

Service Information Letter

SIL MD15-XXX-01
REV. A

Altimeter

MD15-XXX

Barometer Adjustment Instructions

PURPOSE

This document shall serve as instructions to adjust the barometric setting of an MD15-() Altimeter, manufactured by Mid-Continent Instruments, in an instance where an adjustment is required to achieve proper calibration of the instrument.

EQUIPMENT REQUIRED

- Air Data Test Set (ADTS) with minimum accuracy of 1/10 the tolerance band at each required test point
- 3.5 x 60 mm slotted screwdriver
- Original correction card shipped with the instrument (verify serial numbers match)

REFERENCE DOCUMENTS

- FAA Technical Standard Order TSO-C10b, Altimeter, Pressure Actuated Sensitive Type
- SAE Aeronautical Standard AS 392 C, Altimeter, Pressure Actuated Sensitive Type
- FAR Part 43 Appendix E, Altimeter System Test and Inspection

PRECAUTIONS

- This adjustment can only be performed by an appropriately rated repair facility as determined by the Federal Aviation Administration or local regulatory authority.
- The instrument shall not be exposed to pressures other than standard atmospheric for a minimum of eight hours prior to performing this adjustment.
- Test conditions must be compliant with SAE AS 392 C Section 5.
- All altimeter readings must be taken while the instrument is exposed to vibration compliant with SAE AS 392 C Sections 5.2 or 6.4 to minimize friction.

INSTRUCTIONS

- 1) Remove the Warranty Decal covering the screw on the bottom of the bezel directly below the knob.

WARNING: REMOVAL OF THE WARRANTY DECAL MAY VOID THE MANUFACTURERS WARRANTY. PRIOR APPROVAL IS REQUIRED FROM MID-CONTINENT INSTRUMENTS QUALITY ASSURANCE DEPARTMENT

- 2) Connect the instrument to the ADTS and increase the pressure to an equivalent altitude of -1000 feet. Remain at this pressure for a minimum of five minutes.
- 3) Adjust the barometer knob to obtain an altitude reading equivalent to that on the correction card at the reference altitude of -1000 ft. Ensure that you are using a proper means of eliminating friction prior to taking the altitude reading.
- 4) Remove the black nylon screw using a 3.5 x 60 mm slotted screwdriver. Retain the screw.
- 5) Gently pull out on the knob. This releases the pointer/barometer dial engagement.
- 6) Rotate the knob to obtain an indication of 29.92 InHg (1013.2 millibars) on the barometer dial.
- 7) Release the knob and ensure that it returns to its normal resting position.
- 8) Replace the black nylon screw and install until flush with the bottom of the bezel. If the screw will not install flush the knob has not returned to its normal resting position.
- 9) Verify proper altitude reading and barometer dial indication. Ensure that you are using a proper means of eliminating friction prior to taking the altitude reading.
- 10) Perform a complete scale error test per the procedure defined in SAE AS 392 C or FAR Part 43 Appendix E to verify proper calibration.
- 11) Vent the ADTS and disconnect the instrument.
- 12) Install a tamper evident seal over the black nylon screw to prevent unauthorized adjustments.