

# SERVICE BULLETIN



**Service Bulletin No.:** DAC1-24-04 Rev 3

**Date Issued:** July 18, 2008

**Title:** Generator Attachment Bracket

**Page:** 1 of 6

- 1. ATA Code:** 2430
- 2. Effectivity:** DA20-C1 aircraft up to and including S/N C0099
- 3. General:** This Service Bulletin addresses replacement of Generator Mounting Bracket P/N 22-2411-10-00 on early serial numbered DA20-C1 aircraft. There have been several cases of cracks developing in the generator mounting bracket. This Service Bulletin supersedes Service Bulletin DCA1-24-04 Rev 2 Issued March 1, 2006.
- 4. Compliance:** Compliance with this Service Bulletin is recommended.
- 5. Approval:** Engineering data referenced or contained in this Service Bulletin is approved as part of the type design.
- 6. Labour:** Approximately 1 1/2 hours will be required to accomplish this Service Bulletin.

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

<b>7. Material:</b>	<b>Part Number</b>	<b>Description</b>	<b>Qty</b>
	22-2412-00-01	Pivot Bolt	1
	22-2412-00-11	Stabilizing Bracket	1
	22-2412-00-12	Spacer	1
	22-2412-00-13	Adjuster Link	1
	22-2412-14-00	Mounting Bracket	1
	DIN128AM10	Lock Washer	1
The above material may be ordered as kit DAC1-24-04-AMK0. Materials required but not supplied: procure locally.			
	MS20995-C32	.032" Lockwire	A/R
	N/A	222 Loctite	A/R
	LPS3	Corrosion Inhibitor	A/R

- 8. Special Tools:** N/A
- 9. References:** DA20-C1 Maintenance Manual (MM), Document # DA201-C1.

## **10. Accomplishment Instructions:**

- 10.1** Identify which generator mounting bracket is installed. Figure 1 shows identifying details of generator mounting brackets P/N 22-2411-10-00 and P/N 22-2411-13-00.

If P/N 22-2411-10-00 is installed, installation of kit DAC1-24-04-AMK0 is required. Perform steps **10.2** through **10.22** of this Service Bulletin.

If P/N 22-2411-13-00 is installed, no replacement is required. Make a log book entry that this Service Bulletin has been incorporated.

# SERVICE BULLETIN



**Service Bulletin No.: DAC1-24-04 Rev 3**

**Date Issued:** July 18, 2008

**Title:** Generator Attachment Bracket

**Page:** 2 of 6

- 10.2** Remove the Generator (Refer to the MM, Chapter 24-30-00).  
Reference: Figure 2 of this Service Bulletin.
- 10.3** Remove and discard the lower mounting Pivot Bolt and Lockwasher.
- 10.4** Remove and discard the Stabilizing Bracket.
- 10.5** Remove and discard the Adjuster Link.
- 10.6** Remove and discard the Mounting Bracket.
- 10.7** Remove and discard the Spacer.
- 10.8** At the top forward side of the mounting bracket install the Washer (P/N AN960-416L or P/N AN960-416 are permitted) on the engine side of the through-bolt. Install the new Spacer (P/N 22-2412-00-12).
- 10.9** Torque the bolt going into the Spacer from the engine side to 11.3-14.0 Nm (100 – 125 in lbs).
- 10.10** Put the new Mounting Bracket (P/N 22-2412-14-00) loosely in place on the engine.
- 10.11** At the lower pivot point of the mounting bracket, install the Spacer (P/N 630979-9) on the through-bolt between the bracket and the engine. Lubricate the through-bolt with clean 50-weight oil. Install the nut and plain washer at the lower pivot point. Tighten, but do not torque the nut at this time because the mounting bracket will have to be adjusted.
- 10.12** At the upper pivot point of the mounting bracket, install the Spacer (P/N 630979-9) on the through-bolt between the bracket and the engine. Lubricate the through-bolt with clean 50-weight oil. Install the nut and plain washer at the upper pivot point. Tighten, but do not torque the nut at this time because the mounting bracket will have to be adjusted.
- 10.13** At the top forward side of the mounting bracket, going into the Spacer (P/N 22-2412-00-12), install the bolt, the plain washer and a new lock washer. Apply Loctite 222 to the threads of the AN4 bolt. Tighten, but do not torque the nut at this time.
- 10.14** Install the new Adjuster Link (P/N 22-2412-00-13) hand tight with the upper mounting hardware.
- 10.15** Trim the Apron Baffle as required to provide 1/8" nominal clearance around the new Stabilizing Bracket. Lightly sand the trimmed edges of the apron to remove roughness.
- 10.16** Install the new Stabilizing Bracket (P/N 22-2412-00-11). Install new lock washers. Lubricate the cam cover studs with 50 weight engine oil. Torque the nuts to 10.2-12.5 Nm (90-110 in lbs).

