



REPAIR STATION FORMS MANUAL

Rev - 1: 01/10/2015

Altimeter 24 Month Checklist

ITEM No.	Altimeter Appendix E (91.411)						INSPECT DATE
	NOTE: Appropriate Manufactures Maintenance Manuals will be used during any inspection of unfamiliar systems on the aircraft.						
1	Ensure the Pitot/Static system is free from entrapped moisture and restrictions. Drain system prior to test if applicable.						
2	Check operation of pitot tube and/or static port heaters if installed						
3	Ensure no alterations or deformations of the airframe surface have been made that would affect the relationship between air pressure in the static pressure system and true ambient static air pressure for any flight condition.						
4	Set the Altimeter on the test set and the aircraft to 29.92 and note indicated altitude. Record indicated Altitude: A) Test Set Altimeter: _____ B) Aircraft Altimeter: L _____ R _____						
5	Bring the test set to each of the following test points Let stabilize for at least one minute but not more than 10. Enter the aircraft altimeter indication and calculate error. This error must not exceed the max tolerance.						
Scale Error Check NOTE: ITEMS 1-5 WILL BE UTILIZED WHEN PERFORMING A DATA CORRESPONDANCE TEST (APPENDIX E, para c)	TEST SET ALTITUDE	MAX TOLERANCE	AIRCRAFT INDICATED ALT		ERROR		
	-1000	20	L	R	L	R	
	0	20	L	R	L	R	
	500	20	L	R	L	R	
	1000	20	L	R	L	R	
	1500	25	L	R	L	R	
	2000	30	L	R	L	R	
	3000	30	L	R	L	R	
	4000	35	L	R	L	R	
	6000	40	L	R	L	R	
	8000	60	L	R	L	R	
	10,000	80	L	R	L	R	
	12,000	90	L	R	L	R	
	14,000	100	L	R	L	R	
	16,000	110	L	R	L	R	
	18,000	120	L	R	L	R	
	20,000	130	L	R	L	R	
	22,000	140	L	R	L	R	
	25,000	155	L	R	L	R	
	30,000	180	L	R	L	R	
	35,000	205	L	R	L	R	
	40,000	230	L	R	L	R	
	45,000	255	L	R	L	R	
50,000	280	L	R	L	R		
NOTE: Within 15 minutes of the initial exposure to upper limits of the scale in step 5 perform step 6.							

NOTE: CASE LEAK AT 18,000 FEET FOR 1 MIN.

NOT TO EXCEED 30 FEET CASE LEAK

____ Feet



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6 Hysteresis	From max altitude test point, rapidly decrease attitude at the max rate of descent of the aircraft VSI until within 3000 ft of the first test point (50% of the max altitude tested) then approach the test point at the approximately 3000 ft/min. Stabilize 5 minutes (max 75' diff from item 5) Aircraft Alt Reads: Left: _____ Right: _____																																																	
	Rapidly decrease attitude at approximately 3000 ft/min to the second test point. (40% of max altitude tested) Stabilize one (1) minute: Aircraft Alt Reads: Left: _____ Right: _____ (max 75' diff from item 5)																																																	
7 After Effect	Not more than 5 minutes after completion of Step 6, equalize pressure to ambient pressure. Record altitude. (Max difference is 30' from item 4, B) Aircraft Alt Reads: Left: _____ Right: _____																																																	
	Increase altitude at 750 feet per minute to each of the altitudes listed below. While still increasing altitude, tap on the panel next to the altimeter and note the amount the needle jumps, enter below <table border="1"> <thead> <tr> <th>Altitude</th><th>Tolerance</th><th colspan="2">Enter change in reading of pointer</th></tr> </thead> <tbody> <tr><td>1000</td><td>70</td><td>L</td><td>R</td></tr> <tr><td>2000</td><td>70</td><td>L</td><td>R</td></tr> <tr><td>3000</td><td>70</td><td>L</td><td>R</td></tr> <tr><td>5000</td><td>70</td><td>L</td><td>R</td></tr> <tr><td>10,000</td><td>80</td><td>L</td><td>R</td></tr> <tr><td>15,000</td><td>90</td><td>L</td><td>R</td></tr> <tr><td>20,000</td><td>100</td><td>L</td><td>R</td></tr> <tr><td>25,000</td><td>120</td><td>L</td><td>R</td></tr> <tr><td>30,000</td><td>140</td><td>L</td><td>R</td></tr> <tr><td>35,000</td><td>60</td><td>L</td><td>R</td></tr> <tr><td>40,000</td><td>180</td><td>L</td><td>R</td></tr> </tbody> </table>	Altitude	Tolerance	Enter change in reading of pointer		1000	70	L	R	2000	70	L	R	3000	70	L	R	5000	70	L	R	10,000	80	L	R	15,000	90	L	R	20,000	100	L	R	25,000	120	L	R	30,000	140	L	R	35,000	60	L	R	40,000	180	L	R	
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9 Baro-Metric Scale Error	A) Begin at 29.92 on the test set and the aircraft: Test Set Altimeter: _____ Aircraft Altimeter: L _____ R _____ B) Turn the Barometric pressure knob to the listed pressures in column i C) Record the actual indicated altitude of the aircrafts altimeter in column iii D) Calculate the difference between the starting altitude recorded in 9, A and the indicated altitude of the required check point. Record actual diff. in column iv. <table border="1"> <thead> <tr> <th>i) Pressure</th><th>ii) Alt Diff</th><th>iii) Ind. Alt</th><th colspan="2">iv) Actual Diff (MAX 25)</th></tr> </thead> <tbody> <tr><td>28.10</td><td>-1,727</td><td></td><td>L</td><td>R</td></tr> <tr><td>28.50</td><td>-1,340</td><td></td><td>L</td><td>R</td></tr> <tr><td>29.00</td><td>-863</td><td></td><td>L</td><td>R</td></tr> <tr><td>29.50</td><td>-392</td><td></td><td>L</td><td>R</td></tr> <tr><td>29.92</td><td>0</td><td></td><td>L</td><td>R</td></tr> <tr><td>30.50</td><td>+531</td><td></td><td>L</td><td>R</td></tr> <tr><td>30.90</td><td>+893</td><td></td><td>L</td><td>R</td></tr> <tr><td>30.99</td><td>+074</td><td></td><td>L</td><td>R</td></tr> </tbody> </table>	i) Pressure	ii) Alt Diff	iii) Ind. Alt	iv) Actual Diff (MAX 25)		28.10	-1,727		L	R	28.50	-1,340		L	R	29.00	-863		L	R	29.50	-392		L	R	29.92	0		L	R	30.50	+531		L	R	30.90	+893		L	R	30.99	+074		L	R				
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10	Altimeters which are air data computer type with associated systems may be tested I/A/W the manufacturers spec that are FAA approved																																																	