



## Power Systems

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# Service Information Letter

The technical content of this letter is FAA Approved

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## RECOMMENDED ALTERNATOR BRUSH HOLDER REPLACEMENT FOR MODEL ALE, ALH, ALT, ALU, ALX, ALY, & ALZ SERIES

### INTRODUCTION:

Since implementation of the current one piece brush holder assembly for the above series alternators, maintenance personnel have complained of difficulty in installing or removing the assembly. Kelly Aerospace has designed a new two piece brush holder which is superior in construction and designed to ease both installation and removal during routine maintenance. These new brush holders are offered as a product improvement and are considered an alternate but will supercede the current brush holder assembly as field stock is depleted.

### COMPLIANCE:

At the discretion of the owner/operator during any maintenance event or normal brush change.

### EFFECTIVITY:

Any aircraft utilizing ALE, ALH, ALT, ALU, ALX, ALY and ALZ series alternators.

### PROCEDURE:

1. Determine the appropriate part number of the brush holder assembly for your particular alternator. There are two styles of brush holder assembly, a single field terminal and a dual field terminal. The current single field terminal brush holder assembly is P/N ALE-2045BS which can easily identified by the copper strap coming from one terminal to ground. The new alternate assembly is P/N ALE-3045BS and has only one terminal stud. The current dual field terminal brush holder assembly is P/N ALU-2045BS and the new alternate assembly is P/N ALU-3045BS, both have two terminal studs. Consult the Kelly Aerospace OE-2A Service Manual to ascertain the correct application. See figure 1 for current style and figure 2 for new style brush holders.
2. Remove the two screws that hold the brush holder assembly in the slip ring end head. Remove the brush holder assembly and discard. Clean area of carbon dust and debris.

*Note:*

*The current OE-2A Service Manual requires that the black injection molded brush holder assembly be installed at any change. This SIL provides approval to change to the new two piece brush holder assembly.*

3. Install the proper new two piece brush holder assembly by lifting the top terminal end and inserting the lower brush holder into the slip ring end. Install the two retaining screws and remove the wire retaining the brushes. Spin the rotor and check for interference between the brush holder and rotor. Measure the resistance across the field terminals with an ohmmeter. Consult the Kelly Aerospace OE-2A Service Manual to determine the proper ohm value for you specific alternator.

*Note:*

*The current OE-2A Service Manual may obtained directly from Kelly Aerospace by contacting Customer Service at 1-877-359-5355. Visa, Master Card, and wire transfer are accepted.*

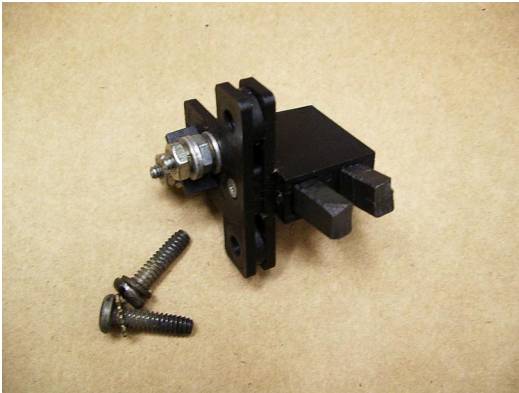


Figure 1 (current style)  
(Dual field terminal shown above)



Figure 2 (new two piece style)

Old P/N ALU-2045BS dual field  
Old P/N ALE-2045BS single field

New P/N ALU-3045BS dual field  
New P/N ALE-3045BS single field

4. Make an appropriate logbook entry indicating proper installation of the new brush holder assembly. Reference compliance with this SIL to approve new parts installation.

## **MATERIALS REQUIRED:**

One each, brush holder assembly P/N ALE-3045BS or one each P/N ALU-3045BS as required. All service parts must be obtained through the Authorized Kelly Aerospace distributor of your choice. Please visit [www.kellyaerospace.com](http://www.kellyaerospace.com) for a complete list and location of our authorized distributors.

## **PARTS AVAILABILITY:**

For planning purposes only, this product improvement will be available approximately 60 days from the date of this publication. Advanced orders may be placed after 30 days.

*If you have any questions concerning these instructions please contact Kelly Aerospace Power Systems, Technical Service at 888-461-6077.*