

# SERVICE BULLETIN

**NUMBER:** SB 500-28-002, REV B  
**MODEL:** ECLIPSE EA500  
**SUBJECT:** ENGINE START PUMP BONDING AND GROUNDING

## 1. PLANNING INFORMATION

### A. Effectivity

Aircraft Serial Numbers 000039 - 000121, 000123 and 000124.

### B. Reason

To verify lightning strike protection for the Engine Start Pumps.

Revision B corrects the panels to be removed to access work area, changes the effectivity and corrects the part numbers and call outs of the materials list .

### C. Description

This Service Bulletin inspects the Aircraft for additional grounding for lightning strike protection. If grounding straps are not present, install grounding strap from Engine Start Pump in the Fuel Systems to the wing.

### D. Relevant Publications

Aircraft Maintenance Manual (AMM) P/N 06-11775, latest revision.

### E. Compliance

Eclipse Aviation Corporation considers this to be an mandatory inspection and/or modification that must be accomplished within 10 hours or 30 days which ever comes first.

Compliance with revision A of this Service Bulletin constitutes compliance with revision B.

### F. Approval

This Service Bulletin is based on engineering data that is FAA-approved, and the modification herein complies with the applicable regulations.

### G. Labor Requirements

The following information is for planning purposes only.

(1) Estimated labor hours to perform:

Suggested number of personnel: 2

Left and right Wing-to-Body Fairing removal: 1.0 Hour

Inspection of left and right fuel pumps for bonding strap: 0.1 Hours

Left and right Wing-to-Body Fairing installation: 1.0 Hour

**Total labor hours: 2.1 Hours**

The above is an estimate based on properly equipped and experienced personnel complying with this Service Bulletin. Actual labor hours may vary depending on workforce experience, concurrent maintenance, discovery of other discrepancies, etc.

(2) Qualification of personnel:

- A person properly authorized under 14 CFR 43 to perform aircraft maintenance.

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**H. Weight and Balance Change**

None

**I. Electrical Load Data Change**

None

**J. Software Accomplishment Summary**

None

**K. References**

Aircraft Maintenance Manual (AMM) P/N 06-11775, latest revision.

**L. Publications Affected**

None

**2. MATERIAL INFORMATION**

**A. Materials**

Order Kit P/N SB500-28-002A below.

(1) **Kit SB500-28-002A**

Part Number	Description	Qty / Unit of Issue
M83413-8-A004BB	Connectors and assemblies, Electrical, Aircraft grounding: Type IV Jumper	2 EA.
MS21042L3	Nut, self locking reduced height	2 EA.
NAS1149G0316P	Washer Flat	2 EA.
NAS1149G0332P	Washer Flat	2 EA.
NAS6203-5	Bolt, Tension, Hex Head, Close tolerance	2 EA.
NAS6203-6	Bolt, Tension, Hex Head, Close tolerance	2 EA.

**3. ACCOMPLISHMENT INSTRUCTIONS**

**A. Procedure**

- (1) Make aircraft safe for maintenance. Refer to AMM-20-00-01-051-801- MAKE SAFE FOR MAINTENANCE.
- (2) Make aircraft safe for fuel system maintenance. Refer to AMM – 28-00-00-051-801 – FUEL SYSTEM - MAKE SAFE FOR MAINTENANCE.
- (3) Remove the following panels: (Refer AMM-06-50-00-051-801-A –AIRCRAFT ACCESS PANELS or AMM -06-50-00-051-801-B – AIRCRAFT ACCESS PANELS for locations)
  - (a) 251 EL - Left Lower Wing-to-Body Fairing.
  - (b) 252 DR - Right Lower Wing-to-Body Fairing.
- (4) Inspect to make sure that M83413-8-A004BB bonding strap is installed on both left and right sides.
  - (a) If bonding straps are installed, proceed to step 7. If bonding straps are not installed proceed to steps 5 and 6.

