
OPTIONAL SERVICE BULLETIN NO. DAC1-34-11 REV. 0

I TECHNICAL DETAILS

I.1 Category

Optional

I.2 Airplanes Affected

Type: DA 20-C1

S/N: C0699 and subsequent

I.3 Time of Compliance

At next scheduled maintenance action

I.4 Subject

Garmin GI 275 installation

ATA code: 34-00

I.5 Reason

This service bulletin provides instructions for installing the Garmin GI 275 in the serial numbers under Section I.2.

I.6 Approval

Engineering data referenced or contained in this service bulletin is approved as part of Garmin STC SA02658SE.

I.7 Accomplishment/Instructions

1. Disconnect the aircraft battery. Refer to AMM Chapter 24-31-00.
2. Remove the existing instrument panel cover. Refer to AMM Chapter 25-10-00.
3. Remove the standby altimeter and airspeed instruments.
4. Assemble the blanking plate. See Figure 1.
5. Install the blanking plate assembly. Ensure the assembly covers the hole previously occupied by the standby airspeed indicator.
6. Drill out the three standby altimeter mounting holes to 11/64" and apply surface protection (DPS501): A1.
7. Install the battery pack (item 2) in the GI 275 as shown in Figure 2.
8. Mount the standby GI 275 indicator in the hole previously occupied by the standby altimeter.
9. Locate the previously capped & stowed wires in the wire bundle above the GDU display and below the tachometer.
10. Using the install kit (item 3), fabricate connector and label J2751. Add capped & stowed wires in addition to the supplied configuration module wires and the USB port wires. Refer to Figures 3 and 4.

NOTE: Route the USB plug beside the audio panel near the top of the instrument panel where easily accessible when the instrument panel cover is removed.

11. Connect the fabricated connector (J2751) to the top connector of the GI 275 indicator.
12. Modify the existing Pitot/static hoses previously routed to the standby altimeter and airspeed indicator to the GI 275 as shown in Figure 5.

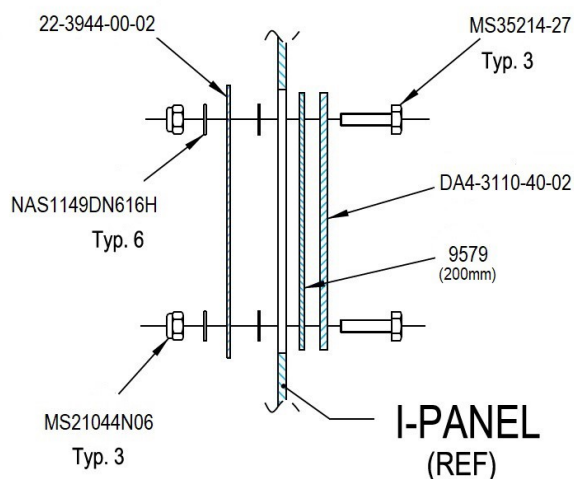


Figure 1. Blanking plate assembly.

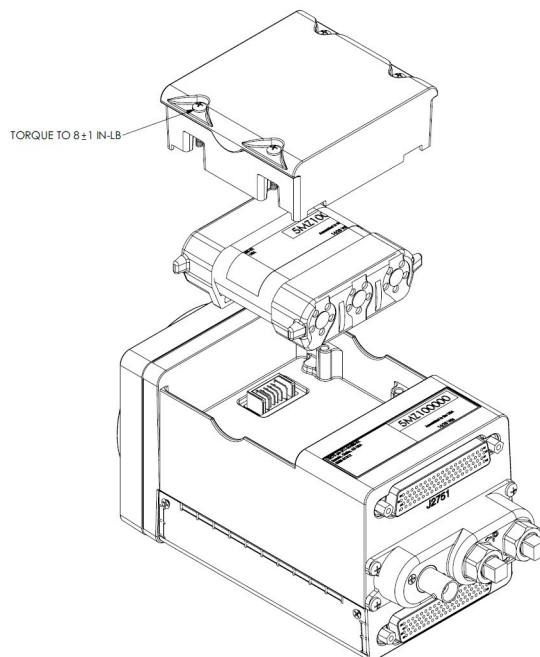


Figure 2. Installation of battery pack.

