ALERT

SERVICE BULLETIN

NUMBER: **SB 500-34-001**

MODEL: **EA 500**

SUBJECT: **Pitot / Angle Of Attack Probes Upgrade / Retrofit**

1. Planning Information

   A. Effectivity

      (1) Aircraft: EA 500 Serial Numbers 000001 through 000004, 000006, and 000007.

      (2) Spares:

         (a) Production Aircraft EA 500 Serial Numbers 000005, 000008 and Up, carry the new Pitot/ AOA Probe Part Number 100435-23 and -24.

         (b) Pitot/AOA Probe Spares of previous Part Number 100435-21 and -22 can not be reworked to the -23 and -24 configuration. These -21 and -22 Probes must be purged from Spares stock.

   B. Reason

      (1) This Service Bulletin (SB) implements the Pitot/AOA Probes upgrade to Part Number 100435-23 (Left) and -24 (Right) for the Serial Number aircraft that were not so equipped before delivery.

      (2) There is a potential for the original Pitot/AOA Probes (Part Number 100435-21 and -22) to ice up during some unfavorable flight conditions. This could lead to the loss of airspeed and AOA indications.

   C. Description

      This SB mandates the replacement of the original Pitot/AOA probes that were susceptible to icing with an improved model that eliminates that potential hazard.

   D. Relevant Publications

      Aircraft Maintenance Manual PN 06-117751, latest revision.

   E. Compliance

      Eclipse Aviation Corporation considers this to be a mandatory modification that *must* be accomplished as soon as possible but no later than 30 calendar days or 50 flight hours after issuance of this SB, whichever comes first.

   F. Approval

      This Service Bulletin has been reviewed by the appropriate governmental authority and the modification herein comply with the applicable regulations and are FAA APPROVED.

   G. Weight and Balance Change

      None.

H. Electrical Load Data Change

None.

I. Software Change

Not Applicable.

J. Publications Affected

Aircraft Maintenance Manual P/N 06-117751, latest revision.

Illustrated Parts Catalog (IPC) 06-117752, latest revision.

2. Material Information

A. Materials

The following parts and/or kits are required for this Service Bulletin:

Part Number	Description	Qty Required
100435-23	Sensor Pitot/AOA, Left	1
100435-24	Sensor Pitot/AOA, Right	1

B. Tooling

Weight-on-Wheels (WOW) Box (EAC, 87-117390-1001)

Air Data Test Set - Barfield DPS450 (or DPS500)

Air Data Accessories Kit ; (Nav Aids PN ADA500945)

FLUKE 52 II Type K Thermocouple Thermometer or equivalent

C. Interchangeability/Intermixability of Parts

The Pitot/AOA sensors upgrade has to be done on each side while performing this SB. No flight is allowed with only one sensor upgraded.

3. Accomplishment Instructions

A. Installation Procedure

(1) Remove existing Left Pitot/AOA Probe, refer to AMM – 34-10-10
   (a) Perform Subtask AMM – 34-10-10-001-921-001
   (b) Perform Subtask AMM – 34-10-10-001-011-001

(2) Install new Left Pitot/AOA Probe (Part Number 100435-23), refer to AMM – 34-10-10
   (a) Perform Subtask AMM – 34-10-10-041-921-001
   (b) Perform Subtask AMM – 34-10-10-041-411-001

(3) Repeat steps (1) and (2) for Right Pitot/AOA Probe (Part Number 100435-24)

(4) Job Close-up:
   (a) Perform Subtask AMM – 34-10-10-041-921-002, Part A: Work area clean up
   (b) Perform Subtask AMM – 34-10-10-041-921-002, Part C: Restore ECB
   (c) **DO NOT PERFORM** Subtask AMM – 34-10-10-041-921-002, Part D: Operational Test
   (d) Perform Test Procedure as described in B., below.
   (e) Perform Subtask AMM – 34-10-10-041-921-002, Part B: Install access panels after completion of tests.
   (f) Return To Service: If all other maintenance is complete, perform AMM Task 20-00-02 – Return to Service (After Maintenance)

B. Test Procedure

(1) Left Pitot & Static System Leak Test for Un-pressurized Airplane

CAUTION: DO NOT over tighten hoses. Damage may occur to test equipment. Hoses should be snug.

