

REVISION TRANSMITTAL

This sheet transmits Revision 1 to MTB-33-01, which:

- A. Adds Model A200CT (C-12D) serial numbers BP-046 thru BP-071 to the serial effectivity.

NOTE: This revision replaces the original issue in its entirety.

REVISION COMPLIANCE

NO EFFECT. Airplanes previously modified by this service letter are not affected by this revision.

LOG OF REVISIONS

Original Issue	October 7, 2019
Revision 1	July 28, 2020

TITLE

LIGHTS - REPLACEMENT OF ENTRY AND ICE LIGHT SOCKETS

EFFECTIVITY

MODEL	SERIAL NUMBERS
Model 100, A100	B-1 thru B-247
Model A100-1 (U-21J)	BB-3 thru BB-5
Model 200, B200	BB-2, BB-6 thru BB-185, BB-187 thru BB-202, BB-204 thru BB-269, BB-271 thru BB-407, BB-409 thru BB-468, BB-470 thru BB-488, BB-490 thru BB-509, BB-511, BB-529, BB-531 thru BB-550, BB-552 thru BB-562, BB-564 thru BB-572, BB-574 thru BB-590, BB-592 thru BB-608, BB-610 thru BB-626, BB-628 thru BB-646, BB-666 thru BB-694, BB-696 thru BB-797, BB-799 thru BB-822, BB-824 thru BB-870, BB-872 thru BB-894, BB-896 thru BB-990, BB-992 thru BB-1051, BB-1053 thru BB-1092, BB-1094, BB-1095, BB-1099 thru BB-1104, BB-1106 thru BB-1116, BB-1118 thru BB-1184, BB-1186 thru BB-1263, BB-1265 thru BB-1288, BB-1290 thru BB-1300, BB-1302 thru BB-1425, BB-1427 thru BB-1447, BB-1449, BB-1450, BB-1452, BB-1453, BB-1455, BB-1456, BB-1458 and On
Model A200 (C-12C)	BC-1 thru BC-75, BD-1 thru BD-30
Model B100	BE-1 thru BE-137
Model A200C (UC-12B)	BJ-1 thru BJ-66
Model 200C, B200C, B200C (C-12F)	BL-1 thru BL-23, BL-25 thru BL-57, BL-61 thru BL-113, BL-115, BL-116, BL-118 and On
Model 200CT, B200CT	BN-1 thru BN-4
Model A200CT (FWC-12D)	BP-7 thru BP-11
Model 200T, B200T	BT-1 thru BT-16, BT-18 thru BT-43
Model B200C (UC-12F)	BU-1 thru BU-10
Model B200C (UC-12M)	BV-1 thru BV-10
Model B200C (C-12R)	BW-1 thru BW-29
Model B200GT	BY-1 thru BY-329
Model B200CGT	BZ-1
Model A200CT (RC-12D), A200CT (RC-12H)	GR-1 thru GR-19
Model 300	FA-1 thru FA-239

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Model A200CT (C-12D)	BP-046 thru BP-071
Model A200CT (RC-12G)	FC-1 thru FC-3
Model A200CT (RC-12K)	FE-1 thru FE-9
Model A200CT (RC-12K)	FE-10 thru FE-24
Model A200CT (RC-12P)	FE-25 thru FE-31
Model A200CT (RC-12Q)	FE-32, FE-34, FE-36
Model 300	FF-1 thru FF-19
Model B300	FL-1 thru FL-1153
Model B300C	FM-1 thru FM-76
Model B300C	FN-1
Model F90	LA-2 thru LA-236
Model 65-90, B90, C90, C90A, C90GT, C90GTi	LJ-1 thru LJ-2151
Model H90 (T-44A)	LL-1 thru LL-61
Model 65-A90	LM-1 thru LM-141
Model 65-A90-4 (RU-21E), 65-A90-4 (RU-21H)	LU-1 thru LU-18
Model E90	LW-1 thru LW-347
Model 99	U-1 thru U-49, U-51 thru U-145, U-147
Model B99	U-146, U-148 thru U-164
Model C99	U-50, U-165 thru U-239

REASON

To provide a spares replacement for faulty entry and ice light sockets.