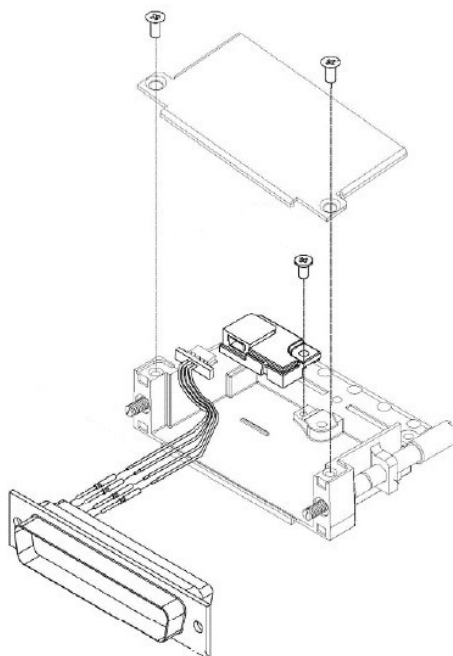


Figure 3. Configuration module installation.

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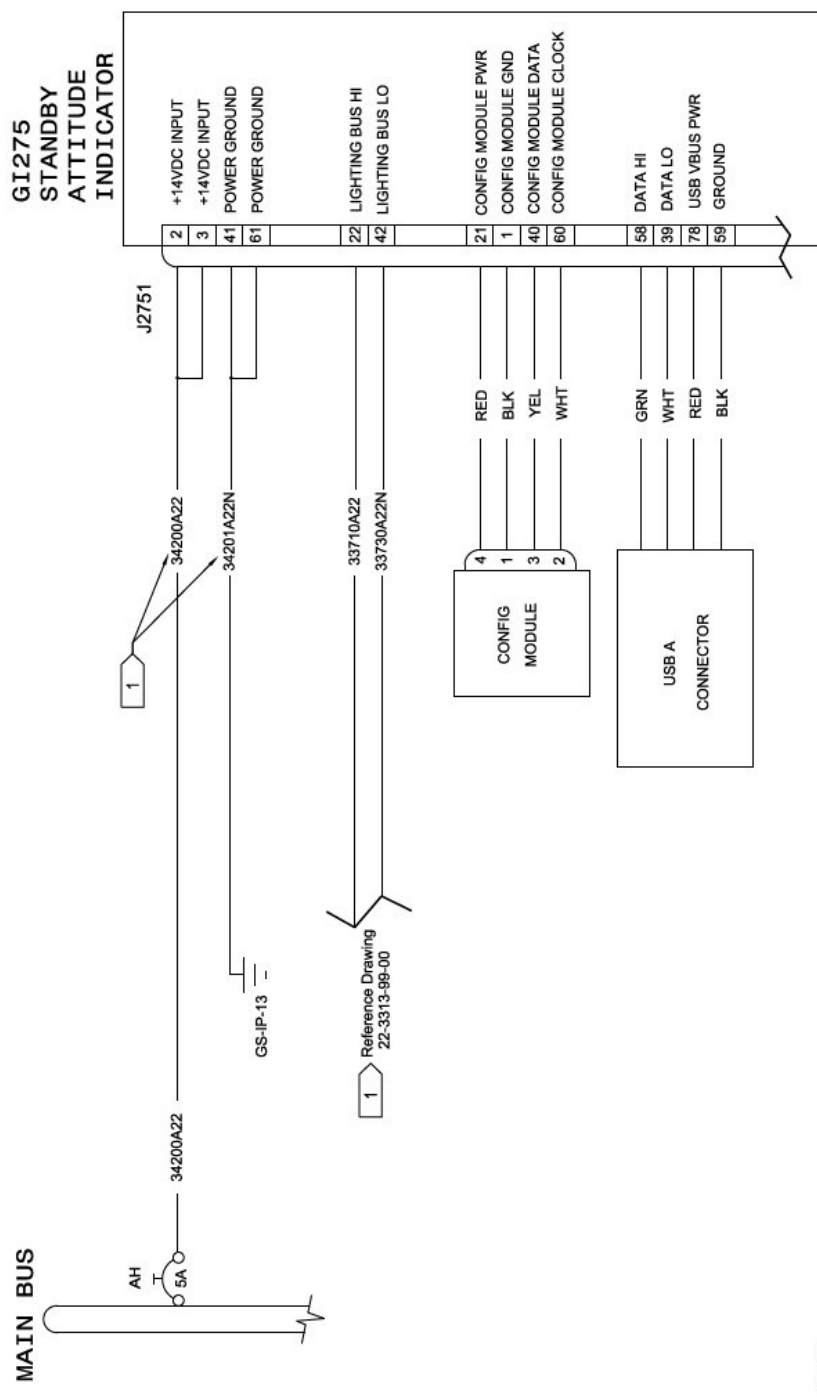