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- (5) Install bonding strap on the left Engine Start Pump as follows:

Refer to [Figure 1](#)

- (a) Remove and discard bolt ([5, Figure 1, Sheet 2](#)) and washer, ([3, Figure 1, Sheet 2](#)). Retain nut for reuse.
- (b) Remove and discard bolt ([6, Figure 1, Sheet 2](#)), washer ([4, Figure 1, Sheet 2](#)) and nut ([2, Figure 1, Sheet 2](#)).
- (c) Position bonding strap ([1, Figure 1, Sheet 2](#)) on Engine Start Pump and install bolt, NAS6203-6 ([6, Figure 1, Sheet 2](#)), washer, NAS1149G0332P ([4, Figure 1, Sheet 2](#)) and nut, MS1042L3 ([2, Figure 1, Sheet 2](#)). Torque nut to 30-40 lbf.in (3,4-4,5 m.N).
- (d) Install bolt, NAS6203-5 ([5, Figure 1, Sheet 2](#)), washer, NAS1149G0316P ([3, Figure 1, Sheet 2](#)) and retained nut from step a. Torque nut to 30-40 lbf.in (3,4-4,5 m.N).

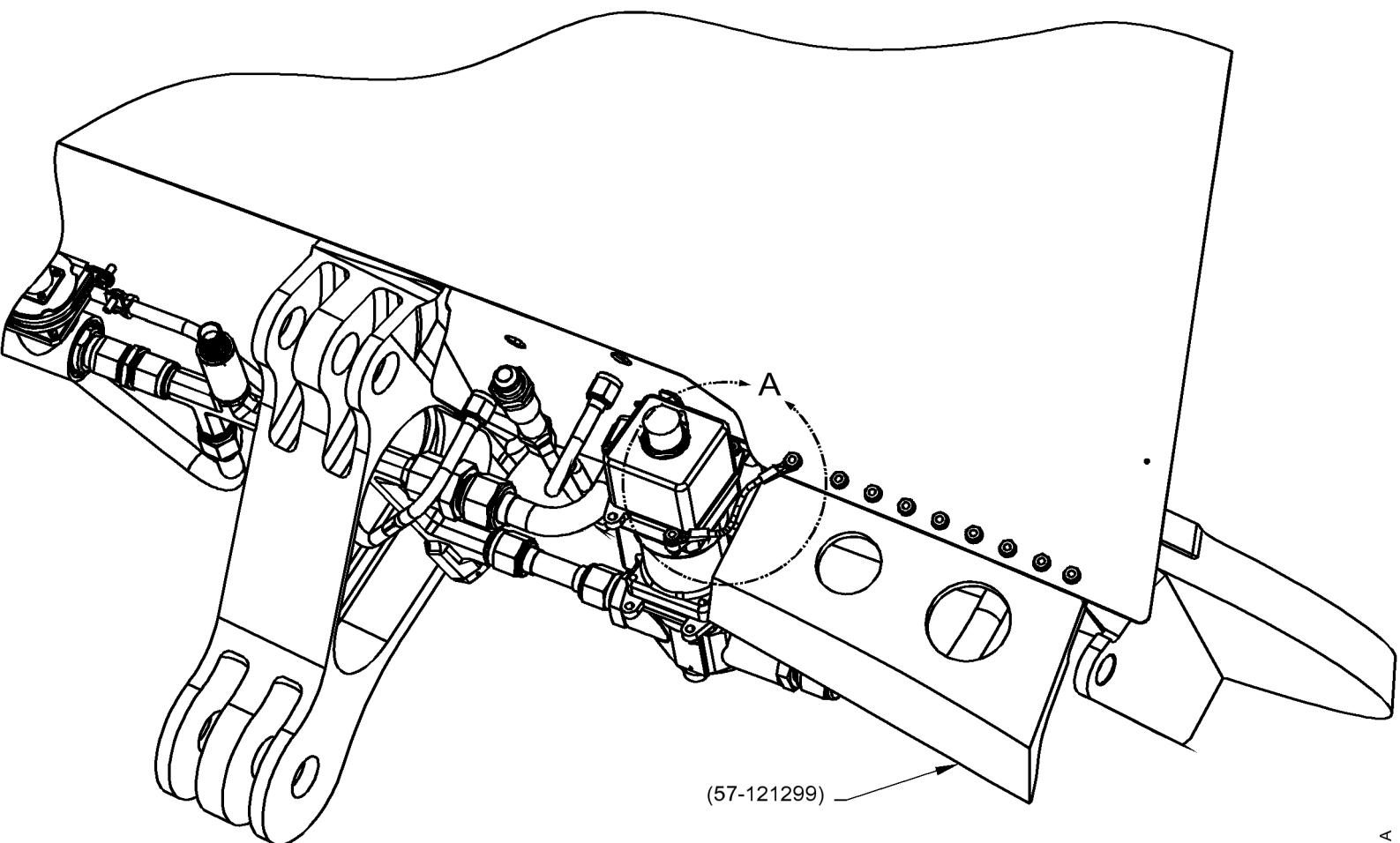


ECLIPSE  
AVIATION

**RECOMMENDED**

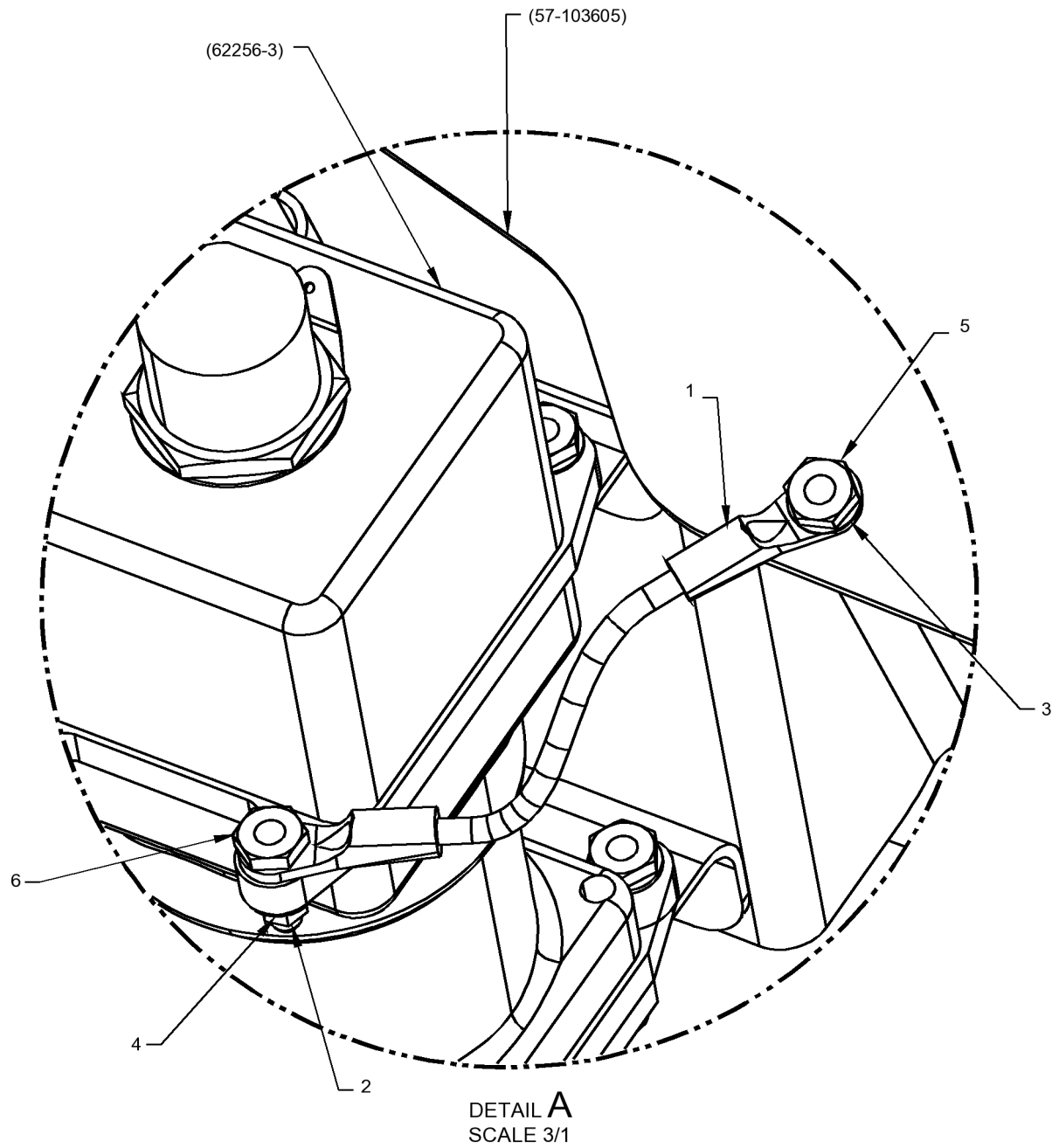
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Left Wing – Engine Start Pump  
Figure 1 (Sheet 1 of 2)

