

SB-GA8-2003-04 Issue 1

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Service Bulletin

Subject:

Conversion of aircraft from CASA certificated FAR23 Amendment 45/48 status to CASA certificated FAR23 Amendment 54 status.

Applicability:

All GA8 aircraft serial numbers GA8-00-004 through GA8-03-025.

Amendments:

Nil - Initial Issue

Background:

Gippsland Aeronautics has upgraded the certification status of the GA8 from FAR 23 at Amendment 45/48 to FAR 23 at Amendment 54. This Service Bulletin documents the modifications required to convert a CASA certificated Amendment 45/48 aircraft to a CASA certificated Amendment 54 aircraft.

Gippsland Aeronautics has already incorporated some of the modifications listed in this Service Bulletin into certain aircraft during production. Refer to the serial number applicability listed for each modification to see if your aircraft is affected.

Before commencing work, read through the contents thoroughly. In the event of any difficulties incorporating this Service Bulletin, please contact Gippsland Aeronautics for assistance.

Compliance:

This Service Bulletin is optional, however, it is a pre-requisite for Service Bulletin SB-GA8-2003-05 that converts a CASA certificated Amendment 54 aircraft to an FAA certificated Amendment 54 aircraft.

Weight and Balance:

Negligible effect on weight and balance.

Approval:

This Service Bulletin has been approved pursuant to Regulation 35 of CAR1988.

Parts:

Item	P/N	Description	Qty
1	GA8-252024-121	Large cabin window surround	1
2	GA8-252024-123	Rear cabin window surround	1
3	GA8-252024-125	Rear LHS baggage window surround	1
4	GA8-252024-126	Rear RHS baggage window surround	1
5	GA8-252024-127	LHS baggage side panel	1
6	GA8-252024-128	RHS baggage side panel	1
7	GA8-252024-129	Fwd LHS wall panel	1
8	GA8-252024-130	Fwd RHS wall panel	1
9	GA8-252024-131	Sliding door panel	1
10	GA8-252024-133	Centre RHS wall panel	1
11	GA8-252024-135	Rear LHS roof trim panel	1
12	GA8-252024-137	Rear RHS roof trim panel	1
13	GA8-252024-139	Rear roof trim panel	1
14	GA8-252024-141	Centre roof trim panel	1
15	GA8-252024-143	Fwd roof trim panel	1
16	GA8-252024-151	Fwd LHS roof trim panel	1
17	GA8-252024-152	Fwd RHS roof trim panel	1
18	GA8-252024-153	Upper Fwd LHS wall panel	1
19	GA8-252024-155	Rear door handle mechanism cover	1
20	GA8-252024-157	Inertia reel cover (LHS)	3
21	GA8-252024-158	Inertia reel cover (RHS)	3
22	GA8-255012-13	Aft luggage bin	1
23	14747	25mm Velcro hook	A/R
24	14847	25mm Velcro loop	A/R
25	GA8-112011-327	Trim position placard	1
26	GA8-112011-325	Loading placard	1
27	GA8-315017-17	Circuit board	1
28	MFR4-2K0	Pitot heat indicator resistor assembly	1
29	GA8-311021-65	Flight instrument sub-panel	1
30	GA8-112011-115	Manoeuvre Speed Placard	1
31	A0172/A0162C	Amber "Pitot Heat" light	1
32	A0172/A0162C	Red "Oil" light	1
33	A0172/A0162C	Blue "Switch On" light	1
34	GA8-793022-21	Oil pressure warning switch	1
35	MS20913-1D	Plug	1
36	GA8-793021-31	Oil pressure sensor fitting	1
37	MS20823-4D	45° elbow	1
38	MS20822-4D	90° elbow	1
39	AN3-3	Bolt	1
40	AN970-3	Washer	1
41	GA8-792011-23	Oil pressure line	2
42	GA8-112011-337	Placard	1
43	GA8-533014-21	Capacitor mounting bracket assembly	1
43	GA8-112011-333	Solenoid box cover caution placard	1
44 45		•	1
	ALS30A473KE040	47000 μF 40 volt capacitor	
46	GA8-533012-23	Solenoid box	1

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Item	P/N	Description	Qty
47	GA8-533014-21	Circuit breaker panel	1
48	MS21047-3	Anchor nut	5
49	MS20426AD3-3	Rivet	10
50	GA8-246022-41	Shunt bas bar	1
51	EI VA-1A-50	Volt/amp indicator (includes loom and shunt)	1
52	MF-R090	Re-settable fuse	2
53	GA8-112011-335	Volts placard	1
54	GA8-246012-17	Diode Assembly	1
55	GA8-246012-19	Excitation resistor assembly	1
56	MS35059-23	Double pole single throw switch	1
57	6421-00	Tee	1
58	291-600	Tube clip	4
59	H511 SAE 30R7	3/16" rubber hose	9 in.
60	MS20470AD6-14	Rivet	1
61	264N04	Union tee	1
62	259P04	Insert stabiliser	4
63	262N04	Inline connector	1
64	259N04	Plug	1
65	E1000-04 1/4 NS	1/4" Nylon hose	6 in.
66	C01-01-03	CASA Approved Flight Manual	1
67	C01-00-03	CASA Approved Service Manual	1

Parts Availability:

New parts can be obtained directly from Gippsland Aeronautics.