Figure 4. Wire connections.

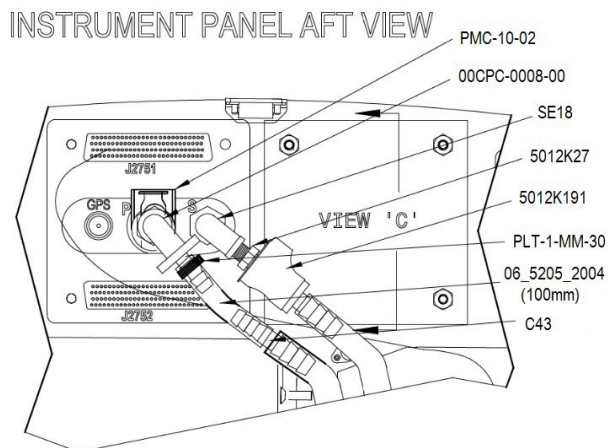


Figure 5. Pitot, static connections.

13. Replace the AH circuit breaker cap with the 5 A circuit breaker (item 11). Locate wire 34200A22 in the circuit breaker bundle. Crimp the wire with item 13 if the ring terminal is not present. See Figure 6.

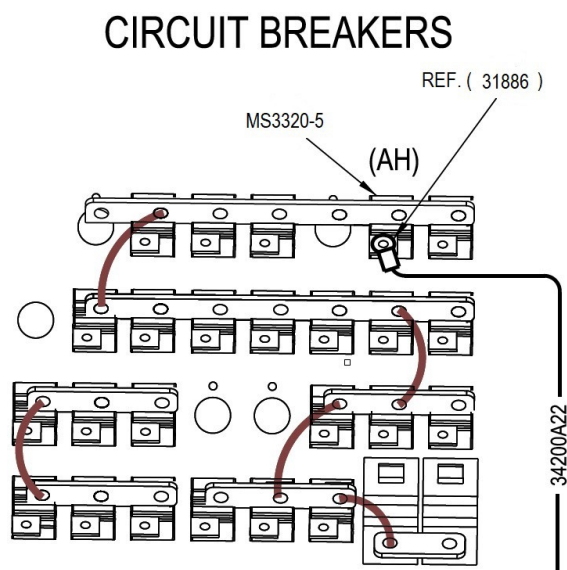


Figure 6. Circuit Breakers.

14. Reconnect the battery and connect the ground power unit.
15. Power on the aircraft.
16. If a pre-configured GI 275 from DAIC (P/N DI275-SB) was not used in the installation, power on the GI 275 in configuration mode by holding down the inner knob, and configure the GI 275 with the settings on the following pages.

