



A Mahindra Aerospace Company

PO Box 881, Morwell, Victoria 3840, Australia

Ph + 61 (0) 3 5172 1200

Fax + 61 (0) 3 5172 1201

www.gippsaero.com

**SB-GA200-2011-06**

**Issue 2**

**OPTIONAL**

## Service Bulletin

### **Subject:**

Wing Spar Life Extension

### **Applicability:**

All GA200C aircraft, serial numbers GA200C-9723 and subsequent

### **Amendments:**

Included information to trim the leading edge and install it overlapping the long strap

### **Background:**

This service bulletin details the modifications required to the GA200C Wing Front Spar Assembly, P/N GA200-571123-1 (LH) and GA200-571123-2 (RH), to increase the fatigue life from 7,300 hours to 14,500 hours

### **Compliance:**

For applicable aircraft, this optional Service Bulletin may be incorporated at the owner's discretion.

Modifications shall not be carried out prior to the wing spar life reaching 5,000 hours

### **Weight and Balance:**

Negligible effect on weight and balance

### **Approval:**

This modification has been approved pursuant to Regulation 21.095 of CASR(1998)

## Parts:

Parts required for 1 (one) aircraft kit. Kit part number SB-GA200-2011-06-1

Item	Part Number	Description	Qty
1	GA200-571002-7	Packer Fwd Face	2
2	GA200-571002-31	Lug Front Spar Attach	4
3	GA200-571002-33	Lug Front Spar Attach	4
4	GA200-571002-35	Lug Front Spar Attach	4
5	GA200-571102-55	Doubler Fwd Face	1
6	GA200-571102-56	Doubler Fwd Face	1
7	GA200-571002-57	Doubler Aft Face	2
8	GA200-571002-71	Root Strap (Long)	2
9	GA200-571002-73	Root Strap (Short)	2
10	AN4-11A	Bolt	8
11	AN4-13A	Bolt	4
12	AN5-15A	Bolt	2
13	AN6-15A	Bolt	2
14	AN960-416	Washer	24
15	AN960-516	Washer	4
16	AN960-616	Washer	4
17	MS21042-4	Nut	12
18	MS21042-5	Nut	2
19	MS21042-6	Nut	2

Additional Items Required from Local Stocks

20	MS20470AD4	Rivets (length as required)	AR
21	MS20470AD5	Rivets (length as required)	AR

## Parts Availability:

New parts can be obtained directly from GippsAero.

Tel.: +61 (0) 3 5172 1200

Fax: +61 (0) 3 5172 1201

Email: [spares@gippsaero.com](mailto:spares@gippsaero.com)

## Labour:

45 hours should be allocated for the incorporation of this Service Bulletin.

## Warranty:

Not applicable.

## Instructions:

1. The instructions below are applicable to both left-hand and right-hand wing installations (P/N GA200-570001-5 and GA200-570001-6 respectively);
2. Remove the wing assembly in accordance with Section 57-10-10 of the GA200C Service Manual;
3. Remove the spar cover secured by 3 (three) pop rivets through the upper skin only;
4. Remove the inboard leading edge section from the spar and skins to gain access to the forward face of the spar assembly (retain for re-installation after modification);
5. Remove and discard the following components from the root fitting assembly. Refer to Figure 1 and Figure 2 for depiction of these components. Discard all attaching hardware (i.e. bolts, washers and nuts);
  - P/N GA200-571002-7, Packer Fwd Face
  - P/N GA200-571002-31, Lug Front Spar Attach (two places)
  - P/N GA200-571002-33, Lug Front Spar Attach (two places)
  - P/N GA200-571002-35, Lug Front Spar Attach (two places)
  - P/N GA200-571102-55 / -56, Doubler Fwd Face
  - P/N GA200-571002-57, Doubler Aft Face
6. Conduct an Eddy Current inspection as per Aviation NDT Services - Test Technique No. QP.11.02 and QP.11.03 on the following remaining components of the lower spar cap between W.S. 0.00" and 21.00" (inboard fuel tank rib). Refer to Figure 3 and Figure 4 for depiction of these components. Particular attention should be drawn to the possibility of cracks emanating from fastener holes, and from part edges;
  - P/N GA200-571002, Front Spar Inboard Flange
  - P/N GA200-571002-5, Spar Cap
  - P/N GA200-571002-13, Front Spar Strap

