Beechcraft

BY TEXTRON AVIATION

Multi-Engine Turboprop Communiqué

Communiqué ME-TP-2016-08 Rev 1
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Revision 1 December 2021	ATA 33 - Emergency Exit Sign Bulb Replacement and Alternate Part Number - Provide an updated seal material

ATA-30 - Prop Heat Operational Check Procedure-Engines Not Running

BY-122, BY-124 and after; BZ-1 and after

King Air Communiqué 2015-07 was issued to remind owner/operators not to operate the propeller heat when the engines are not running. This action helps to prevent damage to the propeller blades and de-ice boot. The propeller manufacturer has also placed a 10-second limitation on operating the propeller heat with the engines not running. This limit creates an issue when performing a propeller heat test because the timer in the propeller de-ice system cycles the power to the left and right propeller every 90 seconds. This condition makes it impossible to assure that the propeller heat system is operating correctly while the airplane is in the hangar. The system can still be tested during ground runs with the engines running.
The following paragraph provides a procedure that tests the system without applying power to the boots.

Propeller De-ice Boot Continuity Check:

Check the resistance of each de-ice boot by disconnecting the boot and testing it individually. Continuity through the slip rings can be measured with the boots connected by disconnecting the brush block and measuring the resistance between the rings. Resistance will vary by how many boots are connected. Verify that there is good continuity. Resistance can also be measured between the two terminals on the brush block assembly with the wires disconnected. Remember that the resistance will vary.

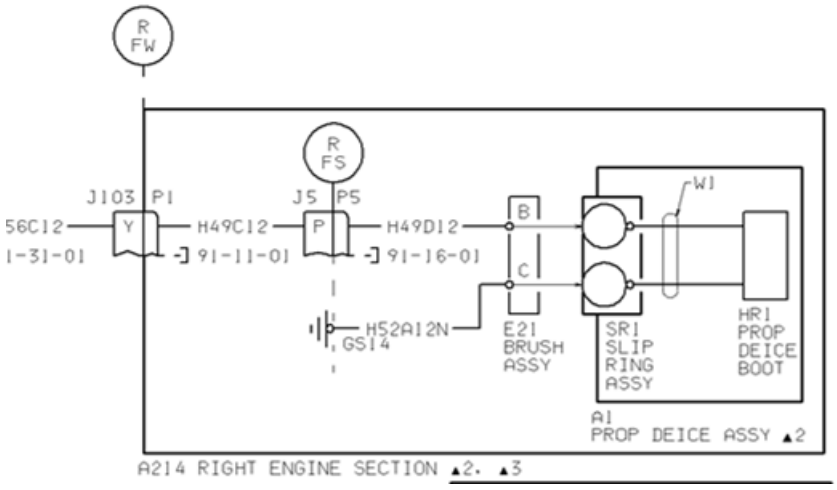
Refer to the following chart for the resistance values.

Temperature Range °F	Temperature Range °C	1 Boot	
		Min Ohms	Max Ohms
0 to 5	-17.8 to -15.0	4.51	4.71
5 to 10	-15.0 to -12.2	4.52	4.72
10 to 15	-12.2 to -9.4	4.54	4.74
15 to 20	-9.4 to -6.7	4.55	4.75
20 to 25	-6.7 to -3.9	4.57	4.77
25 to 30	-3.9 to -1.1	4.58	4.78
30 to 35	-1.1 to 1.7	4.60	4.80
35 to 40	1.7 to 4.4	4.61	4.81
40 to 45	4.4 to 7.2	4.63	4.83
45 to 50	7.2 to 10.0	4.64	4.84
50 to 55	10.0 to 12.8	4.66	4.86
55 to 60	12.8 to 15.6	4.67	4.87
60 to 65	15.6 to 18.3	4.69	4.89
65 to 70	18.3 to 21.1	4.70	4.90
70 to 75	21.1 to 23.9	4.72	4.92
75 to 80	23.9 to 26.7	4.73	4.93
80 to 85	26.7 to 29.4	4.75	4.95
85 to 90	29.4 to 32.2	4.76	4.96
90 to 95	32.2 to 35.0	4.78	4.98
95 to 100	35.0 to 37.8	4.79	4.99

NOTE: Ambient air temperature may not represent the de-ice boot temperature. Solar or infrared heating will affect the temperature of the de-ice boot.

De-ice timer check:

Connect a 28 VDC lamp to terminal block E21 on the left and right engine. Turn power ON and place the De-Ice switch to AUTO position. The light should illuminate and alternate between the left and right engine approximately every 90 seconds.