CAUTION: The leak test can be accomplished with electrical power off. Make sure that WOW Box is not connected during this test if electrical power is used.

Note: When installing Pressure Test Adapters, ensure good seal by applying firm force to seat adapter on probe.

a. Connect NAV Aids Hose E500-7270 (approx. 8ft long) to Barfield DPS450 Air Data Test Set Pt connector. Connect E500-7270 hose to the NAV Aids quick connect cross. Connect (3) left and/or right MFP Pitot hoses approx. 2 ft long to the quick disconnect cross. Connect hoses to the Upper, Middle and Lower Nozzles of the NAV Aids APA94520-4-4-4 Pressure Test Adaptor. Connect APA94520-4-4-4 Pressure Test Adaptor to the left Pitot/AOA Probe. If needed, lubricate with Pitot adaptor Lubricating fluid Part # LF5050.

Note: No other lubricating fluid is allowed, use of the wrong lubricating fluid could lead to malfunction of equipment in flight.

b. Connect NAV Aids Hose E500-5160 (E500-5170 is acceptable) to Barfield DPS450 Air Data Test Set Ps connector. Connect Static Test Adaptor SS53515-4-4 to the left Static Port with the connected fitting to the top Port and finger tighten screws to seat the seals over static ports. Connect other end of E500-5160 hose to the top fitting of the SS53515-4-4 Static Test Adaptor.

c. Use Tape to seal right Static Ports.

Note: Make sure tape used does not leave adhesive residue on Static Port when Test is complete.

d. Power on the Barfield DPS450 Air Data Test Set. Wait to Confirm Settings.

- After a successful self-test sequence the system changes to the Leak Measure mode.

Note: Skip this step if the BARFIELD DPS450 Air Data Test Set is in Quad mode. Quad mode will display four Values: ALT, ROC, CAS, and RtCAS.

e. Press SETUP, press F1 to select [Display]. Press F3 to select [Quad]. Make sure that Alt is in “ft”, CAS is in “kts” and Rt CAS is in kts/min. If not press F2 to select [Units], and then press F1 to select [ft Kts ft/min and press F4 to save settings. Press Clear Quit to return to Main Menu displayed in the upper right corner.

f. Press LEAK MEASURE/ CONTROL for CONTROL MODE.

g. Press F1 to select [Rate Timer], and then press F3 to select [Set Wait].

h. Press “5” and then press ENTER.

- The Set Wait will be updated to ‘5 min’.

i. Press F4 to select [Set Time], and then press “1”, and then press ENTER.

- The Set Time will be updated to ‘1 min’.

j. Press CLEAR QUIT to return to main menu.

k. Press ROC RATE Ps to select the ROC control aim, enter “4000” and press the ENTER button.

l. Press ALT Ps to select the ALT control aim, enter “30000” and press the ENTER button.

- The system starts to control to the new set point.

m. Press SPEED Qc and enter “200” then press ENTER. Wait for at least 15-second stabilization period after the altitude and airspeed achieve these new air data parameter set point values.

n. Press LEAK MEASURE/CONTROL to change to LEAK MEASURE MODE.

o. Press F1 twice: [Start Timing].

- After the Waiting and Timing intervals are complete, the BARFIELD DPS450 Air Data Test Set will display “Timed Rates Available”.

p. Check that the maximum ROC is 100 ft/min or less and the maximum Rt CAS is 2 kts/min or less.

- If Leak Rate is not within tolerances refer to the Troubleshooting Section and Subtract the BARFIELD DPS450 Air Data Test Set Leak check altitude value recorded in the troubleshooting section from the value obtained in this section in order to get a corrected total system leak value.

q. Press LEAK MEASURE/CONTROL to return to CONTROL MODE.

(2) Right Pitot & Static System Leak Test for Un-pressurized Airplane

CAUTION: DO NOT over tighten hoses. Damage may occur to test equipment. Hoses should be snug.