Tel.: +61 03 5172 1200

Fax.: +61 03 5172 1201

Email: spares@gippsaero.com

Instructions:

1. Interior Panel Replacement

NOTE:

A/C serial number GA8-02-018, and serial numbers GA8-02-020 and up had this modification incorporated during production.

- 1. Remove the interior trim panels in the main cabin area between the rear of the cockpit and the aft bulkhead. Take care not to damage the bags of insulation fitted between the trim panels and the outer aluminium skin. Note the sequence in which the panels are removed, as the new panels will have to be installed in the opposite order due to panel overlaps.
- 2. Using the existing panels as templates, drill off holes where required.
- 3. Using the existing panels for reference, attach strips of Velcro to the new panels where required.
- 4. Install the new trim panels, and attach using hardware removed in step 1.

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2. Aft Luggage Bin Replacement (if fitted)

NOTE:

A/C serial number GA8-02-018, and serial numbers GA8-02-020 and up had this modification incorporated during production.

- 1. Remove the existing aft luggage bin by removing the 24 S1022Z6-8 countersunk screws attaching the bin to the aft bulkhead, and the two AN-4 bolts attaching the bin to the cross member. Refer to Figure 2-1.
- 2. Using the existing bin as a guide, drill off holes in the flange of the new aft luggage bin (P/N GA8-255012-13).
- 3. Insert the new bin and attach to the aft bulkhead using hardware removed in step 1.
- 4. Drill through the brackets on the cross member and attach using the AN-4 bolts removed in step 1. The cross member is accessed through the bottom skin inspection panel. Refer to Figure 2-2.



Figure 2-1 - Aft luggage bin installation

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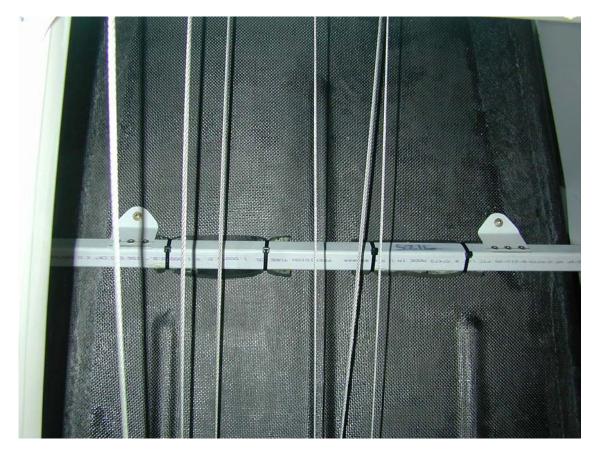


Figure 2-2- Cross member viewed through bottom skin inspection hole

3. Trim Position Placard Replacement

- 1. Remove the existing trim position placard.
- 2. Wind the trimming wheel to the full nose down position.
- 3. Locate the new placard (P/N GA8-112011-327) so that the trim position pointer lines up with the line marking on the placard indicating full nose down. Refer to Figure 3-1.



Figure 3-1 - Trim position placard location

4. Loading Placard Replacement

1. Remove the following placards for the Cabin Baggage Shelf, Main Cargo Area and Aft Luggage Bin.

CABIN BAGGAGE SHELF MAX. LOAD II3KG (250 LBS)

OBSERVE WEIGHT AND BALANCE LIMITATIONS. SEE FLIGHT MANUAL.

MAIN CARGO AREA MAX. LOAD 680KG (1500 LBS)

OBSERVE WEIGHT AND BALANCE LIMITATIONS. SEE FLIGHT MANUAL.

AFT LUGGAGE BIN
MAXIMUM LOAD AFT OF THIS
BULKHEAD 22KG (50 LBS)

OBSERVE WEIGHT AND BALANCE LIMITATIONS. SEE FLIGHT MANUAL.

2. Locate the new loading placard (P/N GA8-112011-325) on the front face of the cabin baggage shelf adjacent to the sliding door opening per Figure 4-1.



Figure 4-1 - Load placard location

5. Pitot Heat Warning Sensor Installation

NOTE:

A/C serial numbers GA8-02-021 and up had this modification incorporated during production.

WARNING:

DO NOT PERFORM ANY SORT OF MAINTENANCE ON THE ELECTRICAL SYSTEM IN CONJUNCTION WITH MAINTENANCE ON THE FUEL SYSTEM. THE ESCAPE OF FUEL FUMES UNDER THE FLOOR AND/OR IN THE AIRCRAFT MAY CAUSE AN EXPLOSION.

WARNING:

IF THE ALTERNATOR EXCITATION SYSTEM INCORPORATING THE CAPACITOR CIRCUIT HAS ALREADY BEEN INSTALLED, PERFORM THE FOLLOWING ACTION TO ENSURE THAT THE CAPACITOR CIRCUIT IS DISARMED BEFORE REMOVING THE COVER PANEL TO ACCESS THE UNDERFLOOR AREA IN FRONT OF THE PILOT'S SEAT

- (i) OPEN THE CIRCUIT BY PULLING THE BUS 2 CONTROL BREAKER
- (ii) SWITCH THE BUS 2 MASTER SWITCH ON

ENSURE THAT THE BREAKER REMAINS OPEN AND THE MASTER SWITCH REMAINS ON FOR THE DURATION THAT THE COVER PANEL IS REMOVED. NOTE THAT BUS 2 IS NOT LIVE WHILST THE BUS 2 CONTROL BREAKER IS PULLED.