ATA 33 – Emergency Exit Sign Bulb Replacement and Alternate Part Number B300 Series

The FWD and AFT Emergency Exit signs located in the headliner of the Model B300 Super King Air airplane come from the factory with an incandescent lamp, DS1. Textron Aviation has approved an LED replacement for this lamp with Part Number E10-WHP. When the lamp is replaced, either with the incandescent or LED Light, it is permissible to use torque seal or any item in 04-001 chapter 20-15-00 Recommended materials to help secure the lamp in the socket. Install the bulb and place a drop of material in one location across the socket to lamp intersection. Permissible to dispatch with no cure time required.

ATA-46 - XM Weather TAF Data on Pro Line 21 King Airs with XM Receiver Part Number 822-2031-002.

Beginning in early 2016, Rockwell Collins began receiving reports of intermittent reception of Terminal Area Forecast (TAF) data through the XM weather receiver installed in Pro Line 21 airplanes. This data includes products such as METARs and AIRMETs. Investigation determined that the National Weather Service had increased the data package size of these messages and the current configuration of the receiver was causing a software time out and reset before the complete data package was downloaded. Any owner/operators experiencing this issue may utilize Rockwell Collins Service Information Letter (SIL) 523-0824074 (attached) to provide an updated receiver configuration that allows it to handle the new data package size. Airplanes with factory installed Fusion avionics are not affected. Pro Line 21 airplanes that have been upgraded to Fusion avionics through an STC may still have the Part Number 822-2031-002 receiver and require the update. Refer to Appendix A.

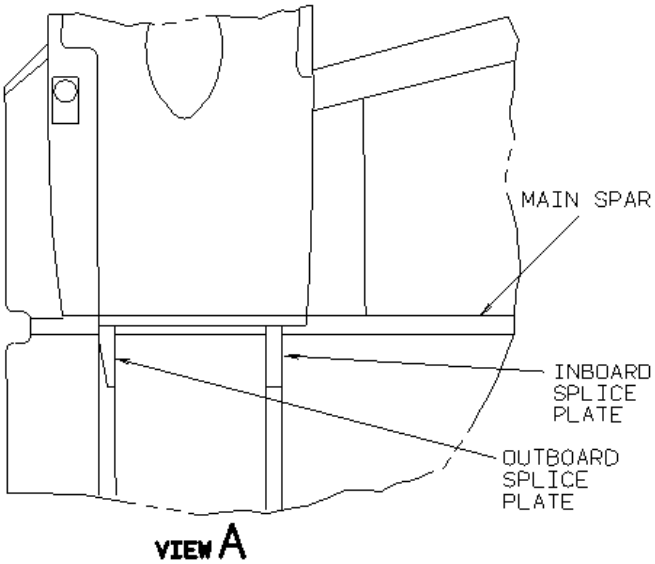
ATA-54 - Nacelle Splice Plate Inspection

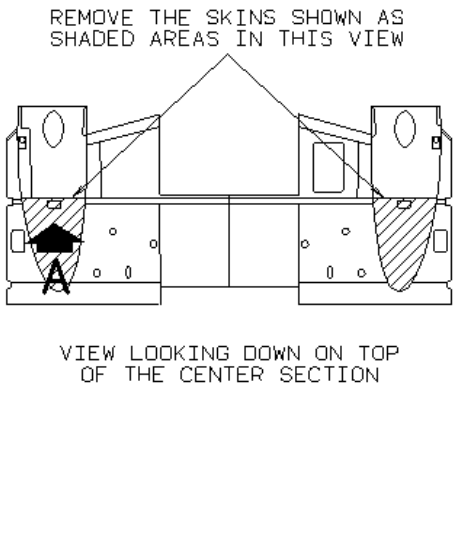
A new inspection requirement has been added to the Model B300 King Air Maintenance Manual. This inspection addresses the nacelle splice plates. Even though this inspection has been in the manual set for many years for other King Air models, it is new on the King Air B300 and it will eventually be added to the King Air 200 and 300 Series Maintenance Manuals as well.

