

## LINEAR MEASUREMENT INSTRUMENTS, Corp.

Research, Development and Manufacturing of Precision Measuring Systems

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### GAGE SETUP AND CALIBRATION INSTRUCTIONS FOR THE LMI 770 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 770 Flush and Gap Transducer  
LMI 720 master block  
LMI 6009 4 pin to 4 pin cable

#### GAGE SETUP:

1. From the program "Zipper Administration", verify setup as follows for a LMI 770 series 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: 770 F&G (L1)
  - Gage Type: LMI/Torque
  - Calibration Method: 300: Min; Max; Zero F; Zero Gap
  - Zero Check Method: 300: Zero Flush; Zero 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. Select the "LMI\Torque Extensions" tab, click on the "+" button and configure as follows for Flush:\*
  - Gage Model Name: 770 F&G (L1)
  - Extension Name: (anything to identify this configuration, suggest "Flush Standard")
  - Mode: Force                  Starting Threshold: 0                          Stopping Threshold: 0
  - Direction: Forward      Speed: 125 Hz                                  Time Filter: 0
  - Offset: Primary (Flush)\*

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7. Click on the disk icon button to save this configuration to be used with part file setups.
8. Click on the “+” button and configure as follows for Gap:\*\*
  - Gage Model Name: 770 F&G (L1)
  - Extension Name: (anything to identify this configuration, suggest “Gap Standard”)
  - Mode: Force                      Starting Threshold: 0                      Stopping Threshold: 0
  - Direction: Forward      Speed: 125 Hz                      Time Filter: 0
  - Offset: Secondary (Gap)
9. Click on the disk icon button to save this configuration to be used with part file setups.
10. 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.
11. After the part file is sent to the Zipper remove the Zipper from the docking station, “press any key to start”.
12. Select the desired part file for collecting data.
13. Connect the LMI 770 to port “LMI 1” using the LMI 6009
14. “Select a Gage” will appear for L1. Press ▲ or ▼ to select “L1:770 F&G (L1)” and press <Enter>.
15. “<Enter> to Calibrate” will appear. Press ▲ or ▼ to select “L1=770 F&G (L1)” and press <Enter>.
16. Extend the LMI 770 and press <Enter>.
17. Retract the LMI 770 and press <Enter>.
18. Place the LMI 770 into the Flush Master position on the LMI 720 Master block and press <Enter>.
19. Place the LMI 770 into the Gap Master position on the LMI 720 Master block and press <Enter>.
20. 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 is to achieve deviation from nominal. If actual gap is desired, change in “Gage Model” for “770 F&G (L1)” the “Secondary (Gap) Zero” to -3. In “LMI\Torque Extensions” change for “770 F&G (L1) Standard Gap” the “Direction” to “Reverse”.