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- 1. Remove pilot's seat and floor carpet. Remove battery box cover. Disconnect battery. Disarm the alternator excitation system if already installed.
- 2. Install circuit board (P/N GA8-315017-17) and wire FH1A14 to output terminal of the Pitot Heat Switch/Breaker in the overhead switch panel. Refer to Figure 5-1.
- 3. Install pitot heat indicator resistor assembly on the pitot heat feed wire FH1A14 at pin 5 of socket J01 of the wing root junction block. Solder one end of wire WH4A22 to the resistor, and the other end to pin 4 of socket J51 at the overhead electrical panel. Install wire WH4B22N between pin 3 of socket J51 and a suitable earth. Install wire WH3B18 between pin 1 of socket J51 and pin 5 of plug P102, and wire WH3A18 between pin 5 of socket J102 and pin 4 of plug 13 of the caution system controller. Refer to Figure 5-1.

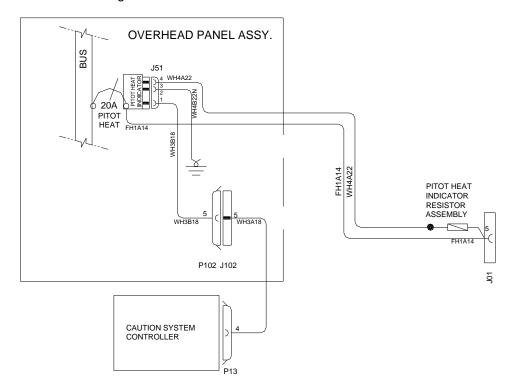


Figure 5-1 - Pitot heat installation (overhead panel)

- 4. Re-connect battery, replace battery box cover, re-install pilot's seat and floor carpet.
- 6. Upgraded Caution/Warning Light System

WARNING:

DO NOT PERFORM ANY SORT OF MAINTENANCE ON THE ELECTRICAL SYSTEM IN CONJUNCTION WITH MAINTENANCE ON THE FUEL SYSTEM. THE ESCAPE OF FUEL FUMES UNDER THE FLOOR AND/OR IN THE AIRCRAFT MAY CAUSE AN EXPLOSION.

WARNING:

IF THE ALTERNATOR EXCITATION SYSTEM INCORPORATING THE CAPACITOR CIRCUIT HAS ALREADY BEEN INSTALLED, PERFORM THE FOLLOWING ACTION TO ENSURE THAT THE CAPACITOR CIRCUIT IS DISARMED BEFORE REMOVING THE COVER PANEL TO ACCESS THE UNDERFLOOR AREA IN FRONT OF THE PILOT'S SEAT

- (i) OPEN THE CIRCUIT BY PULLING THE BUS 2 CONTROL BREAKER
- (ii) SWITCH THE BUS 2 MASTER SWITCH ON

ENSURE THAT THE BREAKER REMAINS OPEN AND THE MASTER SWITCH REMAINS ON FOR THE DURATION THAT THE COVER PANEL IS REMOVED. NOTE THAT BUS 2 IS NOT LIVE WHILST THE BUS 2 CONTROL BREAKER IS PULLED.

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- 1. Remove pilot's seat and floor carpet. Remove battery box cover. Disconnect battery. Disarm the alternator excitation system if already installed.
- 2. Remove the underside cover panels between the instrument panel and the firewall.
- 3. Disconnect the vacuum line between the vacuum pump and the vacuum regulator, and disconnect the vacuum regulator from the firewall.
- 4. Remove the 7 screws attaching the flight instrument sub-panel to the main instrument panel.
- 5. Disconnect caution/warning light connector J41/P41, turn co-coordinator connector J53, and vacuum pressure switch wires WV1A22 and WV1B22N.
- 6. Disconnect pitot line from the airspeed indicator, and the static line from the altimeter.
- 7. Remove the sub-panel from the aircraft.
- 8. Remove all instruments, caution/warning lights, dimmer and press-to-test switches, and the "Manoeuvre Speed V_A 121 KIAS" placard from the sub-panel, and transfer to the new sub-panel (P/N GA8-311021-65) featuring 6 holes for caution/warning lights. Discard old sub-panel.
- 9. The caution/warning lights are to be arranged, from left to right, "Vac", "Oil", "Alt", "Alternate Air", "Pitot Heat" and "Switch On".

NOTE:

Steps 10 and 11 are only applicable to S/N's GA8-00-004 to GA8-02-020

- 10. Install wire WH1A22 between pin 4 of plug P6 of the caution system controller and pin 4 of socket J41. Refer to Figure 6-1 for wiring schematic (Note this wire may already be installed. If so disregard this step).
- 11. Install wire WH1B22 between pin 4 of plug P41 and the negative terminal of the "PITOT HEAT" light. Refer to Figure 6-1 for wiring schematic.

NOTE:

Step 12 and 13 are only applicable to S/N's GA8-02-021 and up

12. Install wire WS2A22 between pin 7 of plug P6 of the caution system controller and pin 7 of socket J41. Refer to Figure 6-1 for wiring schematic

NOTE:

This wire may already be installed. If so disregard this step.