DESCRIPTION

The service document provides parts and instructions to replace the entry and ice lights sockets.

NOTE: It is not necessary to replace all the ice lights and entry lights at same time. It is permissible to replace the ice light sockets and entry lights on an as needed basis.

COMPLIANCE

OPTIONAL. This service document can be accomplished at the discretion of the owner.

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- 1) The mechanic must complete all of the instructions in the service document, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.

- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

APPROVAL

Textron Aviation received FAA approval for the technical data in this publication that changes the airplane type design.

FLIGHT CREW OPERATIONS

No Changes

CONSUMABLE MATERIAL

No specialized consumable materials are required to complete this service document.

TOOLING

No specialized tooling is required to complete this service document.

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Beechcraft King Air 90 Series Maintenance Manual
Beechcraft King Air F90 Series Maintenance Manual
Beechcraft King Air 100 Series Maintenance Manual
Beechcraft King Air Model 99 Airliner Maintenance Manual
Beechcraft King Air 200 Series Maintenance Manual
Beechcraft Super King Air B200GT/B200CGT Fusion Maintenance Manual
Beechcraft Model B300/B300C Fusion Maintenance Manual
Beechcraft Super King Air Model C90GTi Fusion Maintenance Manual
Beechcraft King Air Chapter 20 Standard Practices - Airframe
Beechcraft Super King Air B200GT/B200CGT Pilots Operating Handbook (P/N 101-590168-1)
Beechcraft King Air 350/350C (Model B300/B300C) Fusion Operating Handbook (P/N 434-590169-0003)
Beechcraft King Air C90GTx (Model C90GTi) Fusion Pilots Operating Handbook (P/N 434-590171-0003)
Beechcraft King Air C90 Pilots Operating Handbook (P/N 90-590010-61)
Beechcraft King Air F90 Pilots Operating Handbook (P/N 109-590010-3)
Beechcraft King Air F90 Pilots Operating Handbook (109-590010-57)
Beechcraft King Air C90GT Pilots Operating Handbook (P/N 90-590024-163)
Beechcraft King Air B90 Pilots Operating Handbook (P/N 100-590038-1)
Beechcraft King Air B100 Pilots Operating Handbook (P/N 100-590038-1)

Beechcraft King Air 200/C Pilots Operating Handbook (P/N 101-590010-127)

Beechcraft King Air 200/C Pilots Operating Handbook (P/N 101-590010-147)

Beechcraft King Air B200/C Pilots Operating Handbook (BB-1439, BB-1444 thru BB1842, except BB-1463 and BB-1834, BL-139 thru BL-147, BW-1 thru BW-29) (P/N 101-590010-307)

Beechcraft King Air B200/B200C Pilots Operating Handbook (P/N 101-590010-479)

Beechcraft King Air B200T/B200CT Pilots Operating Handbook (P/N 101-590037-29)

Beechcraft King Air B200T/B200CT Pilots Operating Handbook (P/N 101-590037-57)

Beechcraft King Air B200/B200C Pilots Operating Handbook (P/N 101-590010-425)

Beechcraft King Air 250C/250C (Model B200GT/B200CGT) Fusion Pilots Operating Handbook (P/N 434-590168-0003)

Beechcraft Super King Air 300 ICAO Pilots Operating Handbook and FAA Approved Airplane Flight Manual (P/N 101-590097-59)

Beechcraft King Air 350, 350ER, 350C, 350CER (with or without Extended Fuel Capability) Fusion Pilots Operating Handbook (P/N 434-590170-0003)

Beechcraft King Air 300 Pilots Operating Handbook (FA-2 and after) (P/N 101-590097-3)

Beechcraft King Air B300/C Pilots Operating Handbook (FL-1 thru FL-110; FM-1 thru FM-8; FN-1) (P/N 130-590031-1)