CAUTION: The leak test can be accomplished with electrical power off. Make sure that WOW Box is not connected during this test if electrical power is used.

Note: When installing Pressure Test Adapters, ensure good seal by applying firm force to seat adapter on probe.

a. Connect NAV Aids Hose E500-7270 (approx. 8ft long) to Barfield DPS450 Air Data Test Set Pt connector. Connect E500-7270 hose to the NAV Aids quick connect cross. Connect (3) left and/or right MFP Pitot hoses approx. 2 ft long to the quick disconnect cross. Connect hoses to the Upper, Middle and Lower Nozzles of the NAV Aids APA94520-4-4-4 Pressure Test Adaptor. Connect APA94520-4-4-4 Pressure Test Adaptor to the right Pitot/AOA Probe. If needed, lubricate with Pitot adaptor Lubricating fluid Part # LF5050.

Note: No other lubricating fluid is allowed, use of the wrong lubricating fluid could lead to malfunction of equipment in flight.

b. Connect NAV Aids Hose E500-5160 (E500-5170 is acceptable) to Barfield DPS450 Air Data Test Set Ps connector. Remove tape from right Static Port. Connect Static Test Adaptor SS53515-4-4 to the right Static Port with the connected fitting to the top Port and finger tighten screws to seat the seals over static ports. Connect other end of E500-5160 hose to the top fitting of the SS53515-4-4 Static Test Adaptor.

c. Use Tape to seal left Static Ports.

Note: Make sure tape used does not leave adhesive residue on Static Port when Test is complete.

d. Power on the Barfield DPS450 Air Data Test Set. Wait to Confirm Settings.

- After a successful self-test sequence the system changes to the Leak Measure mode.

Note: Skip this step if the BARFIELD DPS450 Air Data Test Set is in Quad mode. Quad mode will display four Values: ALT, ROC, CAS, and RtCAS.

e. Press SETUP, press F1 to select [Display]. Press F3 to select [Quad]. Make sure that Alt is in “ft”, CAS is in “kts” and Rt CAS is in kts/min. If not press F2 to select [Units], and then press F1 to select [ft Kts ft/min and press F4 to save settings. Press Clear Quit to return to Main Menu displayed in the upper right corner.

f. Press LEAK MEASURE/ CONTROL for CONTROL MODE.

g. Press F1 to select [Rate Timer], and then press F3 to select [Set Wait].

h. Press “5” and then press ENTER.

- The Set Wait will be updated to ‘5 min’.

i. Press F4 to select [Set Time], and then press “1”, and then press ENTER.

- The Set Time will be updated to ‘1 min’.

j. Press CLEAR QUIT to return to main menu.

k. Press ROC RATE Ps to select the ROC control aim, enter “4000” and press the ENTER button.

l. Press ALT Ps to select the ALT control aim, enter “30000” and press the ENTER button.

- The system starts to control to the new set point.

m. Press SPEED Qc and enter “200” then press ENTER. Wait for at least 15-second stabilization period after the altitude and airspeed achieve these new air data parameter set point values.

n. Press LEAK MEASURE/CONTROL to change to LEAK MEASURE MODE.

o. Press F1 twice: [Start Timing].

- After the Waiting and Timing intervals are complete, the BARFIELD DPS450 Air Data Test Set will display “Timed Rates Available”.

p. Check that the maximum ROC is 100 ft/min or less and the maximum Rt CAS is 2 kts/min or less.

- If Leak Rate is not within tolerances refer to the Troubleshooting Section and Subtract the BARFIELD DPS450 AIR Data Test Set Leak check altitude value recorded in troubleshooting section from the value obtained in this section in order to get a corrected total system leak value.

q. Press LEAK MEASURE/CONTROL to return to CONTROL MODE.

r. Remove tape from left Static Port

(3) Left Angle of Attack Test

a. Connect the WOW Box as follows:

- Disconnect electrical connectors 32A07P01 (left) (1, Fig. 1) and 32A08P01 (right) (3, Fig. 1) from WOW proximity sensors on left and right landing gear.
- Connect WOW Box (2, Fig. 1) to electrical connectors 32A07P01 (left) (1, Fig. 1) and 32A08P01 (right) (3, Fig. 1) on the landing gear.