- 13. Install wire WS2B22 between pin 7 of plug P41 and the negative terminal of "Switch On" light. Refer to Figure 6-1 for wiring schematic.
- 14. Install wire WP2A22 between pin 6 of plug P10 of the caution system controller and pin 3 of socket J41. Refer to Figure 6-1 for wiring schematic

<u>NOTE:</u>

This wire may already be installed. If so disregard this step.

- 15. Install wire WP2B22 between pin 3 of plug P41 and the negative terminal of "Oil" light. Refer to Figure 6-1 for wiring schematic.
- 16. Connect wire WA4B22 between pin 10 of plug P41 and the positive terminal of the oil pressure warning light. Refer to Figure 6-1 for wiring schematic.

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17. Connect wires WD1B22 thru WD1F22 between the positive terminals of each light, except for the oil pressure warning light. Refer to Figure 6-1 for wiring schematic.

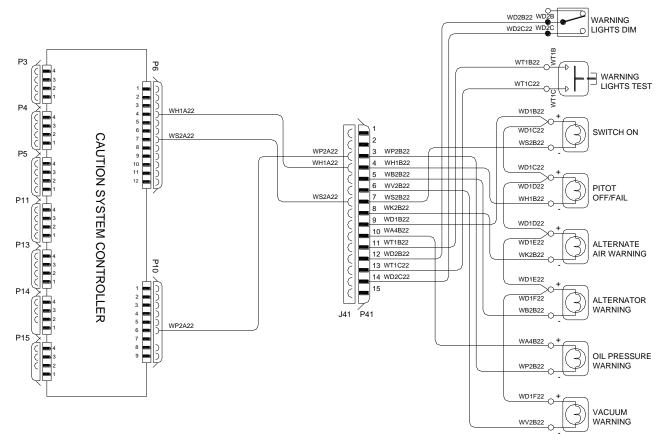


Figure 6-1 - Caution/warning light wiring schematic (instrument panel)

- 18. Drill a 0.189" diameter hole in the firewall 5.0" above the hot air duct and 9.5" from the left hand side cabin wall. Fit oil pressure sensor fitting (P/N GA8-793021-31) and attach using an AN3-3 bolt and AN9703-3 washer. Refer to Figure 6-2.
- 19. Connect oil pressure warning switch (P/N GA8-793022-21), MS20823-4D 45° elbow, MS20913-1D plug and MS20822-4D 90° elbow to the oil pressure sensor fitting. Refer to Figure 6-2.
- 20. Disconnect existing oil line between the oil pressure indicator on the instrument panel and the firewall fitting. Connect oil pressure line (P/N GA8-792011-23) between the firewall fitting and the MS20823 elbow. Connect oil pressure line (P/N GA8-792011-23) between the MS20822 elbow and the oil pressure indicator. Refer to Figure 6-2.

NOTE:

Instead of fitting new oil lines, the existing line may be modified by cutting in half and fitting Stratoflex 300-65 or Aeroquip 491-4 end connectors

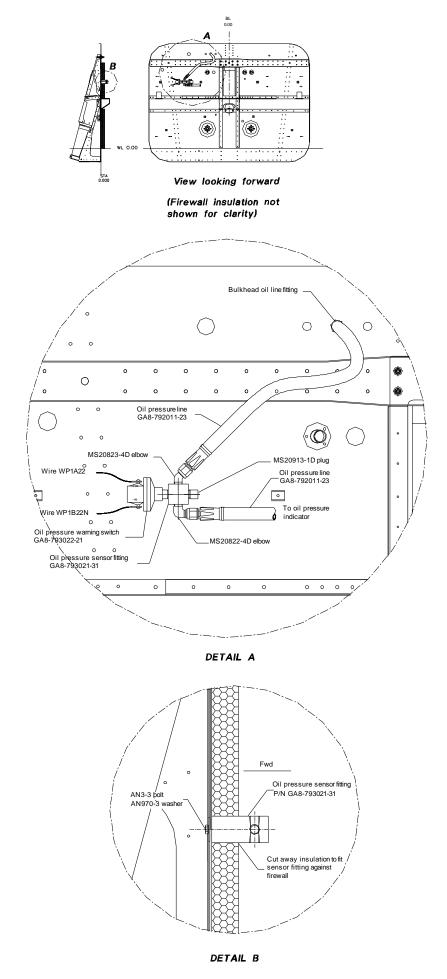


Figure 6-2 Oil pressure line modification

21. Install wire WP1A22 between the positive terminal of the oil pressure switch (GA8-793022-21) and pin 3 plug 14 of the caution system controller. Install wire WP1B22N between the negative terminal of the oil pressure switch and pin 1 of plug 15 of the caution system controller. Refer to Figure 6-3 for wiring schematic.