Beechcraft King Air B300/C Pilots Operating Handbook (FL-381, FL-383 thru FL-492, FL-494 thru FL-499; FM-12 and FM-13) (P/N 130-590031-181)

Beechcraft King Air 350/350i/350C Pilots Operating Handbook (P/N 130-590031-235)

PUBLICATIONS AFFECTED

Beechcraft King Air 100 Series Illustrated Parts Catalog

Beechcraft King Air Model 200/200T/200CT Illustrated Parts Catalog

Beechcraft King Air Model B200/200T/B200C/B200CT Illustrated Parts Catalog

Beechcraft King Air Model B200GT/B200CGT Illustrated Parts Catalog

Beechcraft King Air B200GT/B200CGT Illustrated Parts Catalog

Beechcraft B300/B300C Illustrated Parts Catalog

Beechcraft King Air Model 300/LW Illustrated Parts Catalog

Beechcraft C90/C90A/C90GT/E90 Illustrated Parts Catalog

Beechcraft 99 Airliner Illustrated Parts Catalog

Beechcraft King Air C99 Illustrated Parts Catalog

ACCOMPLISHMENT INSTRUCTIONS

NOTE: It is not necessary to replace all the ice light sockets and entry light sockets at same time. It is permissible to replace the ice light sockets and entry light sockets on an as needed basis.

1. Prepare the airplane for maintenance.
 - A. Make sure that the airplane is electrically grounded.
 - B. Make sure that all switches are in the OFF/NORM position.
 - C. Disconnect electrical power from the airplane.
 - (1) Disconnect external electrical power.

- (2) Disconnect the airplane battery.
 - D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
2. Install new 101-361192-0007 Ice Light Socket Assemblies.
- A. (Refer to Figure 1, View A-A and View D-D.) Modify the ice light cover assembly. (Refer to the applicable Maintenance Manual, Chapter 33, Lamp Replacement - Maintenance Practices.)
 - (1) Remove the ice light cover assembly, the 23009-01 Ice Light Socket and the A7079B-24 Bulb from the nacelle. (Refer to the applicable Maintenance Manual, Chapter 33, Lamp Replacement - Maintenance Practices.)
 - (a) Keep the left ice light cover assembly and A7079B-24 Bulb and discard the ice light socket.
 - (b) Keep the attaching hardware.
 - (2) Modify the ice light cover assembly.
 - (a) (Refer to Figure 1, View E-E.) Enlarge the 0.69 diameter hole in the bracket to 0.75 inch diameter, +0.03 or -0.00 inch.
 - (3) (Refer to Figure 1, View D-D.) Modify the wiring.
 - (a) Remove the ring tongue terminal from the L185B20 Wire. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Wiring - Maintenance Practices.)
 - (4) (Refer to Figure 1, View A-A and View D-D.) Install the 101-361192-0007 Light Socket Assembly.
 - (a) Put the 101-361192-0007 Light Socket Assembly in the bracket with two 1445904-1 Jam Nuts.
 - 1 Finger tighten the 1445904-1 Jam Nuts.
 - 2 Electrically bond the 101-361192-0007 Light Socket Assembly. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Bonding - Maintenance Practices.)
 - (b) Install the kept A7079B-24 Bulb in the 101-361192-0007 Light Socket Assembly.
 - (c) Rotate the socket in the ice light assembly so that the A7079B-24 Bulb will illuminate the de-icing boot in the area visible to the pilot.
 - (d) Connect the L191A16N Wire to the ground wire on the 101-361192-0007 Light Socket Assembly. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Wiring - Maintenance Practices.)
 - (e) Connect the L185B20 Wire to the pigtail wire on the 101-361192-0007 Light Socket Assembly with one M81824/1-2 Splice. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Wiring - Maintenance Practices.)
 - (f) Tighten the 1445904-1 Jam Nuts.
 - (5) Connect the bond jumper using the kept hardware. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Wiring - Maintenance Practices.)
 - (a) Electrically bond the bond jumper. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Bonding - Maintenance Practices.)
 - (6) (Refer to Figure 1, Detail A and View A-A.) Install the modified ice light cover assembly in the nacelle using the kept hardware.
 - (7) Do Step 2.A.(1) through Step 2.A.(6) for the opposite ice light cover assembly.
 - B. Remove the maintenance warning tags and connect the airplane battery.