Note: Make sure that the WOW Box switches are set to WOnW.

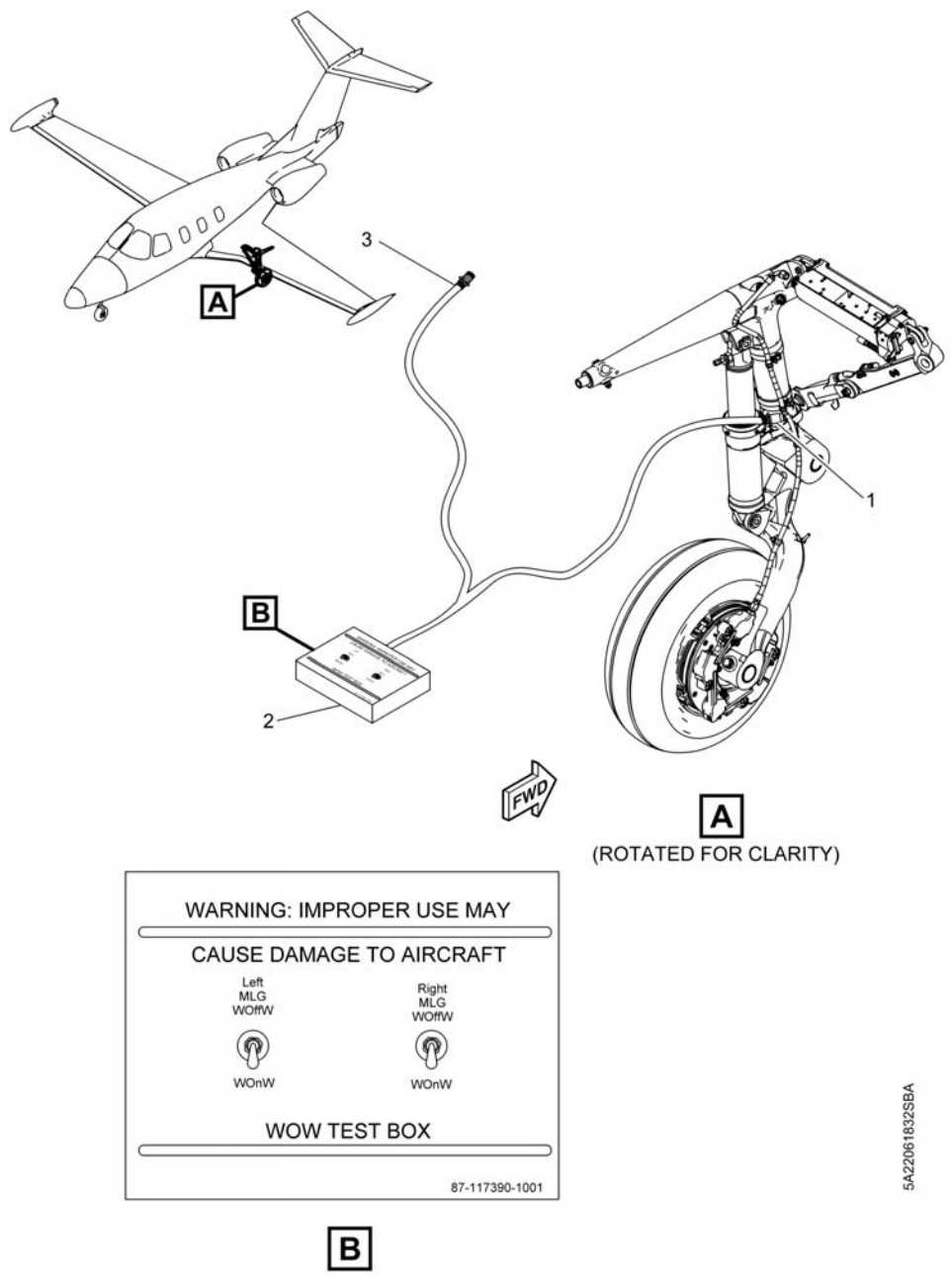
3
A
1
B
2
FWD
A
(ROTATED FOR CLARITY)
WARNING: IMPROPER USE MAY
CAUSE DAMAGE TO AIRCRAFT
Left
MLG
WOffW
Right
MLG
WOffW
WOnW
WOnW
WOW TEST BOX
87-117390-1001
5A22061832SBA
B

FIGURE 1

b. Power up the aircraft by setting the SYS BATT and START BATT switches to ON and the BUS TIE to AUTO.