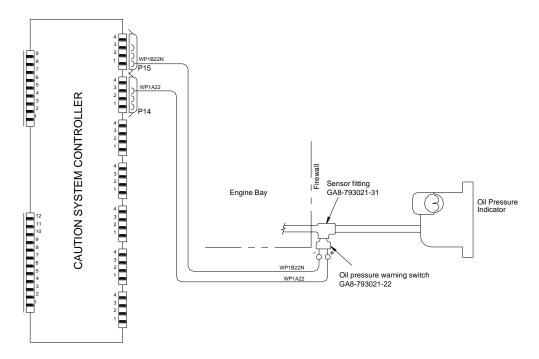


Figure 6-3 - Oil pressure switch installation

- 22. Re-connect battery, replace battery box cover, re-install pilot's seat and floor carpet.
- 23. Install "Warning Lights" placard (P/N GA8-112011-337) around the press-to-test and dimmer switches, and "Manoeuvre Speed" placard (P/N GA8-112011-115) under the airspeed indicator. Refer to Figure 6-4.
- 24. Test that all six lights are functional by pressing the press-to-test button.
- 25. Perform operational test of newly installed lights by the following procedure.
 - (i) With the Master Switches ON and the engine not running:
 - i. check that the "Oil" light illuminates.
 - ii. with the pitot-heat switched off, check that the "Pitot Heat" light illuminates.
 - iii. with the pitot-heat switched on, check that the "Pitot Heat" light extinguishes.
 - iv. with the pitot-heat switched on, disconnect left hand wing root electrical connector P01/J01. Check that the "Pitot Heat" light illuminates.
 - v. with the fuel pump switched on, check that the "Switch On" light illuminates.
 - (ii) With the engine running:
 - i. check that the "Oil" light extinguishes when the oil pressure indicates above 25 psi.

24. Conduct pitot-static leak per section 34-10-00 of the GA8 Service Manual.



Figure 6-4 - Caution/warning light arrangement

7. Volt/Amp Indicator Replacement

NOTE:

A/C serial numbers GA8-02-025 and up had this modification incorporated during production.

WARNING

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WARNING

IF THE ALTERNATOR EXCITATION SYSTEM INCORPORATING THE CAPACITOR CIRCUIT HAS ALREADY BEEN INSTALLED, PERFORM THE FOLLOWING ACTION TO ENSURE THAT THE CAPACITOR CIRCUIT IS DISARMED BEFORE REMOVING THE COVER PANEL TO ACCESS THE UNDERFLOOR AREA IN FRONT OF THE PILOT'S SEAT

- (i) OPEN THE CIRCUIT BY PULLING THE BUS 2 CONTROL BREAKER
- (ii) SWITCH THE BUS 2 MASTER SWITCH ON

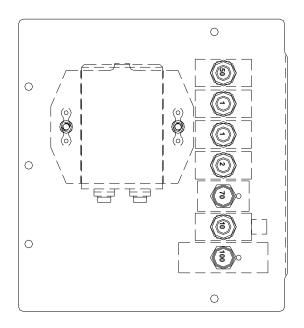
ENSURE THAT THE BREAKER REMAINS OPEN AND THE MASTER SWITCH REMAINS ON FOR THE DURATION THAT THE COVER PANEL IS REMOVED. NOTE THAT BUS 2 IS NOT LIVE WHILST THE BUS 2 CONTROL BREAKER IS PULLED.

- 1. Remove pilot's seat and floor carpet. Remove battery box cover. Disconnect battery. Disarm the alternator excitation system if already installed.
- 2. Disconnect wires DA1A18, DA1B18 and DA2D18N between the instrument panel mounted battery monitor and the ammeter shunt located on the rear of the firewall at the left lower engine mount bolt. Discard wire DA2D18N.
- 3. Disconnect and discard wire DA2A18 between terminal DA2A of the Bus1/Bus 2 switch and the battery monitor.
- 4. Disconnect, remove and discard the battery monitor from the instrument panel.
- 5. Disconnect, remove and discard mode switch and wiring. The mode switch hole may be blanked with a rubber plug or similar.
- 6. Disconnect and remove all parts from the solenoid box.
- 7. Disconnect floor-mounted circuit breakers and remove circuit breaker panel. Remove circuit breakers from the existing panel and attach to new circuit breaker panel (P/N GA8-246022-33).

NOTE:

Step 8 is only applicable to S/N's GA8-00-004 to GA8-02-021. S/N's GA8-02-022 to GA8-02-024 have an alternative capacitor installation that is functionally equivalent to the following.

8. Attach capacitor and capacitor mounting bracket (P/N GA8-533014-21) to the new circuit breaker panel. Refer Figure 7-1. Refer to Section 8 **Alternator Excitation System Installation** for capacitor wiring details.



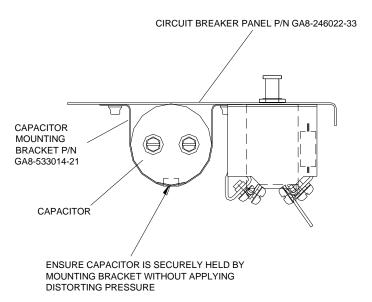


Figure 7-1 – Circuit breaker panel capacitor installation

9. Attach the new ammeter shunt to the circuit breaker panel. Connect the shunt bus bar (P/N GA8-246022-41) between the shunt and 100A breaker. Refer to Figure 7-2.