**NOTE:**

*If cracks or other damage are found, contact GippsAero for further advice.*

**NOTE:**

*New spars are supplied with 1/64" undersize holes and require reaming to full size bolt before installation.*

7. Install new (replacement) components (Items 1 through 7 and Items 10 through 21 listed under the 'Parts' section of this service bulletin) as per the otherwise original installation. Refer to Figure 5 for further detail. For bolt torque values, refer to Section 20-10-00 of the GA200C Service Manual;

**NOTE:**

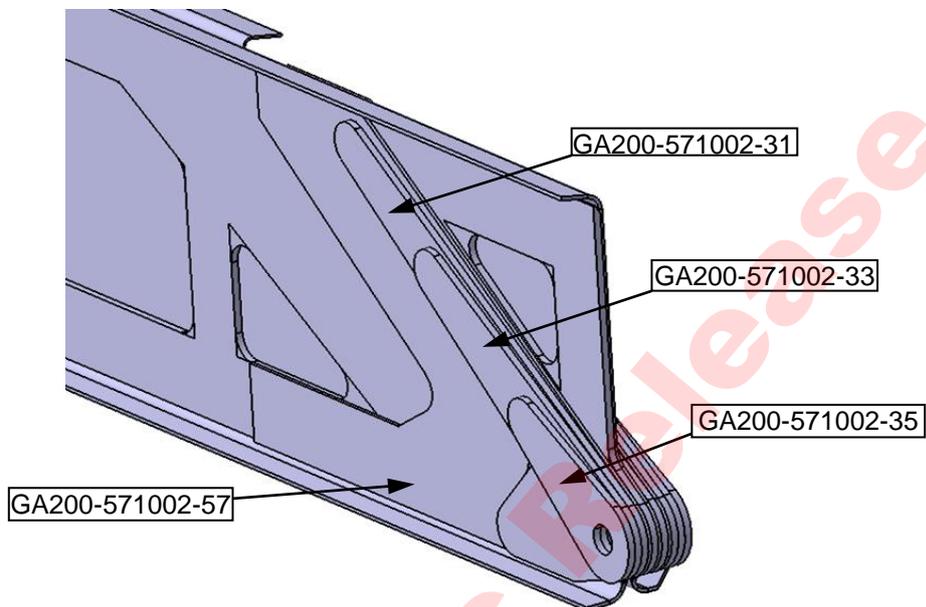
*The two washers required on each bolt of the root attach fitting are to be installed under the nut*

**NOTE:**

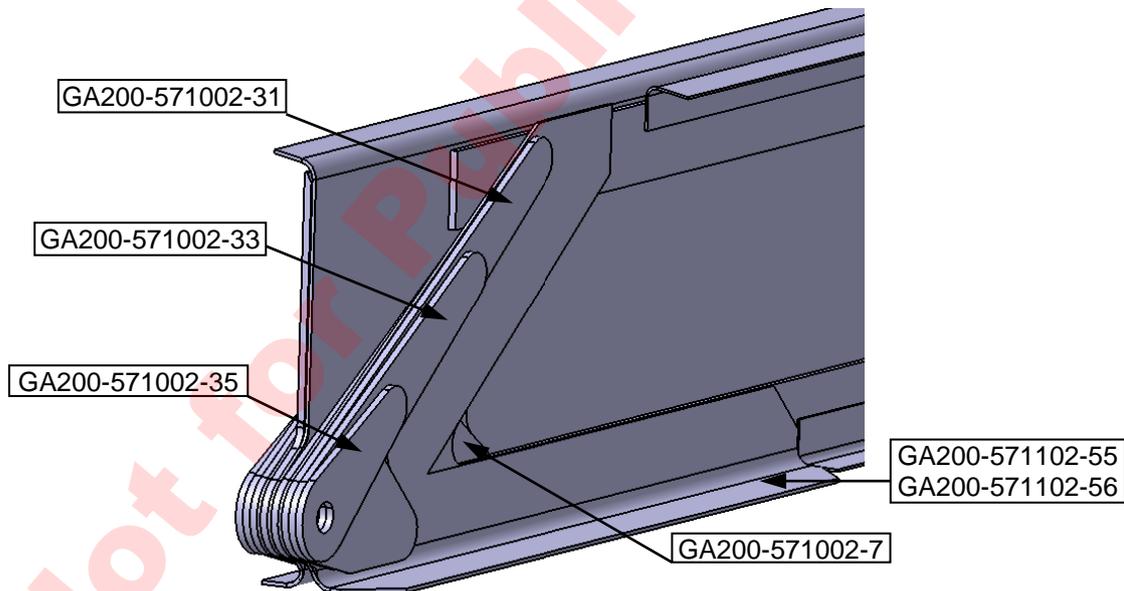
*Maximum permissible width of root fitting after assembly is 1.226"*

