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### LINEAR MEASUREMENT INSTRUMENTS, Corp.

Research, Development and Manufacturing of Precision Measuring Systems

# GAGE SETUP AND CALIBRATION INSTRUCTIONS FOR THE LMI 241 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 Flush and Gap Transducer LMI 720 Master Block LMI 6025 6 pin to 6 pin cable

#### GAGE SETUP:

- 1. From the program "Zipper Administration", verify setup as follows for a LMI 241 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: 241 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:

$\triangleright$	Gage Model Name:	241 Ga	ap (L1)**
$\triangleright$	Gage Type:	LMI/T	orque
$\triangleright$	Calibration Method:	241: M	lin; Max; Zero F & G (Gap)
$\triangleright$	Zero Check Method:	241 Ze	ero Flush & Gap
۶	Zero Check (Flush):	0	Secondary (Gap) Zero: 0
۶	Min:	0	
۶	Max:	10	
$\triangleright$	Linear Range:	10	
0.40			

## LMI Corporation

- 7. Click on the disk icon button to save this configuration to be used for part file setups.
- 8. Select the "LMI\Torque Extensions" tab, click on the "+" button and configure as follows Flush.

Gage Model Name:	241 Flush (L2)					
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)						

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

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

Gage Model Name:	241 Gap (L1)	
Extension Name:	(anything to identify this configuration, s	uggest "Gap Standard")
Mode: Force	Starting Threshold: 0	Stopping Threshold: 0
Direction: Reverse**	Speed: 125 Hz	Time Filter: 0
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Offset: Primary (Flush)

- <u>11.</u> Click on the disk icon button to save this configuration to be used with part file setups.
- <u>12.</u> 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\*\*\*.
- 13. After the part file is sent to the Zipper, remove Zipper from the docking station and "press any key to start"
- <u>14.</u> Select the desired part file for collecting data.
- 15. Connect the LMI 241 to port "LMI 2" using the LMI 6018.
- 16. "Select a Gage" will appear for L1. Press ▲ or ▼ to select "L1:241 Gap (L1)" and press <Enter>.
- 17. "Select a Gage" will appear for L2. Press ▲ or ▼ to select "L2:241 Flush (L2)" and press <Enter>.
- 18. "<Enter> to Calibrate" will appear. Press ▲ or ▼ to select "L2=241 Flush (L2)" and press <Enter>.
- 19. On the LMI 241 retract the gap finger and leave the flush tip extended, press <Enter>.
- 20. On the LMI 241 retract the flush tip and leave the gap finger extended, press <Enter>.
- 21. Place the LMI 241 into the LMI 720 master block at the master position and press <Enter>.
- 22. 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".

\*\* This configuration will achieve deviation from nominal. If actual value is required, change in "Gage Model" for "241 Gap (L1)" the "Zero Check (Flush)" to 3. In "LMI\Torque Extensions" change for "241 Gap (L1)" "Direction" to Forward.

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

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