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**Left Engine Start Pump  
Figure 1 (Sheet 2 of 2)**

- (e) Using a Extech Milli-Ohmmeter, electrically bond the Engine Start Pump to the surrounding structure. Refer to AMM - 20-03-00-051-801 - ELECTRICAL BONDING - MAINTENANCE PRACTICES. Resistance must be 0.01 ohms or less.

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(6) Install bonding strap on the right Engine Start Pump as follows:

Refer to [Figure 1](#)

- (a) Remove and discard bolt ([5, Figure 1, Sheet 2](#)) and washer, ([3, Figure 1, Sheet 2](#)). Retain nut for reuse.
- (b) Remove and discard bolt ([6, Figure 1, Sheet 2](#)), washer ([4, Figure 1, Sheet 2](#)) and nut ([2, Figure 1, Sheet 2](#)).
- (c) Position bonding strap ([1, Figure 1, Sheet 2](#)) on Engine Start Pump and install bolt, NAS6203-6 ([6, Figure 1, Sheet 2](#)), washer, NAS1149G0332P ([4, Figure 1, Sheet 2](#)) and nut, MS1042L3 ([2, Figure 1, Sheet 2](#)). Torque nut to 30-40 lbf.in (3,4-4,5 m.N).
- (d) Install bolt, NAS6203-5 ([5, Figure 1, Sheet 2](#)) and washer, NAS1149G0316P ([3, Figure 1, Sheet 2](#)) and retained nut from step a. Torque nut to 30-40 lbf.in (3,4-4,5 m.N).
- (e) Using a Extech Milli-Ohmmeter, electrically bond the Engine Start Pump to the surrounding structure. Refer to AMM - 20-03-00-051-801 - ELECTRICAL BONDING - MAINTENANCE PRACTICES. Resistance must be 0.01 ohms or less.

