LMI ™

LINEAR **M**EASUREMENT **I**NSTRUMENTS, Corp.

Research, Development and Manufacturing of Precision Measuring Systems

GAGE SETUP AND CALIBRATION INSTRUCTIONS FOR LMI 241 BW & BWV2 WITH THE GAGETALKER "ZIPPER"

REQUIRED EQUIPMENT FROM GAGETALKER: Gagetalker "Zipper"

"Zipper" Docking Station set up to a computer

Zipper PC Tools (software)

REQUIRED EQUIPMENT FROM LMI: LMI 241-BW/BWV2 Flush and Gap Transducer

LMI 3030 Master Block

LMI 6025 6 pin-6 pin cable

GAGE SETUP:

1. From the program "Zipper Administration", verify setup as follows for a LMI 241-BW transducer.
2. Select the "Gages" tab.
3. In Gages, select the "Gage Model" tab.
4. Configure the "Gage Model" screen as follows:
   - ➢ Gage Model Name: 241BW Flush (L2)*
   - ➢ Gage Type: LMI/Torque
   - ➢ Calibration Method: 241: Min; Max: Zero; F&G (Flush)
   - ➢ Zero Check Method: 241 Zero Flush & Gap
   - ➢ Zero Check (Flush): 0   Secondary (Gap) Zero: 0
   - ➢ Min: 0
   - ➢ Max: 10   Linear Range: 10
5. Click on the disk icon button to save this configuration to be used for part file setups.
6. Configure the "Gage Model" screen as follows:
7. Gage Model Name: 241BW Gap (L1)**
8. Gage Type: LMI/Torque
9. Calibration Method: 241: Min; Max; Zero F&G (Gap)
10. Zero Check Method: 241 Zero Flush & Gap
11. Zero Check (Flush): 3   Secondary (Gap) Zero: 0
12. Min: 0
13. Max: 10   Linear Range: 10

14. Click on the disk icon button to save this configuration to be used for part file setups.

15. Select the "LMI\Torque Extensions" tab, click on the "+" button and configure as follows Flush.

    16. Gage Model Name: 241BW Flush (L2)

    17. Extension Name: (anything to identify this configuration, suggest "Flush Standard")

    18. Mode: Force   Starting Threshold: 0   Stopping Threshold: 0

    19. Direction: Forward   Speed: 125 Hz   Time Filter: 0

    20. Offset: Primary (Flush)

21. Click on the disk icon button to save this configuration to be used with part file setups.

22. Click on the "+" button and configure as follows for Gap.

    23. Gage Model Name: 241BW Gap (L1)

    24. Extension Name: (anything to identify this configuration, suggest "Gap Standard")

    25. Mode: Force   Starting Threshold: 0   Stopping Threshold: 0

    26. Direction: Forward   Speed: 125 Hz   Time Filter: 0

    27. Offset: Primary (Flush)

28. Click on the disk icon button to save this configuration to be used with part file setups.

29. At this point the gage is set up and a part file needs to be created and sent to the Zipper. See page 47 of the "Zipper PC Tools" manual for further details on part files***.

30. After the part file is sent to the Zipper, remove the Zipper from the docking station and "press any key to start".

31. Select the desired part file for collecting data.

32. Connect the LMI 241-BW to port "LMI 2" using the LMI 6018.

33. "Select a Gage" will appear for L1. Press ▲ or ▼ to select "L1:241BW Gap (L1)" and press <Enter>.

34. "Select a Gage" will appear for L2. Press ▲ or ▼ to select "L2:241BW Flush (L2)" and press <Enter>.

35. "<Enter> to Calibrate" will appear. Press ▲ or ▼ to select "L2=241BW Flush (L2)" and press <Enter>.

36. On the LMI 241-BW retract the gap finger and leave the flush tip extended, press <Enter>.

37. On the LMI 241-BW retract the flush tip and leave the gap finger extended, press <Enter>.

38. Place the LMI 241-BW into the LMI 3030 master block at the master position, and press <Enter>.

39. Calibration is complete.

    * Note: To change the polarity of the gage readings, select a new name for the extension and change the "Direction" to "Reverse".

    ** Note: This configuration will achieve actual values. If deviation from nominal is required, change in "Gage Model" for "241BW Gap (L1)" the "Zero Check (Flush)" to 0. In "LMI\Torque Extensions" change for "241 Gap (L1)" "Direction" to "Reverse".

    *** Note: To accept both flush and gap readings at the same time the part file must be set up with the "AutoRead" function activated. See pages 9-25 of the "Zipper PC Tools" manual for further details on how to edit a part for the "Zipper".