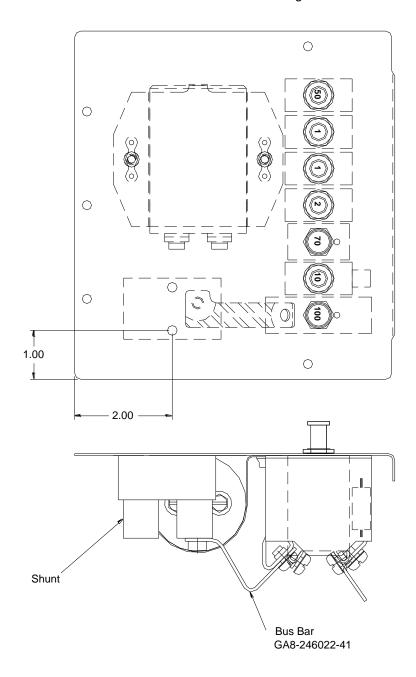


Figure 7-2 - Shunt and bus bar installation

10. Unfasten the screws attaching the solenoid box to the floor and remove the solenoid box.

11. Extend the solenoid box floor opening by 3.0" as per Figure 7-3. Use the new elongated solenoid box (P/N GA8-533023-23) as a pattern to locate 5 additional anchor nut positions at the front of the extended opening. Rivet MS21047-3 anchor nuts to the floor using MS20426AD3-3 rivets.

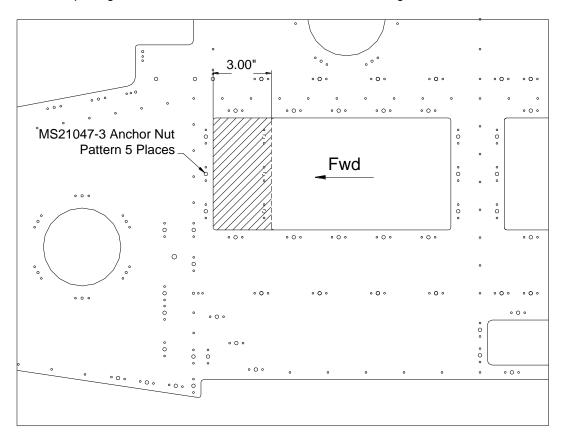


Figure 7-3 – Solenoid box floor opening extension

- 12. Fit all parts removed in step 6 into the new elongated solenoid box per Figure 7-4.
- 13. Install the new elongated solenoid box into the floor and secure using the MS24694S52 screws removed in step 10.

14. Reconnect wiring to the components in the solenoid box.

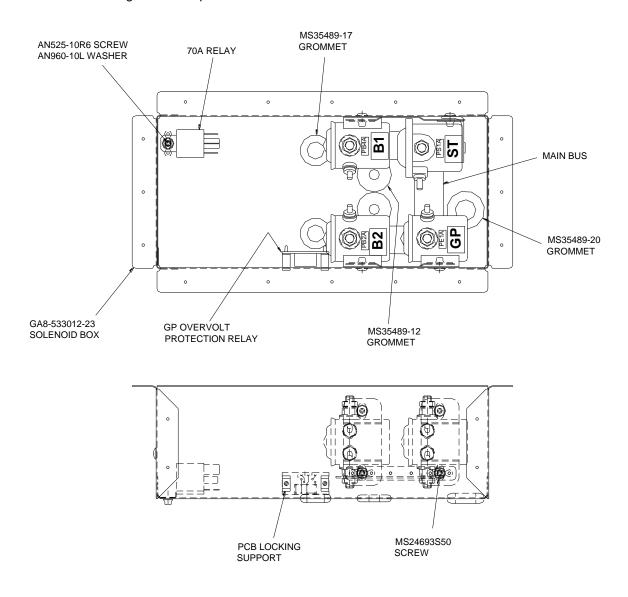


Figure 7-4 - Solenoid box fit-out

- 15. Install and connect circuit breaker panel.
- 16. Disconnect wire PG1A6 from the 100A Alt. Main circuit breaker and connect to terminal PG1A of the new ammeter shunt. Install wire PG1B6 between terminal PG1B of the new ammeter shunt and the 100A Alt. Main circuit breaker. Refer to Figure 8-1 for wiring schematic.
- 17. Connect re-settable fuses MF-R090 to the positive and negative terminals of the ammeter shunt.
- 18. Solder wires DA1A18 and DA1B18 disconnected in step 2 to the re-settable fuses.
- 19. Splice wires DA1A18 and DA1B18 to the orange and brown wires of the volt/amp indicator loom.
- 20. Connect the black wire and white with red trace wire from the volt/amp indicator loom to the Earth bus located on the left hand side of the fuselage directly above the System Controller and Caution System Controller.

- 21. Connect the red wire from the volt/amp indicator loom to terminal DA2A of the Bus 1/Bus 2 switch.
- 22. Connect the white with brown trace wire from the volt/amp indicator loom to the positive terminal of the oil pressure indicator.
- 23. Install new volt/amp meter P/N VA-1A-50 in the instrument panel at the location previously occupied by the battery monitor. Connect the volt/amp indicator loom to the instrument.
- 24. Re-connect battery, replace battery box cover, re-install pilot's seat and floor carpet.
- 25. Remove existing battery monitor placard and install new ammeter placard P/N GA8-112011-335.

8. Alternator Excitation System Installation

NOTE:

A/C serial numbers GA8-02-022 and up had an equivalent modification incorporated during production.

WARNING:

DO NOT PERFORM ANY SORT OF MAINTENANCE ON THE ELECTRICAL SYSTEM IN CONJUNCTION WITH MAINTENANCE ON THE FUEL SYSTEM. THE ESCAPE OF FUEL FUMES UNDER THE FLOOR AND/OR IN THE AIRCRAFT MAY CAUSE AN EXPLOSION.