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GI275 UNIT CONFIGURATION SETTINGS	
AIRFRAME CONFIGURATION:	
NEW UNIT SET TO	GI #1
	ADI-STANDBY
	ADHRS
INTERFACES:	
ADC 1	INTERNAL
ADC 2	NONE
AHRS 1	INTERNAL
INERTIAL-AIDED VERT.SPEED	OFF
AHRS 2	NONE
MAGNETIC HEADING 1	NONE
NAV/GPS:	
GPS 1	NONE
NAV 1	NONE
VFR GPS	NONE
EIS:	
EIS	NONE
AIRSPEED SWITCHES:	
SWITCH #1 - DISCRETE OUT	NONE
AUTOPILOT:	
AUTOPILOT	NONE
TRAFFIC:	
TRAFFIC (TYPE)	NONE
GENERAL PURPOSE:	
ARINC 429 OUT	
GENERAL PURPOSE 1 #1	NONE
GENERAL PURPOSE 1 #2	NONE
GENERAL PURPOSE 2 #1	NONE
GENERAL PURPOSE 2 #2	NONE
INTERNAL AHRS	NONE
INTERNAL ADC	NONE
INTERNAL ADAHRS	NONE
GP RS-232 OUT	
ALTITUDE FORMAT 3	NONE
GP DISCRETE OUT	
GPS 1/2 SOURCE	NONE
ON-GROUND	NONE
TERRAIN AUDIO ACTV	NONE
GP DISCRETE IN	
ADC1/ADC2	NONE
AHRS1/AHRS2	NONE
AUDIO INHIBIT	NONE
WEIGHT ON WHEELS	NONE
DISPLAY BACKUP	NONE
DAY/NIGHT	NONE
TERRAIN INHIBIT	NONE
RP MODE	NONE

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GI275 UNIT CONFIGURATION SETTINGS CONT'D	
OTHER	
RADAR ALTIMETER	NONE
PFD SYNC	NONE
STORMSCOPE	NONE
GDL69	NONE
GENERAL	
BACKUP BATTERY	ON
UNIT LOCATION	PILOT
AIRFRAME CONFIG	
ROLL POINTER	SKY
ADI STYLE	3-IN-1
ALTITUDE BUG	OFF
IAS UNITS	KNOTS
ALT/VS UNITS	FEET
VERTICAL SPEED RANGE	+/-3000 FPM
VERTICAL SPEED MIN	ON (-3000)
VERTICAL SPEED MAX	ON (3000)
AIRSPEED BUG	OFF
AIRSPEED - ADVANCED	
RED (LOW SPEEDS)	OFF
WHITE	ON (MIN=34, MAX=78)
HALF WHITE	OFF
WHITE/GREEN	ON (MIN=42, MAX=78)
GREEN	ON (MIN=78, MAX=118)
YELLOW	ON (MIN=118, MAX=164)
STALL SPEED	34
GLIDE/VREF	73
V _x /V ₁	57
V _y /V ₂	68
V _r	44
V _{le}	OFF
BLUE BAR	OFF
RED BAR	OFF
RED/WHITE BAR	OFF
WHITE TRIANGLE	OFF
V _{me} /V _{mo} /M _{mo}	FIXED (MIN=164)
M _{mo}	OFF
V _{ne} /V _{mo} / ROW 1	OFF

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GI275 UNIT CONFIGURATION SETTINGS CONT'D	
AIRSPEED - BASIC	
VSO	34
VS1	42
Vfe	78
Vno	118
Vne	164
GLIDE	73
Vr	44
Vx	57
Vy	68
Vle	OFF
Vmca	OFF
Vyse	OFF
ADI (STANDBY) PAGES	
PAGE 1	ADI
PAGE 2	NONE
PAGE 3	NONE
LIGHTING	
ENHANCED LIGHTING MODE	ON
PHOTOCELL RESPONSE TIME	7
DISPLAY SOURCE	LIGHTING BUS
KNOB SOURCE	LIGHTING BUS
INPUT TYPE	14VDC
RESPONSE TIME	0
GLOBAL CONFIGURATION	
AUDIO OUT	GI 1
VOICE TYPE	FEMALE
ALERT VOLUME	0
TERRAIN MODE	TERRAIN PROXIMITY
EXTERNAL TAWS	NOT INSTALLED
TRAFFIC COLOUR	CYAN
ALTITUDE ALERTER	200FT CHIME
DATABASE SYNC	PILOT CONTROLLED
CDI & BARO SIDE SYNC	PILOT CONTROLLED
WIRELESS LRU	GI 1
SSID	LEAVE BLANK
PASSWORD	LEAVE BLANK
BLUETOOTH NAME	LEAVE BLANK
OWNERSHIP ICON	LOW WING PROP
OWNERSHIP ICON COLOUR	WHITE