CAUTION: Because this test is performed with weight off wheels (simulated), the heaters will be commanded on by the system. If the pitot/static heat ECB's are not collared off, harm to personnel or air data test equipment can occur.

Note: ECB's can only be collared in the weight on wheels condition.

c. Collar The Following ECB's by scrolling to the MFD ECB Page using lower left/right Softkey. Select ECB by system softkey. Scroll to ICE PROT using outer knob. Press inner knob to select. Scroll to required ECB using outer knob and highlight. Press "COLLAR" Softkey. Press "CONFIRM COLLAR" softkey.

- L PITOT HEAT (BATT)
- R PITOT HEAT (R FWD)
- L STATIC HEAT (BATT)
- L STATIC HEAT (R FWD)
- R STATIC HEAT (L FWD)
- R STATIC HEAT (R FWD)
- STBY PITOT HEAT (L FWD)
- L WINDSHIELD HEAT (L AFT)
- R WINDSHIELD HEAT (R AFT)

d. Select WoffW on the WOW test box.

e. Make sure both left and right PFD Baro Set to 29.92 by using the BARO SET knob on the ACP (Autopilot Control Panel). Make sure the baro setting matches on the left PFD, right PFD and MFD.

f. Remove PS35210-4-4 Pressure Test Adaptor and Re-connect E500-7270 hose to the NAV Aids quick connect cross with the APA94520-4-4-4 Pressure Test Adaptor still attached. Remove the upper hose of the APA94520-4-4-4 Pressure Test Adaptor from the quick connect cross. Attach another quick connect cross to the disconnected end of hose of PTA.

CAUTION: DO NOT over tighten hoses. Damage may occur to test equipment. Hoses should be snug.

g. Remove the other hose from the pitot/static test adaptor PS35210-4-4 and connect it to the same quick connect cross as the upper hose of PTA.

h. Attach an E500-5160 hose to the upper static test adaptor. Attach the other end of the hose to the quick connect cross, connected to the upper hose of the Pitot/AOA test adaptor. If needed Lubricate with Pitot adaptor Lubricating fluid Part # LF5050 Insert PTA onto the left Pitot probe and adjust PTA nozzles to align with the holes of the Pitot/AOA Probe.

Note: No other lubricating fluid is allowed, use of the wrong lubricating fluid could lead to malfunction of equipment in flight.

i. Power on the Barfield DPS450. Wait to Confirm Settings.

- Wait for the Barfield DPS450 Air Data Test Set to finish a sequence of pneumatic and internal system checks and the system changes to the Leak Measure mode (shown, lower left display corner).

j. Press LEAK MEASURE/CONTROL to select the CONTROL MODE (shown, lower left display corner). Press ALT Ps and enter “6000” and press enter.

k. Select F2 “UNITS” > select F3 inHg.

- Units on display change from kts/min to inHg.

l. Press SPEED Qc and enter “0.5” inHg then press ENTER.

- Wait for 15 seconds after the Barfield DPS450 Air Data Test Set achieves this new air data set point value.

m. Record the airspeed on the left PFD.

- Expected Results: 105.5 knots +/- 2.5kts

n. Press GROUND, to go to atmospheric pressure. Press F1 to select [Yes] to confirm.

- Barfield DPS450 Air Data Test Set displays shows for “SAFE AT GROUND”

(4) Right Angle of Attack Test

a. Select WoffW on the WOW test box (If not already set).

b. Make sure the ECBs in step (3),c, remain COLLARED.

c. If needed Lubricate with Pitot adaptor Lubricating fluid Part # LF5050. Insert PTA onto the right Pitot probe and adjust PTA nozzles to align with the holes of the Pitot/AOA Probe. Remove Static probe test fixture and rotate 180 degrees or remove hose and relocate to lower fitting so that the connected fitting is relocated to the left bottom static port.