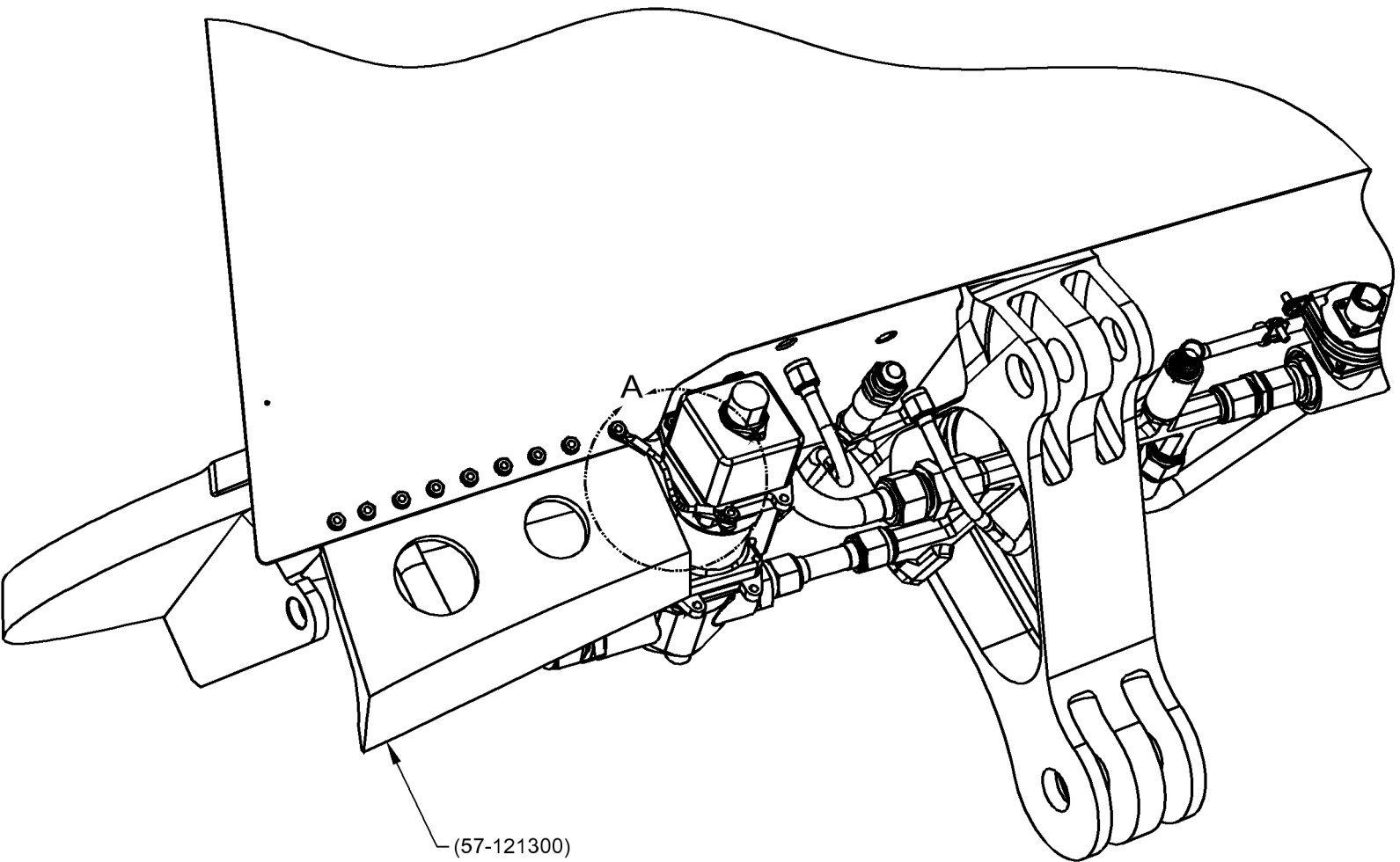


ECLIPSE  
AVIATION

**RECOMMENDED**

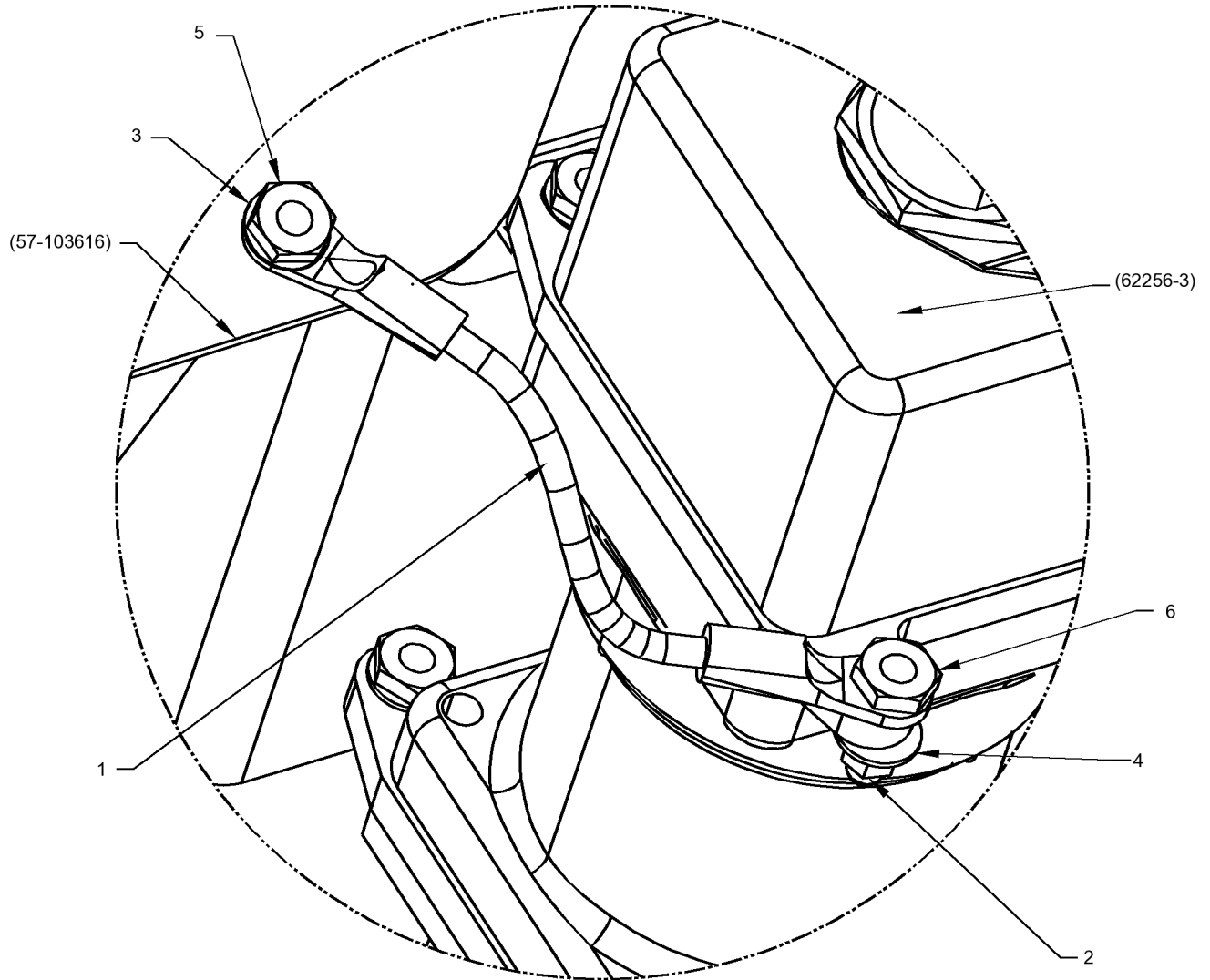
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Right Wing – Engine Start Pump  
Figure 2 (Sheet 1 of 2)

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DETAIL **A**

SCALE 3/1

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**Engine Start Pump  
Figure 2 (Sheet 2 of 2)**

- (7) Install the following panels: (Refer AMM-06-50-00-051-801-A –AIRCRAFT ACCESS PANELS or AMM -06-50-00-051-801-B – AIRCRAFT ACCESS PANELS for locations)
  - (a) 251 EL - Left Lower Wing-to-Body Fairing.
  - (b) 252 DR - Right Lower Wing-to-Body Fairing.
- (8) Remove all tools, equipment and unwanted material from the work area.



**ALERT**

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(9) If all other maintenance is complete, return the aircraft to service. Refer to AMM-20-00-02-921-001.

### **B. Limitations and Procedures**

None

### **C. Cost**

Parts and Labor will be supplied by Eclipse Aviation Corporation at no charge to the aircraft owner. This Service Bulletin must be accomplished at an Eclipse Aviation Service Center.

### **4. RECORD OF COMPLIANCE**

Upon completion of this Service Bulletin, make an appropriate maintenance-record entry specifying the Service Bulletin number.

### **5. 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 4100 Aerospace Parkway Albuquerque, NM 87121
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