SERVICE BULLETIN
SB16001, REV A

MARCH 1, 2016

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Progressive Aerodyne Considers Compliance Mandatory

This Service Bulletin meets requirements of ASTM F2295-06
It is a Safety Directive for the purpose of Compliance with 14 CFR 91.327(b)(4)

EFFECTIVE DATE:	March 1, 2016
SUBJECT:	Fuel Tank Calibration
AIRCRAFT AFFECTED	Serial Numbers 1012 and higher, and all LSA aircraft with Fuel Tank Part number 2810-037
COMPLIANCE TIME	Before next flight and on annual inspections
CONTINUED INSPECTION	Annual Inspections
PURPOSE	The plastic fuel tank in the aircraft may settle and/or change shape slightly over time. The change in shape may affect the accuracy of fuel readings on your EFIS fuel guage, as the fuel sensor is mounted to the tank itself. This service bulletin provides instructions for calibrating the fuel tank, in order to get accurate fuel readings on the EFIS. (NOTE – Always visually confirm fuel quantity prior to flight).
PARTS LIST	N/A

INSTRUCTIONS: Fuel Calibration

1. Begin by verifying the Tank is completely empty. (Drain through Sump outlet).

2. Place the unit into the Instrument Calibration mode. This is done by pressing "Set" on the unit and then press and hold "Calibration". Use the [NEXT] button to scroll to Tank 1. Verify that Tank 2, Tank 3, and Tank 4 are turned off.

3. Verify/Enter the max size of the Tank in the Tank Size field. (In this case Tank Size is 22.0).

4. Set the Audio On/Off Setting. If this is set to ON, an Audio warning will sound if the fuel level is below the Red Low At setting.

5. Set the Instrument On/Off Setting. If this is set to ON the tank will be displayed.

6. Enter the number of calibration points. For this specific tank, there are 12 increments, or one point for every 2 gallons. **AD_VALUE decreases as Fuel Quantity increases.**

7. Use the [NEXT] button to scroll down to the tank calibration data. The calibration data is displayed in two columns, one for ground and one for flight. Use the knob button to switch between ground and flight data columns. The current AD_Value reading for the tank is displayed at the top of the table.

8. Start with the aircraft on level ground.

9. Starting at "0 Gallons", add **1/2 gallon** of fuel, and press the [COPY] button or use the knob to record the current AD_Value to the correct fuel amount and attitude (The first case is "0.0" for "GROUND").

   NOTE: The initial 1/2 gallon of fuel is for ullage/unusable fuel. It is also a safety precaution.

10. Lift the tail to a distance of **20-1/2"** from the ground measured from the bottom center tip of the aft Hull Transom and record the flight data after the fuel reading has settled. (The first case is "0.0" for "FLIGHT").

    NOTE: The top of the Tank may be bumped a few times to get a correct reading as the Fuel Sending Unit may not have settled properly in the Tank.

11. Lower the aircraft back down to level ground again. Do a quick check to see if the AD_VALUE for "GROUND" stays the same.

12. Repeat the recording process from steps 9 through 11 for every calibration point while filling the tank with **2 more gallons** each time. Repeat this for each increment until the tank is full.

13. Press the **[SAVE]** button to save the data to permanent memory and [BACK] to exit Tank Calibration.

14. **CAUTION:** Do not turn off power or exit the calibration menu before pressing the save button.

    NOTE: Fuel tank sensors are not accurate when the tank is near full. Once you notice the reading not changing much or not corresponding with the rest of the readings during calibration the last few entries in the fuel calibration data should be set to the same value.

    If the tank does not consistently show full, lower the digital value for the tank full data.

    The fuel gauge will only show the digital fuel amount for the highest reading with a plus sign indicating that the correct fuel amount is not known but is over the last reading. The analog gauge will show full for the last changed reading. It is normal for an 18-gallon tank to show 16+ when it is full. This indicates that the float stopped changing at 16 gallons and this is the highest fuel reading that can be detected by the float in the tank.