

**GAGEMAKER**

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***TF-LG-3 Gagemaker Lead Gage  
Fixture for LG-5003***

***CALPAK Fixture Manual***

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# ***TF-LG-3 CAL-PAK Fixture Manual***

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## Setup

### Materials Needed:

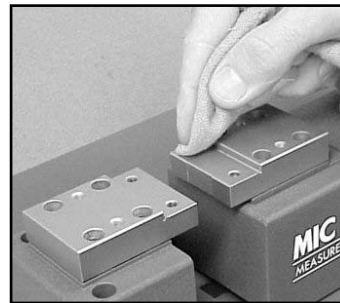
- MIC TRAC MT-3000 base unit
- Lead gage
- Lead gage fixture (TF-LG-3 Block) and cap screws
- Flat face anvil (TF-1F Block) and cap screws
- 5/32" hex wrench
- 3/32" hex wrench
- 30 in/lb torque wrench
- Cloth
- ZEP I.D. Red cleaner

### 1. Inspect the lead gage visually as follows:

- Check for damage and excessive wear.
- Check for clear bezel, legible dial face.
- Inspect for proper function of the bezel adjustment and lock.
- Inspect for missing or loose screws or worn contact point.
- Check for smoothness of travel by depressing the indicator shaft throughout the entire travel range. Any indicators, with restricted movement, must be repaired prior to calibration.



### 2. Clean both of the receiver pads and mounting surfaces of the flat face anvil using the cloth and ZEP I.D. Red cleaner.



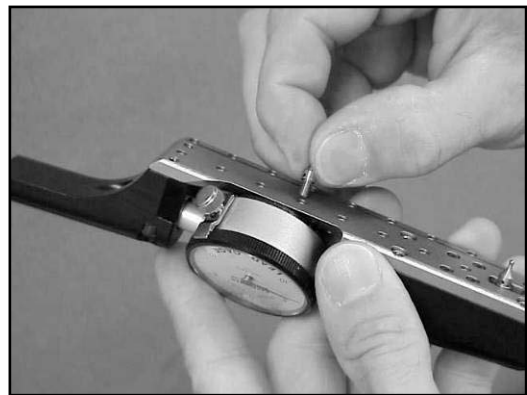
### 3. Place the shoulder side of the flat face anvil against the left receiver pad shoulder.





## Setup

4. While holding the anvil against the receiver pad shoulder, insert the two cap screws into the holes on either side of the anvil.
5. While applying pressure toward the receiver pad shoulder, use a 5/32" hex wrench to slightly tighten the screws.
6. Use a 30 in/lbs torque wrench to secure the cap screws.
7. Remove the rear contact point from the lead gage.
8. Clean the mounting surfaces of the Gagemaker lead gage fixture using the cloth and ZEP I.D. Red cleaner.





## Setup

9. Place the Gagemaker lead gage fixture against the right receiver pad shoulder.
  
10. Insert the two cap screws into the holes on either side of the lead gage fixture.
  
11. While applying pressure toward the receiver pad shoulder, use a 5/32" hex wrench to tighten the screws.
  
12. Turn the coarse adjust knob clockwise until the lead gage fixture is within 1/2" of the flat face anvil.





## **Setup**

13. Clean the lead gage using the cloth and ZEP I.D. Red cleaner.



14. Insert the lead gage into the slot in the top of the lead gage fixture. Position the contact point on the gage on the outside of the flat face anvil.







## Setup

15. Secure the lead gage in the slot by tightening the set screws on the side of the fixture with a 5/32" hex wrench.



16. Turn the coarse adjust knob clockwise until the indicator needle aligns with zero.





## Calibration

### Materials Needed:

- MIC TRAC MT-3000 base unit and CPU readout
- Seiko printer (optional)
- Lead gage
- 5/32" hex wrench
- 3/32" hex wrench
- Lightweight gage oil
- Gage Calibration Record

1. Turn the fine adjust knob counterclockwise to align the indicator needle with zero.

2. Secure the fine-adjust lock.

3. On the front panel of the CPU, press the INT (internal measurement) pad.

4. Press the ZERO pad on the CPU panel twice. The readout displays 0.00000.







## Calibration

5. Turn the fine adjust knob counterclockwise until the lead gage indicator reads the first calibration value.

**Note:** If you pass the calibration value, turn the needle back and approach the value again, from the same direction. This practice will increase the accuracy of the calibration.

6. If you have a Seiko Printer attached to your MIC TRAC for printing a permanent record of calibration measurements, press the PRINT pad on the CPU panel.
7. Record any deviations on the Gage Calibration Record or in-house calibration report. Continue with remaining measurements at every .001" until .010". Return the needle to zero, and then calibrate the gage moving in the opposite direction.
8. After completing all measurements, loosen the screws and remove the lead gage fixture from the MT-3000. Remove the lead gage fixture from the lead gage.
9. Continue with the same calibration process for the next lead gage.





## **Calibration**

10. After calibrating all lead gages, be sure to remove the flat face anvil from the MT-3000. Oil the fixtures and return them to the storage case.





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Notes:

# **GAGEMAKER**

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