16. Inspect the installation for FOD.
17. Install the new expanded instrument panel cover assembly (item 21) using the hardware from the original instrument panel cover.
18. Perform pitch/roll offset, engine vibration, and air data calibration in accordance with Garmin STC Installation Manual 190-02246-10.
19. Set the GI 275 panel tilt to 7 degrees in accordance with the Garmin STC Installation Manual 190-02246-10.
20. Perform an EMI check including the victim/source test in accordance with the Garmin STC Installation Manual 190-02246-10.
21. Clean working areas, check for foreign objects.
22. Check all altered, replaced, repaired parts for proper function.
23. Test all systems in working area for function.
24. Make all necessary entries in the logbooks.
25. Submit the execution report to Techpubs@diamondaircraft.com

I.8 Mass (Weight) and CG

The change in mass and CG is negligible.

II PLANNING INFORMATION

II.1 Material and Availability

Item	Quantity	Part Number	Description
1	1	010-01912-10	Garmin GI 275, ADAHRS, unit only
1a	ALT	DI275-SB	Garmin GI 275, pre-configured
2	1	010-02304-00	Garmin GI 275 battery pack
3	1	011-04809-01	Garmin GI 275, install kit
4	3	MS35214-27	Screw, machine
5	6	NAS1149DN616H	Washer, flat
6	3	MS21044N06	Locknut
7	100 mm	9579	Double sided tape
8	1	5012K27	Plug, quick release
9	1	5012K191	Socket, quick release, barb
10	1	PMC-10-02	Socket, quick release
11	1	MS3320-5	Circuit breaker, 5A
12	1	31886	Ring terminal
13	1	DA4-3110-40-02	Blanking plate, airspeed
14	1	22-3944-00-02	Backing plate
15	3	MS35214-42	Screw, machine
16	1	00CPC-0008-00	Elbow, male CPC 90 fitting
17	1	SE18	Fitting, 90 deg, street elbow
18	100 mm	06_5205_2004	Hose 4x7 mm
19	1	C43	Hose connector, reducing
20	1	PLT-1-MM-30	Cable tie
21	1	22-3950-10-00	Cover assembly, IP, expanded

II.2 Special Tools

None.

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II.3 Labour Effort

Approximately 3 hours will be required to accomplish this service bulletin.

This estimate is for direct labour performed by a technician, and it does not include setup, planning, familiarization, cure time, part fabrication, or tool acquisition.

II.4 Credit

None

II.5 Reference Documents

DA 20-C1 Aircraft Maintenance Manual (AMM), Document # DA201-C1

Garmin STC Installation Manual 190-02246-10

III REMARKS

1. All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. All work, particular that, which is not especially described in this service bulletin, must be done in accordance with the referenced maintenance manual.
3. Completion of all work must be recorded in the logbook.
4. In case of doubt, contact Diamond Aircraft Industries.

To obtain satisfactory results, procedures specified in this service bulletin must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft cannot be responsible for the quality of work performed in accomplishing the requirements of this service bulletin. Diamond Aircraft reserves the right to void continued warranty coverage in the area affected by this service bulletin if it is not incorporated.

If you no longer own the aircraft to which this service bulletin applies, please forward it to the current owner and send the name of the current owner to Diamond Aircraft at the address below.

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Technical Publications:
E-mail: Techpubs@diamondaircraft.com

**EXECUTION REPORT TO
SERVICE BULLETIN
DAC1-34-11 REV. 0**

AIRPLANE INFORMATION

Airplane Serial Number	_____
Airplane Registration	_____
Airplane Operator	_____
Hours of Operation of Airplane	_____
No. of Landings	_____
Hours of Operation of Engine	_____
Typical Operation of Airplane	_____
	(private, club, training, other)

Date, Name, Signature

Please e-mail the completed form to Techpubs@diamondaircraft.com.