- 1. Remove pilot's seat and floor carpet. Remove battery box cover. Disconnect battery.
- 2. Connect Earth wire PG4B18N from capacitor earth terminal to the screw securing the 70A relay to the solenoid box.
- Replace main supply wire between the alternator main and alternator field circuit breakers with diode assembly (P/N GA8-246012-17). Ensure correct orientation of diode. Refer to Figure 8-1 for wiring schematic.
- 4. Install excitation resistor assembly (P/N GA8-246012-19) between the power supply side of the alternator field circuit breaker and the positive terminal of the capacitor. Refer to Figure 8-1 for wiring schematic.
- 5. Remove the alternator field relay assembly, including diode assembly (P/N GA8-246012-15) between terminals 85 and 86 of the field relay, and wires PG3A18 and PG3B18N.
- 6. Remove the existing Bus 2 master switch located in the overhead electrical panel assembly and replace with the new double pole double throw Bus 2 master switch (P/N MS35059-23). Re-connect existing wires PB3A18 and PB3B18 to terminals of the new switch. Refer to Figure 8-1 for wiring schematic.
- 7. Install and secure wire PG2A14 into the aircraft main wiring loom from the alternator field circuit breaker terminal to pin 4 of plug P105, and wire PG2B14 from pin 4 of socket J105 to terminal PG2B of newly installed Bus 2 master switch. Refer to Figure 8-1 for wiring schematic.
- 8. Install and secure wire PG2C14 into the aircraft main wiring loom from terminal PG2C of the newly installed Bus 2 master switch to pin 5 of socket J105, and wire PG2D14 from pin 5 of plug P105 to terminal ALT. SW. of the system controller (P/N GA200-243001-1). Refer to Figure 8-1 for wiring schematic.
- 9. Install new solenoid box cover caution placard (P/N GA8-112011-333).
- 10. Re-connect battery, replace battery box cover, re-install pilot seat and floor carpet.
- 11. Perform operational test by the following procedure:
 - (i) Start aircraft engine.
 - (ii) Pull the Bus 2 control breaker, and turn both Master Switches OFF.
 - (iii) Wait a minimum of 10 seconds and turn the Bus 2 Master Switch ON. Do not activate the Bus 1 Master Switch.
 - (iv) Ensure Bus 2 becomes active.

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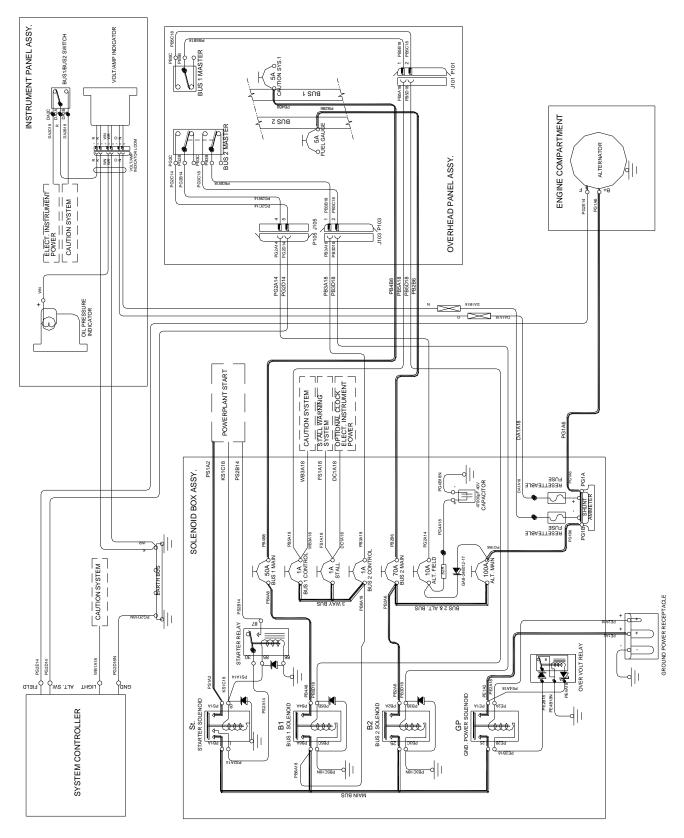


Figure 8-1 – Capacitor installation wiring



Figure 8-2 Capacitor, solenoid box installation

9. Pitot Drain Installation

NOTE:

A/C serial numbers GA8-02-021 and up had this modification incorporated during production.

1. Gain access to the location of the existing static drain by removing the inspection panel positioned directly behind the pilot's seat.

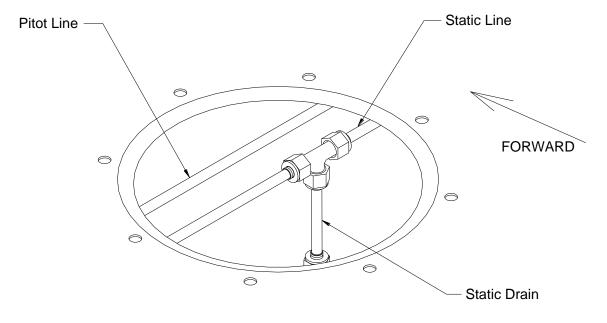


Figure 9-1 – Existing static drain location

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2. Identify the pitot line and locate a suitable position to install the drain line.