# SERVICE BULLETIN



**Service Bulletin No.: DAC1-24-04 Rev 3**

**Date Issued:** July 18, 2008

**Title:** Generator Attachment Bracket

**Page:** 3 of 6

- 10.17** Put the Generator in place for a trial fit. Make sure that the generator pulley and the prop extension pulley can be aligned. Adjust the mounting bracket as necessary. The misalignment between the generator pulley and the prop extension pulley is not to exceed  $\pm 0.8$  mm (0.031 in). Refer to Figure 3.  
Remove the Generator from the trial fit position.
- 10.18** At the top forward side of the mounting bracket, torque the bolt going into the spacer to 10.2-12.4 Nm (90-110 in lbs). Witness mark the bolt.
- 10.19** At the lower pivot point of the bracket, torque the through-bolt nut on the bracket side to 49.7-52.0 Nm (36.6 - 38.3 ft lbs). Witness mark the nut.
- 10.20** At the upper pivot point of the bracket, torque the through-bolt nut on the bracket side to 49.7-52.0 Nm (36.6 - 38.3 ft lbs). Witness mark the nut.
- 10.21** Install the Generator (Refer to the MM, Chapter 24-30-00).  
NOTE: A new Pivot Bolt (P/N 22-2412-00-01) and a new Lock Washer (P/N DIN128AM10) will be required at the stabilizing bracket for the installation of the Generator.
- 10.22** Make a log book entry that this Service Bulletin has been incorporated.

## 11. Weight and Balance:

The weight and balance is not affected by this Service Bulletin.

## 12. Availability:

Contact Diamond Aircraft.

*To obtain satisfactory results, procedures specified in this service bulletin must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft Industries Inc. 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 Industries, Inc., at the address below.*

Diamond Aircraft Industries Inc. 1560 Crumlin Sideroad, London, Ontario, Canada N5V 1S2  
Phone: (519) 457-4041 Fax: (519) 457-4060