8. Position the new lower root straps (Items 8 and 9) as shown in Figure 5. The straps are aligned with the forward edge of the doubler fwd face (Item 5 and 6) and installed over the lower wing skins;
9. If required, trim outboard end of straps (maximum 0.50") to provide clearance from existing rivet locations. Ensure a minimum 2d edge distance for all new and existing rivet holes;
10. Match drill holes (#30, .1285" dia.) from skins and spar into the straps. Figure 5 shows new rivet locations. Thoroughly deburr all holes;
11. Rivet the new straps to the wing assembly using MS20470AD4 rivets. Refer to Section 51-40-00 of the GA200C Service Manual for information regarding riveting. Seal the rivets and repaired area in the fuel tank the in accordance with Section 28-10-10 of GA200C Service Manual;

12. Position and clamp the leading edge skin onto the wing assembly;
13. Trim the area that overlaps the short strap (item 9) and drill the holes (#30, .1285" dia.) from the leading edge into the strap. Figure 5 shows new rivet locations. Thoroughly deburr all holes;
14. Re-install the removed parts as per the otherwise original configuration;
15. Install the wing assembly to the aircraft in accordance with Section 57-10-10 of the GA200C Service Manual.



**Figure 1 - Fitting Details – Afterward Side of Spar Assembly**



**Figure 2 - Fitting Details – Forward Side of Spar Assembly**

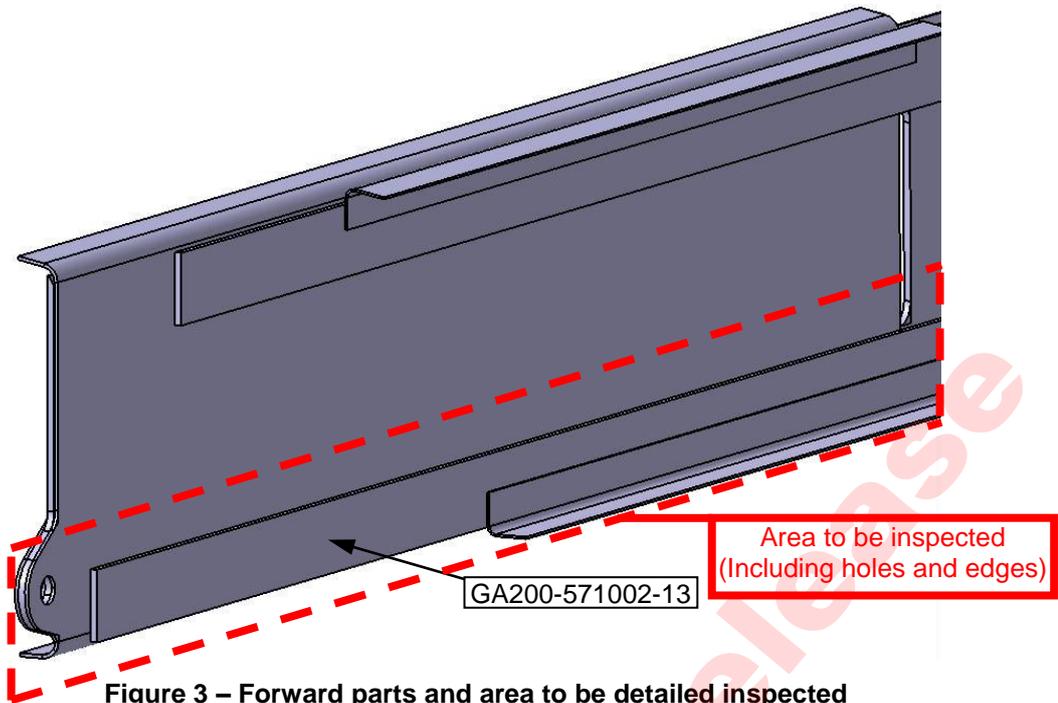


Figure 3 – Forward parts and area to be detailed inspected

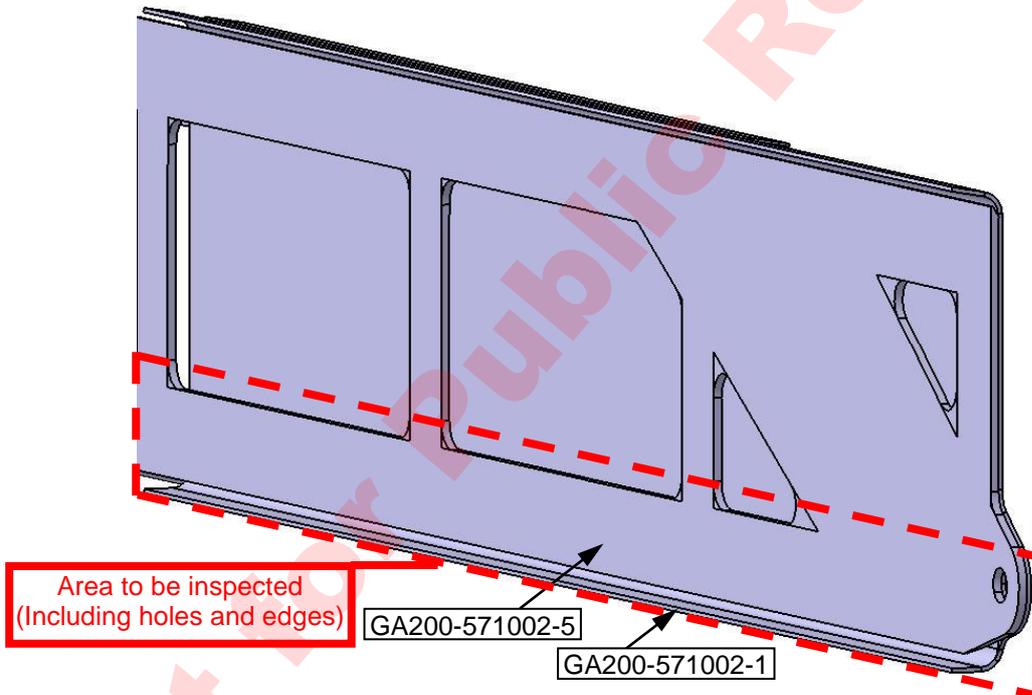
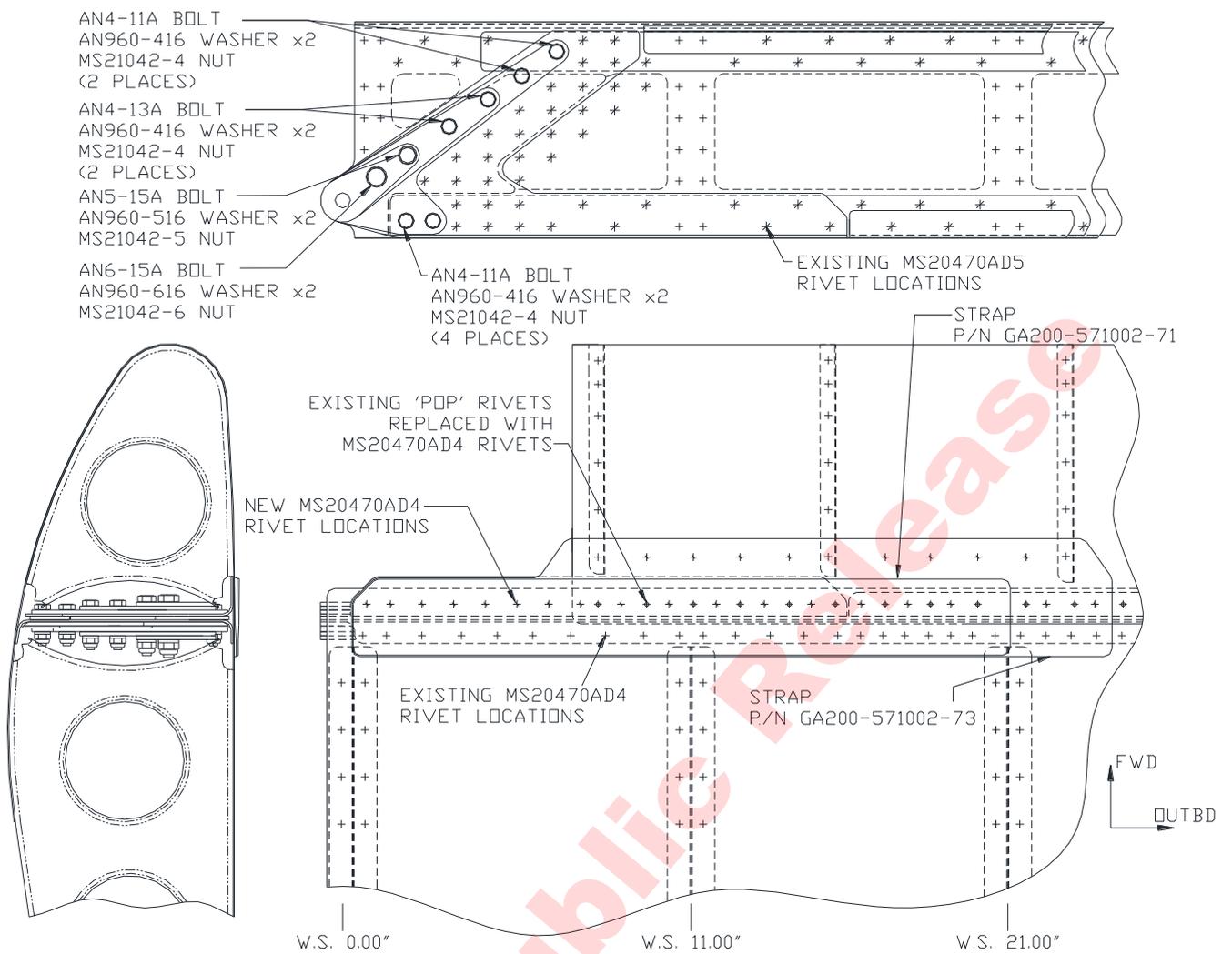


Figure 4 – Afterward parts and area to be detailed inspected



**Figure 5 – LH Wing (RH Opposite), View Looking Up**

**Documentation:**

Update the aircraft log book to reflect incorporation of this Service Bulletin.

Record wing serial numbers from plate on root rib #1.

**Continuing Airworthiness:**

Continue inspections of the wing skin, spar and internal structure in accordance with Chapter 5 of the GA200C Service Manual B01-00-31.

**Compliance Notice:**

Complete the Document Compliance Notice and return to GippsAero by mail, fax or email.

Not for Public Release

## DOCUMENT COMPLIANCE NOTICE



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Document:

**SB-GA200-2011-06**

**Issue 2**

Aircraft Serial Number: GA8- \_\_\_\_\_

Wing Serial Number: PT: \_\_\_\_\_

STBD: \_\_\_\_\_

Service Bulletin SB-GA200-2011-06 Issue 2 has been incorporated in the above aircraft.

Date: \_\_\_\_\_

\_\_\_\_\_  
Signed

Print Name: \_\_\_\_\_

Please post or fax this compliance notice to:

GippsAero  
Attn: Technical Services  
P.O. Box 881  
Morwell Victoria 3840  
Australia  
Fax: +61 3 5172 1201