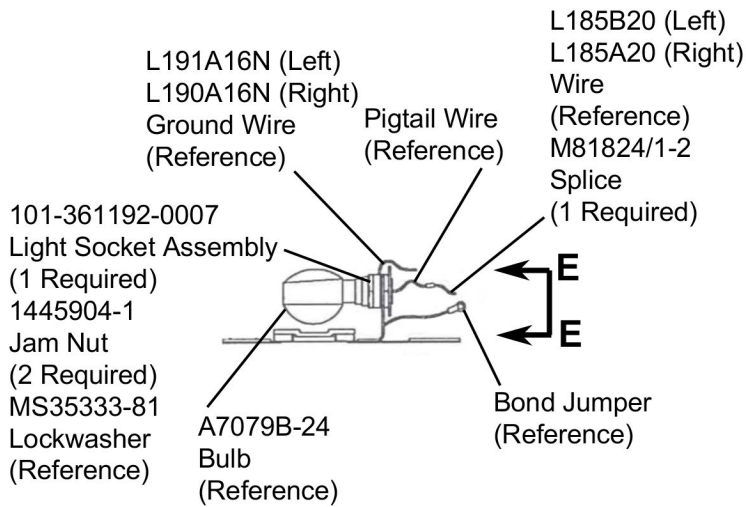
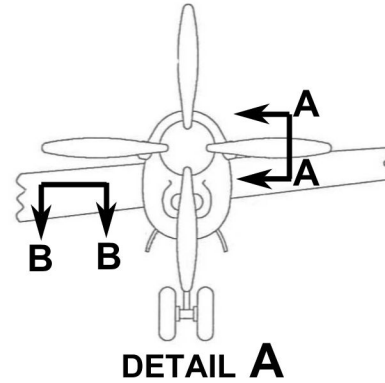
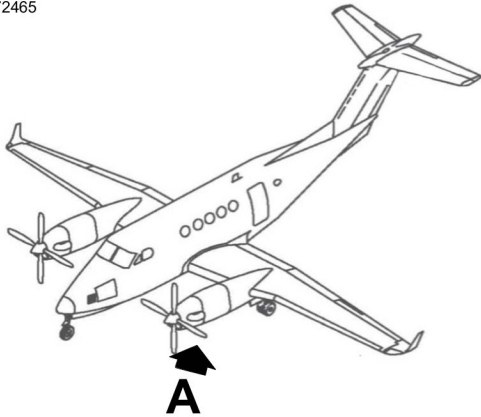
- C. Do an operational check of the ice lights. (Refer to the applicable Pilots Operating Handbook, Section 7, Lighting Systems - Exterior).
3. (All 90 series and all 100 series (except the A100-1), serials B-1 thru B-5 do not have the entry light) (Refer to Figure 1, View B-B and View D-D.) Modify the exterior entry light. (Refer to the applicable Maintenance Manual, Chapter 33, Lamp Replacement - Maintenance Practices.)
- A. Remove the 101-360031-0001 Entry Light Access Door Assembly from the underside to the left wing.
- B. Remove the 23009-01 Socket and M6363/3-1 Bulb from the 101-360031-0001 Door Assembly.
- (1) Keep the bulb and discard the socket.
- C. (Refer to Figure 1, View B-B and View F-F.) Modify the 101-360031-0001 Door Assembly.
- (1) (Refer to View E-E.) Enlarge the 0.69 inch diameter hole in the 101-360031-0005 Bracket to 0.75 inch diameter, +0.03 or -0.00 inch.
- D. (Refer to Figure 1, View B-B.) Modify the wiring.
- (1) Remove the ring tongue terminal from the L143B22 Wire. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Wiring - Maintenance Practices.)
- (2) Splice the L143B22 Wire to the pigtail on the light socket assembly using one M81824/1-2 Splice. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Wiring - Maintenance Practices.)
- E. (Refer to Figure 1, View B-B and View G-G.) Install the 101-361192-0007 Light Socket Assembly.
- (1) Install the 101-361192-0007 Light Socket Assembly in the 101-360031-005 Bracket with two 1445904-1 Jam Nuts.
- (a) Finger tighten the 1445904-1 Jam Nuts.
- (b) Electrically bond the 101-361192-0007 Light Socket Assembly. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Bonding - Maintenance Practices.)
- (2) Install the kept A7079B-24 Bulb in the 101-361192-0007 Light Socket Assembly.
- (3) (Refer to Figure 1, View G-G.) Rotate the socket in the entry light assembly so that the A7079B-24 Bulb will illuminate the ground/door stairs.
- (4) Connect the L143B22 Wire to the pigtail wire on the 101-361192-0007 Light Socket Assembly with one M81824/1-2 Splice. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Wiring - Maintenance Practices.)
- (5) Connect the bond jumper using the existing hardware. (Refer to the King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Wiring - Maintenance Practices.)
- (a) Electrically bond the bond jumper. (Refer to King Air Chapter 20 Standard Practices - Airframe, Chapter 20, Electrical Bonding - Maintenance Practices.)
- (6) Tighten the 1445904-1 Jam Nuts.
- (7) (Refer to Figure 1, Detail A and View B-B.) Install the modified door assembly in the underside of the left wing using the kept hardware.
- (8) Remove the maintenance warning tags and connect the battery.
- (9) Do an operational check of the ice lights. (Refer to the applicable Pilots Operating Handbook, Section 7, Lighting Systems - Exterior.)

4. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

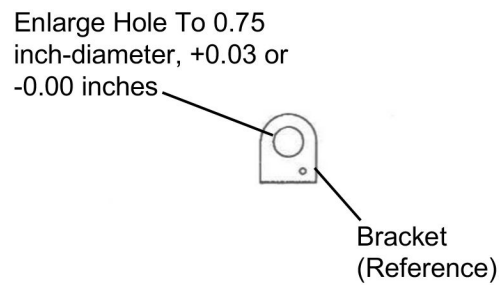
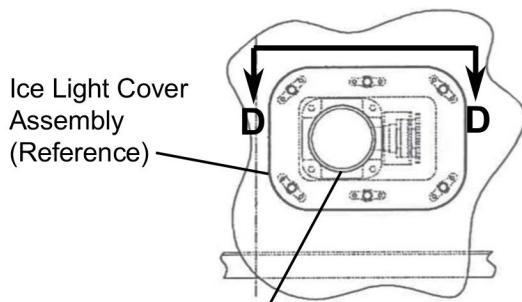
NOTE: Textron Aviation recommends that compliance with all service documents is reported to a maintenance tracking system provider.

- Complete a record of compliance. (Maintenance Transaction Report, Log Book Entry, or other record of compliance.)
- Put a copy of the completed record of compliance in the airplane logbook.
- Send a copy of the completed record of compliance to the maintenance tracking system provider used.