COPYRIGHT 1999

# SERVICE BULLETIN

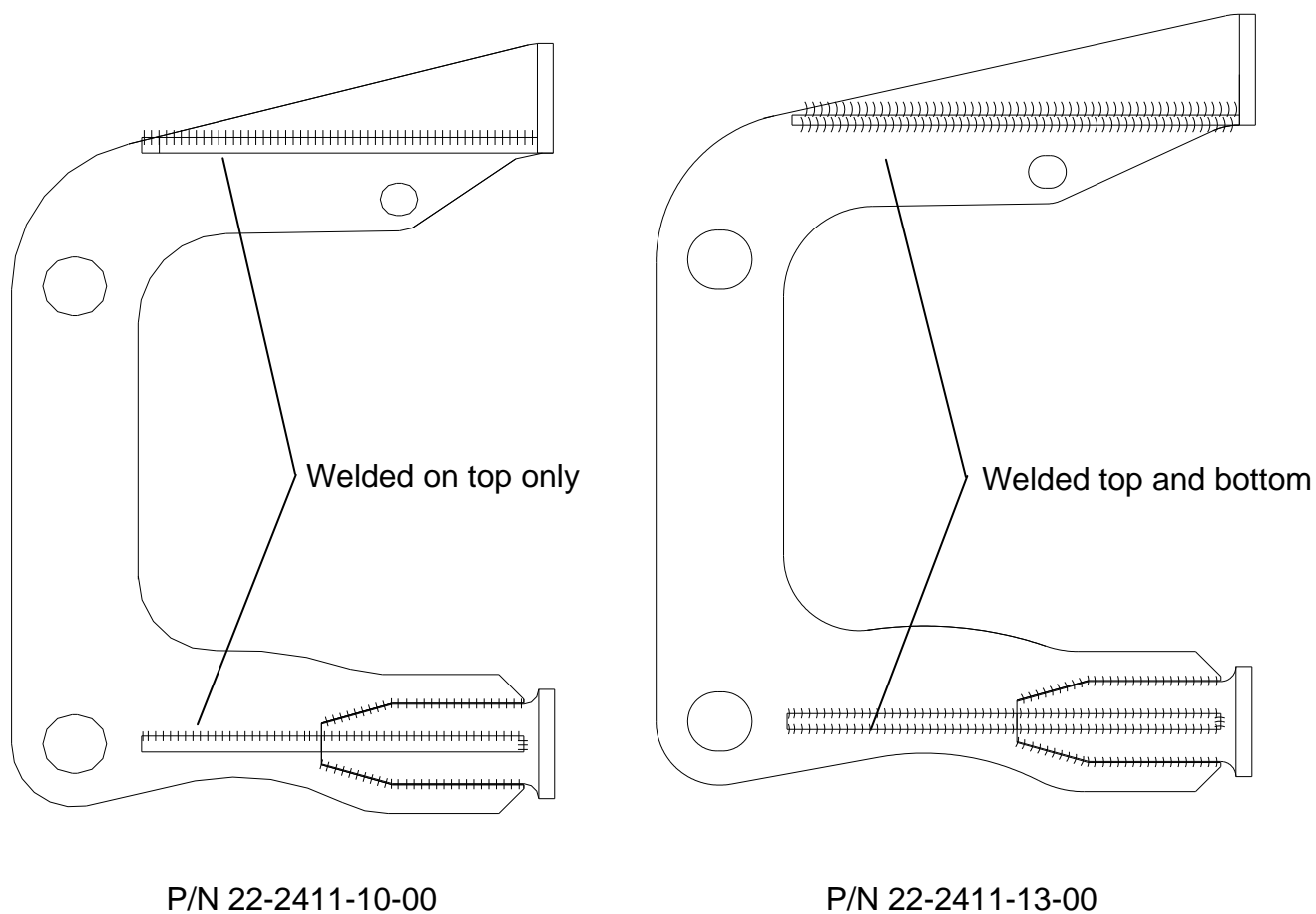


Service Bulletin No.: DAC1-24-04 Rev 3

Date Issued: July 18, 2008

Title: Generator Attachment Bracket

Page: 4 of 6



**Figure 1 - Mounting Bracket - Looking Inboard**

# SERVICE BULLETIN



Service Bulletin No.: DAC1-24-04 Rev 3

Date Issued: July 18, 2008