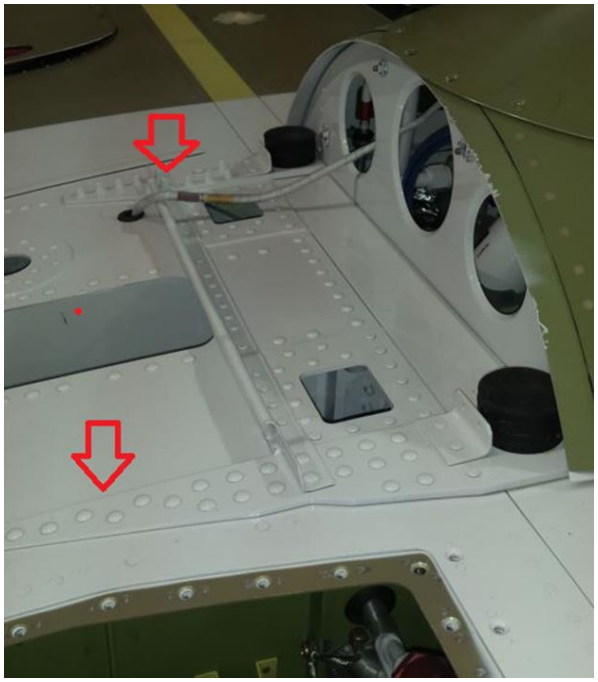
Textron Aviation Technical Support has received inquiries from B300 owner/operators asking for information about the nacelle splice plates since they are not familiar with this new requirement. The purpose of this Model Communiqué is define the scope of the inspection, provide illustrations of where the nacelle splice plates are located, provide examples of corrosion that have been found in past inspections, and explain why these inspections are now required.

The nacelle splices plates are located under the nacelle turtle back. There are two per side and they run longitudinal. Refer to the illustrations on the following pages. For airplanes without wing lockers, the turtle back should to be removed. As an alternative, the nacelle splice plate edge may be inspected through the main landing gear wheel well. For airplanes with wing lockers, the splice plates are exposed when the lockers are removed. Model 350ER airplanes will have to deal with external fuel tanks, but the intent of the inspection is met by inspecting the edge of the part as seen through the main landing gear wheel well area. This inspection procedure is included in the SIRM

for other King Air models and can be used as a reference until the SIRM is updated to include this procedure in the B300 section.







Nacelle Splice Plates

Edge Part Visible thru Wheel Well

A Severely Corroded Example

ATA-71 - Engine Mount Isolators - Beechcraft Part Number Cross Reference to Vendor Part Number

The King Air Illustrated Parts Catalogs list the part number of the engine mount isolators using the Beechcraft assembly part number. The King Air Component Maintenance Manual lists the part number of the engine isolators using the vendor part numbers. The table below provides a cross reference between these part numbers to simplify

replacement parts ordering. The King Air uses Barry Engine Vibration Isolators or Lord Engine Mount Isolators, but it is important not to mix brands of isolators on the same engine.

Beechcraft has also developed Kit 90-9077-1 S, which provides two rubber/metal bonded assemblies P/N R20700-11 used on the Barry Engine Vibration Isolators for 90 series (except C90A, C90GT), 100, A100 and 200 airplanes.

The King Air inspection guide states that the Engine Vibration Isolator Mounts are to be replaced at engine overhaul or 4,000 hours, whichever occurs first. The intent of this replacement is met by replacing the rubber/metal bonded assembly only. The other components of the engine vibration isolators can be inspected per the "Checks" Section of the appropriate vendor manual. A common question received by Textron Aviation Technical Support is what to do if the engines in a particular airplane are enrolled in P&W's TBO extended program (or similar plan), where the engine TBO is extended beyond 4,000 hours. This question can be answered by the fact that most manuals say "replace at engine TBO or 4,000 hours or whichever comes first. This is reinforced by the following statement found in the Barry Vendor Manual:

"The isolators will provide good service for engine TBO but they rarely last twice engine TBO. Therefore, it is suggested that these isolators be removed at scheduled engine removal and replaced with new isolators, or overhauled in accordance with the detailed procedures specified in this manual."

Beechcraft Part Number	Vendor Part Number
50-389133-3 and -7	LM-412-SA11
50-389133-9	5906-2SA1
50-389133-11	5906-2SA4
50-389133-13	LM-427-SA1
50-389133-15	5906-2SA5
50-389133-17	LM-427-SA7
90-389003-1	92882-01
90-389003-3	92882-02
90-389003-5	LM-821-SA49 (less mounting hardware)or LM-821-SA22 (with mounting hardware)
90-389003-7	LM-821-SA50 (less mounting hardware)or LM-821-SA24 (with mounting hardware)
100-910036-1	5906-2SA1
114-389031-1	93880-2
114-389031-3	93880-21
114-389031-5	93880-25
114-389031-7	00-12101-25
114-389031-11	93880-10
114-389031-15	93880-9
114-389031-17	93880-19
114-389031-19	LM-421-SA10-1