For A/C serial numbers GA8-00-004 to GA8-02-019

3. Cut the pitot line and install a drain line using a 6421-00 tee, 291-600 tube clips, H511 SAE 30R7 3/16" rubber hose and an MS20470AD6-14 rivet. Refer to Figure 9-2.

For A/C serial number GA8-02-020

3. Cut the pitot line and install a drain line using a 264N04 union tee, 259N04 insert stabilisers, 262N04 inline connector, 259N04 plug and E1000-04 ¼ NS nylon hose. Refer to Figure 9-3.

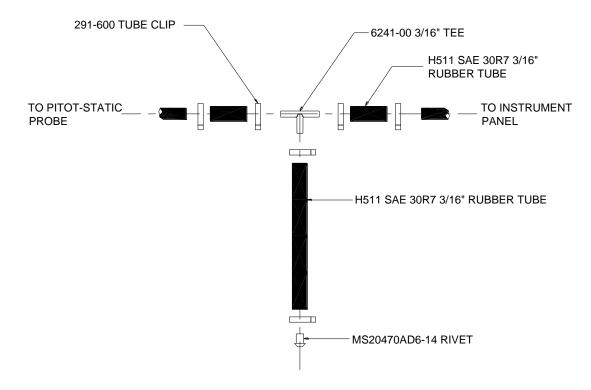


Figure 9-2 - Pitot drain installation (S/N GA8-00-004 to GA8-02-019)

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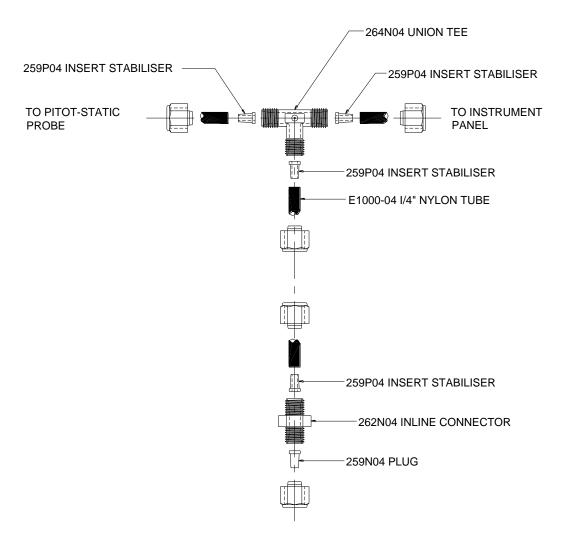


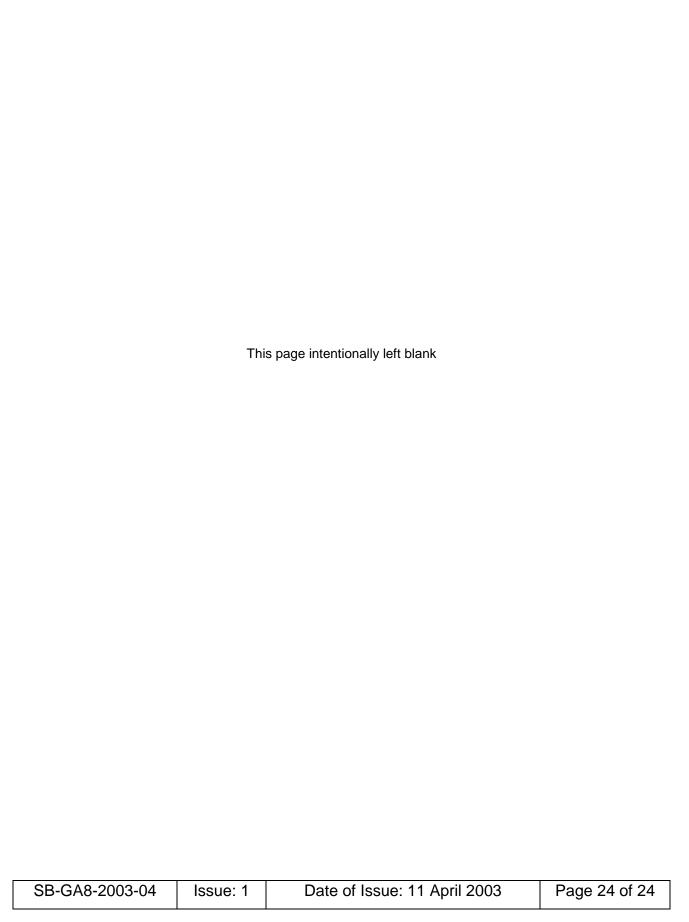
Figure 9-3 - Pitot drain installation (S/N GA8-02-020)

Documentation:

- 1. Replace existing Flight Manual C01-01-01 with Flight Manual C01-01-03.
- 2. Replace existing Service Manual C01-00-01 with Service Manual C01-00-03.
- 3. Update aircraft log book to reflect incorporation of this Service Bulletin.

Compliance Notice:

Complete the Service Bulletin Compliance Notice and return to Gippsland Aeronautics by fax/mail.



DOCUMENT COMPLIANCE NOTICE



Document: Service Bulletin SB-GA8-2003-04

Aircraft Serial Number:	GA8	_
I/we have incorporated Servi	ce Bulletin SB-GA8-2	003-04 for the above aircraft.
Signed		
Please post or fax this compl	iance notice to:	

Gippsland Aeronautics

Attn: Technical Services

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Morwell Victoria 3840

Australia

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