CAUTION: DO NOT over tighten hoses. Damage may occur to test equipment. Hoses should be snug.

Note: No other lubricating fluid is allowed, use of the wrong lubricating fluid could lead to malfunction of equipment in flight.

d. Press CLEAR QUIT on the Barfield DPS450 Air Data Test Set.

- Wait for the Barfield DPS450 Air Data Test Set finish a sequence of pneumatic and internal system checks and the system changes to the Leak Measure mode (shown, lower left display corner).

e. Press LEAK MEASURE/CONTROL to select the CONTROL MODE (shown, lower left display corner).

f. Press SPEED Qc and enter “0.5” inHg then press ENTER.

g. Press F1 (ft, kts).

h. Press ALT Ps and enter “6000” press ENTER.

i. Wait for 15 seconds after the Barfield DPS450 Air Data Test Set achieves this new air data set point value.

j. Record the airspeed on the right PFD.

- Expected Results: 105.5 kts +/- 2.5 kts

k. Press GROUND, to go to atmospheric pressure. Press F1 to select [Yes] to confirm.

l. After the Barfield DPE450 Air Data Test Set displays shows for “SAFE AT GROUND” prompt, power off the Barfield DPS450 Air Data Test Set.

m. Remove all of the NAV Aids test equipment from the aircraft. Stow all NAV Aids and Barfield test equipment.

n. Select WonW on the WOW test box.

o. Using left/right lower softkey on MFD, scroll to the ECB synoptic page. Press ECB BY SYSTEM and using outer knob scroll to ICE PROT. Press inner knob to select. Using outer knob scroll to select ECB and press the RESET softkey for the following ECBs:

- L PITOT HEAT (BATT)
- R PITOT HEAT (R FWD)
- L STATIC HEAT (BATT)
- L STATIC HEAT (R FWD)
- R STATIC HEAT (L FWD)
- R STATIC HEAT (R FWD)
- STBY PITOT HEAT (L FWD)
- L WINDSHIELD HEAT (L AFT)
- R WINDSHIELD HEAT (R AFT)

p. Power down the aircraft by setting the SYS BATT and START BATT switches to OFF and the BUS TIE to OPEN.

q. Disconnect the WOW Box (2, Fig. 1) as follows:

- Disconnect WOW Box (2, Fig. 1) from electrical connectors 32A07P01 (left) and 32A08P01 right) on left and right landing gear.
- Connect electrical connectors 32A07P01 (left) (1, Fig. 1) and 32A08P01 (right)(3, Fig. 1) to WOW proximity sensors on left and right landing gear.

(5) Pitot/AOA Probe Heat Test

a. Power up the aircraft by setting the SYS BATT and START BATT switches to ON and the BUS TIE to AUTO. (Clear any MASTER WARNINGS/CAUTIONS as needed.)

b. Using left/right lower softkey on MFD, scroll to the ECB synoptic page. Press ECB BY SYSTEM and using outer knob scroll to ICE PROT. Press inner knob to select. Using outer knob scroll to select ECB and press the PULL softkey for the following ECBs:

- L PITOT HEAT (BATT)
- R PITOT HEAT (R FWD)
- L STATIC HEAT (BATT)
- L STATIC HEAT (R FWD)

- R STATIC HEAT (L FWD)
- R STATIC HEAT (R FWD)
- STBY PITOT HEAT (L FWD)
- L WINDSHIELD HEAT (L AFT)
- R WINDSHIELD HEAT (R AFT)

CAUTION: During this test, the heaters will be commanded on by the system. Harm to personnel or equipment can occur if touching the probes or static ports. DO NOT LEAVE ON FOR EXTENDED TIME. Allow 10 minutes after test for Probes and Static Ports to cool.

c. Record the current ambient temperature of test location with a Type K Thermocouple Thermometer within a 5 foot radius of the nose of the aircraft.

d. On MFD scroll to ICE synoptic page by using the lower left/right softkey, press the PITOT/STATIC softkey to select ON.

e. Using left/right lower softkey on MFD, scroll to the ECB synoptic page. Press ECB BY SYSTEM and using outer knob scroll to ICE PROT. Press inner knob to select. Using outer knob scroll to ECB L PITOT HEAT (BATT Bus) and press the RESET softkey.

f. Using a Type K Thermocouple Thermometer measure the temperature of the left Pitot/AOA Probe.