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VIEW D-D



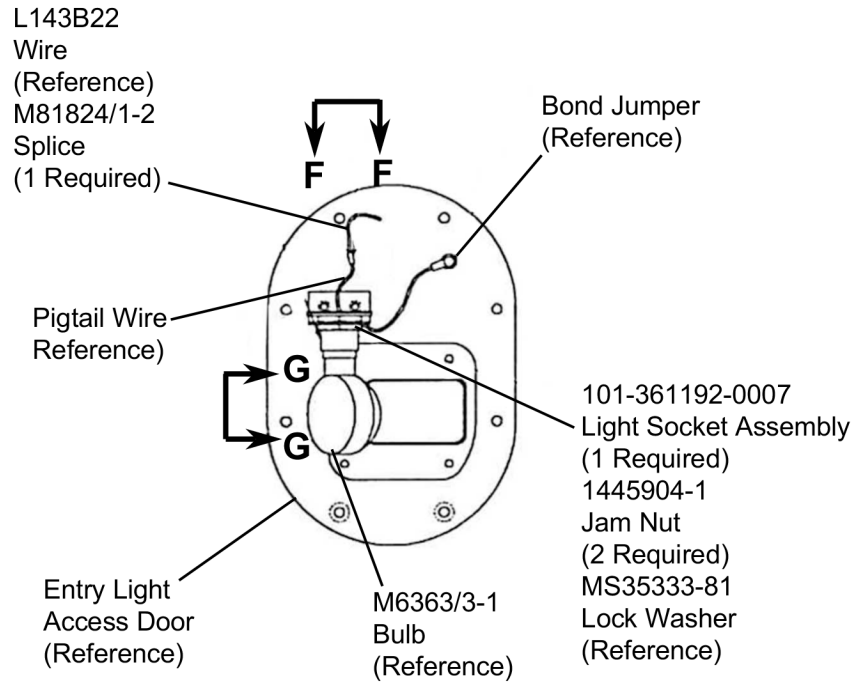
VIEW E-E

Rotate Socket in Bracket to a Position in Which the Light Will Illuminate the De-Icing Boot in the Area Visible to the Pilot.

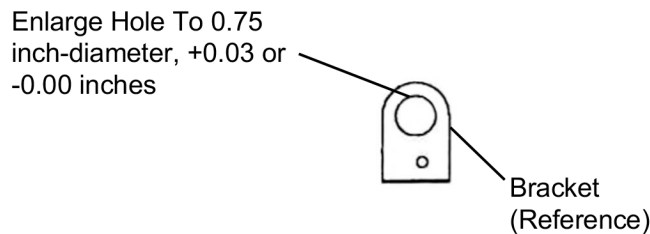
VIEW A-A

Figure 1. Ice Light and Entry Light Socket Replacement (Sheet 1)

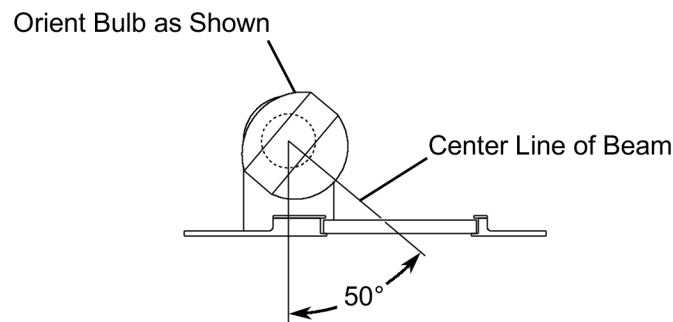
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VIEW B-B



VIEW F-F



VIEW G-G

(All Models Except The Model C90GTi)

Figure 1. Ice Light and Entry Light Socket Replacement (Sheet 2)

MATERIAL INFORMATION

Order the kit/parts below to install this modification. The kit listed below is to replace one light socket assembly. If replacing more than one light socket assembly, order kits in multiple quantities as necessary.

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
MTB-33-01	1	Kit , consisting of the following parts:		
101-361192-0007	1	Light Socket Assembly		
1445904-1	2	Jam Nut		
M81824/1-2	1	Splice		
MTB-33-01	1	Instructions		

TITLE

LIGHTS - REPLACEMENT OF ENTRY AND ICE LIGHT SOCKET

TO:

Aircraft Owner

REASON

To provide a spares replacement for faulty entry and ice light sockets.

COMPLIANCE

OPTIONAL. This service document can be accomplished at the discretion of the owner.

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
MTB-33-01	*	*

* Please contact Textron Aviation Parts Distribution for current cost and availability of parts listed in this service document. Phone at 1-800-835-4000 (Domestic) or 1-316-517-5603 (International). Send email to: parts@txtav.com.

Based on availability and lead times, parts may require advanced scheduling.

WARRANTY

None

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at www.txtavsupport.com to register.