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Commercial Aviation Services

# **SERVICE LETTER**

FLEET SUPPORT ENGINEERING • BOEING COMMERCIAL AIRPLANES • P.O. BOX 3707 • SEATTLE • WASHINGTON 98124-2207

**737-SL-71-062** ATA: 7100C80 12 October 2009

# **SUBJECT:** ENGINE-MOUNTED FAN COWL RADIAL SUPPORT BRACKET IMPROVEMENT

**MODEL:** 737-600 to -900ER and BBJ

- APPLICABILITY: All 737-600 to -900ER and BBJ Airplanes from Line Position 184 through Line Position 2599 and all new or overhauled CFM56-7B engines with new or partial Boeing QEC kits delivered from August 2001 through March 2009.
- REFERENCES: a) 737-600 through -900ER and BBJ Aircraft Illustrated Parts Catalog (AIPC) 71-40-51-01B Item 210, 225 and 71-00-51-14 Item 225, 240
  b) 737-600 through -900ER and BBJ Power Plant Buildup Manual
  - (PPBUM) 71-00-02 Figure 6-1 Item 350

## **SUMMARY:**

This service letter advises of the availability of an improved reference a) engine-mounted fan cowl radial support bracket, which was introduced to resolve in-service cracking events with a prior bracket design.

# **BACKGROUND:**

Commencing with entry into service of the 737NG-series airplanes in 1997 and as supplied in early Quick Engine Change (QEC) kits, Boeing delivered the reference a) P/N 332A2930-11 radial support bracket assembly. The purpose of this bracket is to guide the right-hand fan cowl into position prior to latching with the left-hand fan cowl. During a subsequent producibility review, the existing design was changed to a P/N 332A2930-83 bracket assembly, which was first delivered on 737NG airplanes from Line Position 184 and delivered in QEC kits from August 2001. Line Position 184 was delivered in February 1999.

Shortly after entry into service of the P/N 332A2930-83 bracket assembly, Boeing began receiving reports of cracking of one or both of the guide tangs, which in several instances resulted in separation of these tangs. An investigation concluded the cracking was due to insufficient strength in the guide tangs of the P/N 332A2930-83 bracket design, which was machined from multiple flat aluminum sheets in lieu of the single titanium casting used on the

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previous design.

To correct this condition, Boeing introduced the P/N 332A2930-90 bracket assembly. This latest bracket is identical to the original P/N 332A2930-11 bracket assembly but adds surface cleaning requirements, which requires a new part number designation. This bracket assembly was introduced concurrent with 737NG Line Position 2600 and delivered in follow-on QEC kits from early March 2009.

## **BOEING ACTION:**

Boeing introduced the P/N 332A2930-90 bracket concurrent with 737NG Line Position 2600 and as included in new QEC kits from March 2009.

## **SUGGESTED OPERATOR ACTION:**

Boeing recommends that at the next convenience maintenance opportunity, operators perform an inspection to determine which bracket part number is installed. If a P/N 332A2930-11 or P/N 332A2930-90 bracket is installed, no further action is required. If a P/N 332A2930-83 bracket assembly is found, Boeing recommends that replacement be scheduled within the earliest maintenance opportunity.

If replacement of this part is not currently feasible, operators should perform an inspection on the tangs for cracks. If cracks are found, it is acceptable to continue operation of the airplane for a maximum of 500 hours; provided an inspection is performed each time the right fan cowl panel is closed to ensure that the fan cowl pin is engaged in the mating bushing on the bracket.

Operators should also examine all QEC kits (either installed on spare engines or in inventory) and discard any discrepant P/N 332A2930-83 bracket assemblies.

Refer to the reference b) PPBUM for replacement information for the subject bracket.

# **ESTIMATED LABOR HOURS:**

The total estimated labor hours for the work performed in accordance with this service letter is 2.0 hours to inspect both engines for the defective P/N 332A2930-83 bracket assembly; and, an additional estimated 2.0 labor hours, if required, to replace each defective bracket. Access to the bracket requires opening the left and right fan cowl panels in accordance with AMM 71-11-02/201. Note that there are two brackets per airplane.

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#### WARRANTY INFORMATION:

Boeing warranty remedies are available for 737 airplanes and spare parts in warranty as of February 9, 2006.

For a one-time inspection for airplanes in warranty as of that date, send a claim to Boeing Warranty & Product Assurance Contracts. If the condition described in this service letter is found during the inspection for airplanes in warranty as of that date and additional labor hours and parts are required, send a claim to Boeing Warranty & Product Assurance Contracts.

#### **INTERCHANGEABILITY:**

The current P/N 332A2930-90 bracket assembly is one-way forward interchangeable with the earlier P/N 332A2930-83 bracket assembly, with the P/N 332A2930-11 bracket assembly optional to either the P/N 332A2930-83 or P/N 332A2930-90 bracket assemblies. However, installation of the P/N 332A2930-83 bracket assembly is no longer recommended. Boeing Spares has also reflected the replacement of the P/N 332A2930-83 with the P/N 332A2930-90 bracket assembly.

The reference b) Power Plant Buildup manual will be changed in the 5 October 2009 revision to show the P/N 32A2930-83 bracket assembly as deleted.

## **PARTS AVAILABILITY:**

Operators may procure the P/N 332A2930-90 bracket assembly from Boeing Spares.

PTK:cmm