- Pitot/AOA Probe temperature is 25°C greater than ambient and rising. (It may take up to 4 minute's depending on ambient temperatures.)

g. Using left/right lower softkey on MFD, scroll to the ECB synoptic page. Press ECB BY SYSTEM and using outer knob scroll to ICE PROT. Press inner knob to select. Using outer knob scroll to ECB L PITOT HEAT (BATT Bus) and press the PULL softkey.

h. Using left/right lower softkey on MFD, scroll to the ECB synoptic page. Press ECB BY SYSTEM and using outer knob scroll to ICE PROT. Press inner knob to select. Using outer knob scroll to ECB R PITOT HEAT (R FWD Bus) and press the RESET softkey.

i. Using a Type K Thermocouple Thermometer measure the temperature of the right Pitot/AOA Probe.

- Pitot/AOA Probe temperature is 25° C greater than ambient and rising. (It may take up to 4 minute's depending on ambient temperatures.)

j. Using left/right lower softkey on MFD, scroll to the ECB synoptic page. Press ECB BY SYSTEM and using outer knob scroll to ICE PROT. Press inner knob to select. Using outer knob scroll to ECB R PITOT HEAT (R FWD Bus) and press the PULL softkey.

k. On MFD scroll to ICE synoptic page by using the lower left/right softkey, press the PITOT/STATIC softkey to select AUTO.

l. Using left/right lower softkey on MFD, scroll to the ECB synoptic page. Press ECB BY SYSTEM and using outer knob scroll to ICE PROT. Press inner knob to select. Using outer knob scroll to select ECB and press the RESET softkey for the following ECBs.

- ECB L PITOT HEAT (BATT Bus)
- ECB R PITOT HEAT (R FWD Bus)

- ECB L STATIC HEAT (BATT Bus)
- ECB L STATIC HEAT (R FWD Bus)
- ECB R STATIC HEAT (L FWD Bus)
- ECB R STATIC HEAT (R FWD Bus)
- ECB STBY PITOT HEAT (L FWD Bus)
- ECB L WINDSHIELD HEAT (L AFT Bus)
- ECB R WINDSHIELD HEAT (R AFT Bus)
- ECB L ENG ANTIICE VLV (L AFT Bus)
- ECB R ENG ANTIICE VLV (R AFT Bus)

m. Power down the aircraft by setting the SYS BATT and START BATT switches to OFF and the BUS TIE to OPEN.

C. Trouble Shooting

If leakage is excessive during the Left & Right Pitot & Static System Leak Test for Un-pressurized Airplane. Do the following test:

(1) Leak Testing the Barfield DPS450 Air Data Test Set and Connecting Hoses.

CAUTION: DO NOT over tighten hoses. Damage may occur to test equipment. Hoses should be snug.

a. Connect NAV Aids Hose E500-7270 (approx. 8ft long) to Barfield DPS450 Air Data Test Set Pt connector. Connect other end of E500-7270 to Pitot/AOA pressure test Hose fitting. Connect pressure test Hose fitting to the PT421-4520 Pre-Test Probe

b. Connect NAV Aids Hose E500-5160 approx. 4ft long (E500-5170 is acceptable) to Barfield DPS450 Air Data Test Set Ps connector. Connect other end of E500-5160 to the SS53515-4- 4 Static Test Adaptor. Connect Static Test Adaptor to the PTS515 Pre-Test Plate.

c. Power on the Barfield DPS450 Air Data Test Set. Wait 2 Minutes for Barfield DPS450 Air Data Test Set to Confirm Settings.