Title: Generator Attachment Bracket

Page: 5 of 6

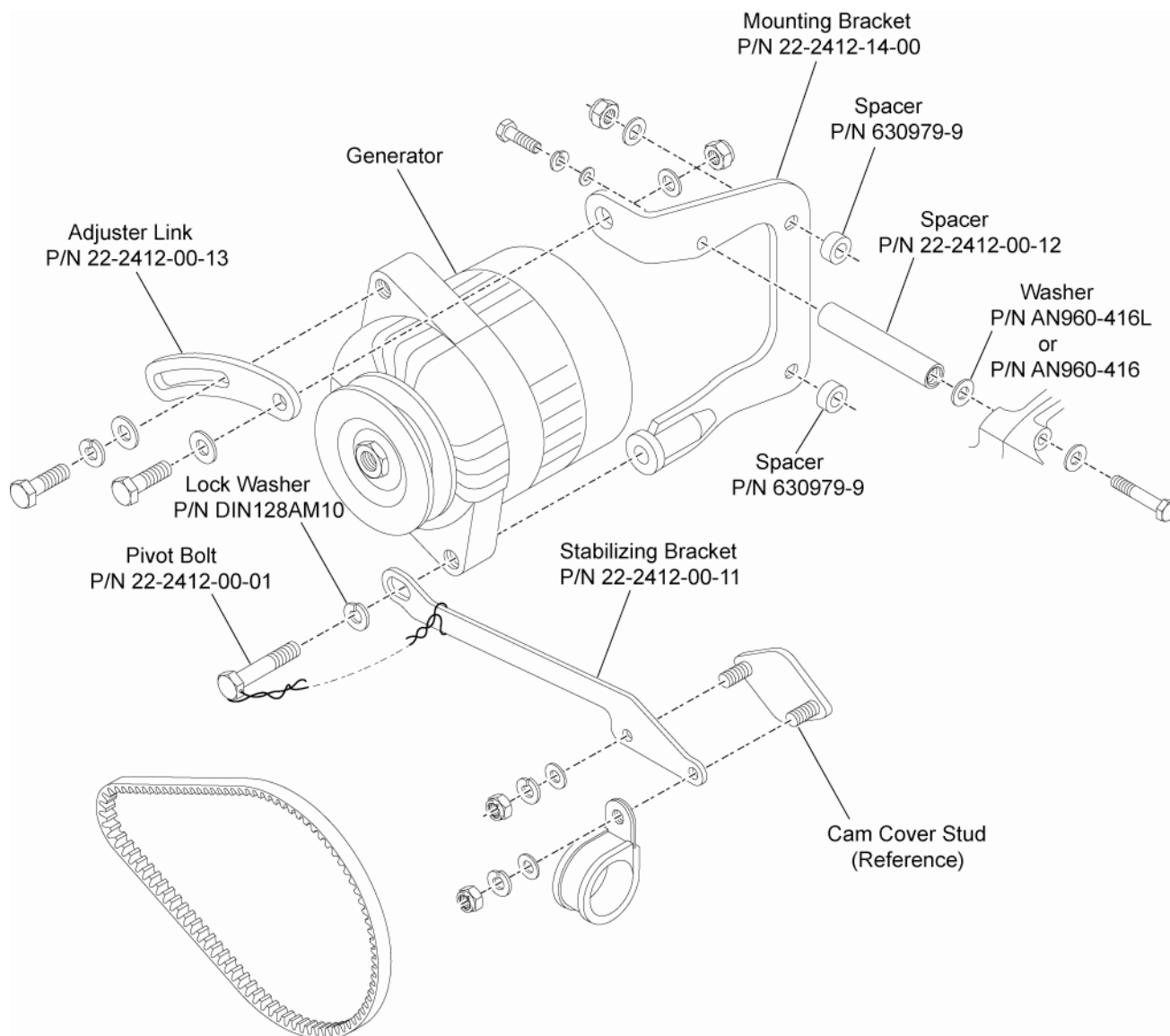


Figure 2 - Replacement of the Generator Mounting Bracket

# SERVICE BULLETIN



Service Bulletin No.: DAC1-24-04 Rev 3

Date Issued: July 18, 2008

Title: Generator Attachment Bracket

Page: 6 of 6

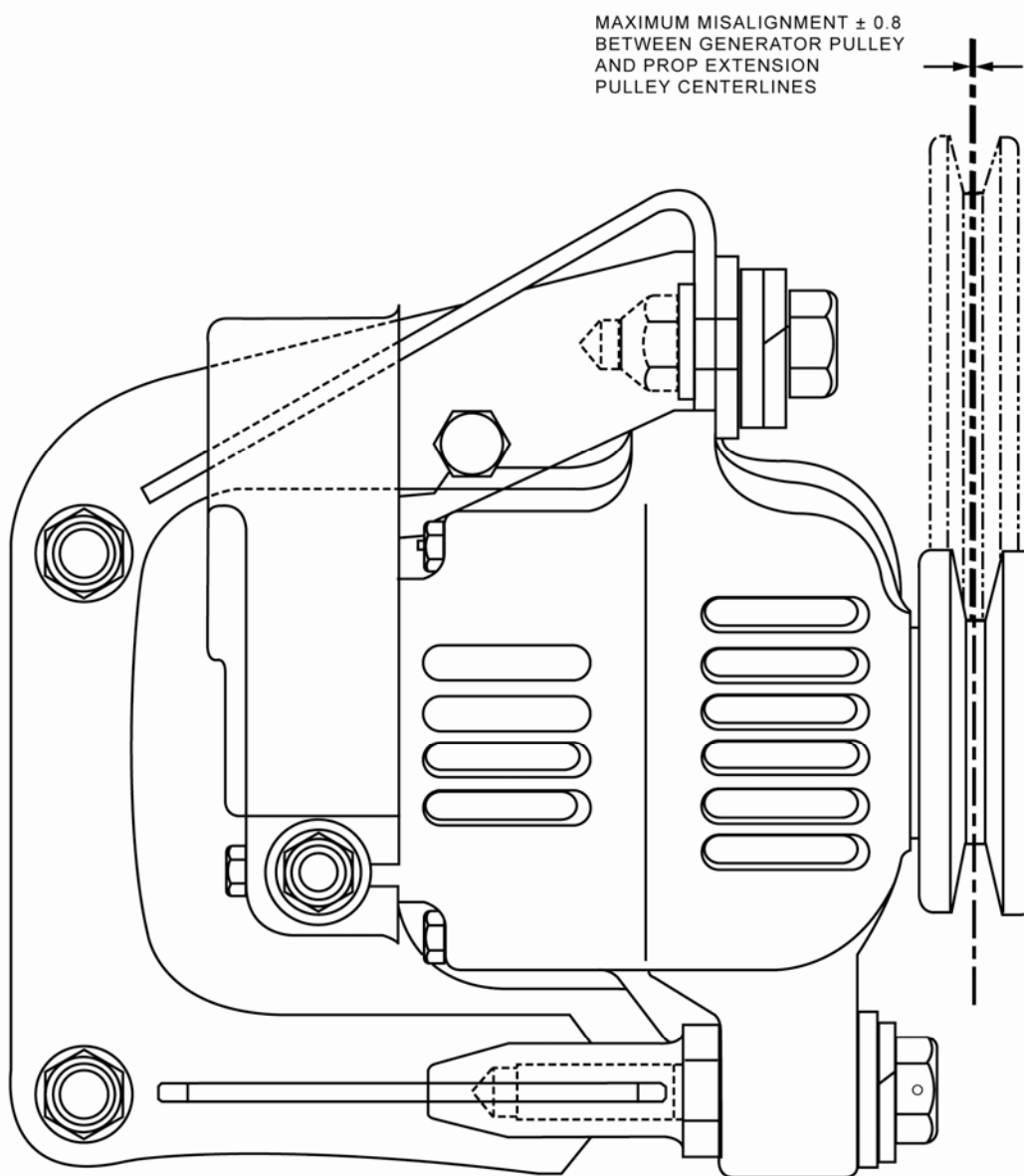


Figure 3 – Generator Alignment