

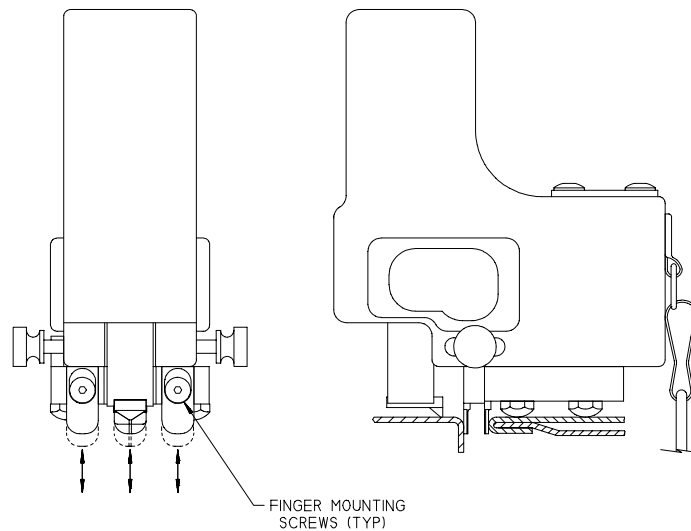
Flush tips are available in different materials as well as configurations. The two standard configurations are an adjustable single point tip and blade tip. To replace the tip, simply remove the screw indicated in Figure 4. Put the new tip on and replace the screw. The point tip has a slotted mounting hole, designed to adjust the tip anywhere from 3 – 7mm away from the gap check finger. To adjust the point tip, simply loosen the screw and slide the flush tip to the desired location and re-tighten.

**FIGURE 4**



## **Gap Check Fingers and Locating Fingers:**

LMI offers sets of (3) fingers which include (2) Locating Fingers and (1) Gap Check Finger. The fingers are adjustable within a 2 mm range and are available in the following lengths: 0-2mm, 2-4mm, 4-6mm, 6-8mm and 8-10mm. To adjust the fingers simply loosen the mounting screw and slide the fingers to the desired length and re-tighten (Figure 5).



**FIGURE 5**