- After a successful self-test sequence the system changes to the Leak Measure mode.

d. Skip this step if the Barfield DPS450 Air Data Test Set is in Quad mode. Quad mode will display four Values: Ps, RtPc, Qc, RtQc. Press SETUP, press F1 to select [Display]. Press F3 to select [Quad]. Make sure that Alt is in “ft”, CAS is in “kts” and Rt CAS is in kts/min. If not press F2 to select [Units], and then press F1 to select [ft Kts ft/min] and press F4 to save settings. Press Clear Quit to return to Main Menu displayed in the upper right corner.

e. Press ALT Ps, ROC RATE Ps, SPEED Qc, and RATE to display the appropriate air data parameters.

f. Press CLEAR QUIT for Main Menu displayed in upper right corner. Several attempts of pressing CLEAR QUIT button may be needed to return to the main menu.

g. Press LEAK MEASURE/CONTROL to scroll to CONTROL MODE displayed in lower left corner.

h. Press ROC RATE Ps to select the ROC control aim, and using keypad enter “4000” and press ENTER. Press ALT Ps to select the Altitude control aim, and then enter “10000” and press ENTER.

- The ROC and ALT control aim values will be updated.

i. Press SPEED Qc and enter “200” then press ENTER. Wait for 15- second stabilization period after the ROC and CAS achieves the new air data parameter set points values before moving to next step.

j. Press LEAK MEASURE/CONTROL to change to LEAK MEASURE MODE.

k. Press F1 to select [Rate Timer], and then press F3 to select [Set Wait]. Press “0.3”, and then ENTER.

l. Press F4 to select [Set Time], press “0.3”, and then ENTER.

- The Set Wait and Set Time will both be updated to ‘00m.30s.

m. Press **F1** [Start Timer].

- The display starts the count down “Waiting timer” followed by the “Timing” timer. After the “Timing” timer has expired, the ROC and Rt CAS will display “Timed Leak Measure” with the final values.
- Make sure the ROC is less than ±25 ft/min and Rt CAS is less than ±0.25 kt/min.

n. Press CLEAR QUIT to return to the main menu.

o. Press LEAK MEASURE/CONTROL to return to CONTROL MODE.

p. Press GROUND, to go to atmospheric pressure. Press F1 to select [Yes] to confirm.

q. After the Barfield DPS450 Air Data Test Set displays the “SAFE AT GROUND” prompt, power off the test set and remove the hose caps.

r. Return to section of test previously run to incorporate values from Leak Testing the Barfield DPS450 Air Data Test Set and Connecting Hoses section.

D. Cost

It is recommended that this Service Bulletin be accomplished at and by one of the Eclipse Aviation Service Centers.

Parts and Labor will be supplied at no charge to the aircraft owner by Eclipse Aviation Corporation.

4. Record of Compliance

Upon completion of this Service Bulletin, make an appropriate maintenance-record entry specifying the Service Bulletin number (including part numbers and serial numbers, if applicable).

A. Notifying Eclipse Aviation

On completing this service bulletin, the operator/maintainer shall complete the attached *Compliance Record* and send it to Eclipse Aviation via regular mail, fax, or e-mail.

Mailing Address: Eclipse Aviation Corporation
ATTN: Customer Care
2503 Clark Carr Loop SE
Albuquerque, NM 87106

Fax: 1-505-241-8802

E-mail: customercare@EclipseAviation.com

SERVICE BULLETIN COMPLIANCE RECORD

SB 500-34-001: Pitot / Angle Of Attack Probes Upgrade / Retrofit

MODEL _____ AIRPLANE S/N _____ REG. NO. _____ TOTAL TIME _____ (Hours)

OWNER NAME: _____

ADDRESS: _____

_____

TELEPHONE NO. ( ) _____ FAX NO. ( ) _____

COMPLIANCE WITH SB 500-34-001

Description of Work Performed
(Inspection | Modification | Repair | Option Installation | Defect or Damage Found, if applicable)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

DATE _____

WORK PERFORMED BY _____ (Printed)

_____ (Signature)

COMPANY _____

ADDRESS _____

_____

TELEPHONE _____ FAX _____