



# Installation Instruction BEECHCRAFT KING AIR 200, 300 & 350

# Part 0 Manual Administration

## 0.1 Table of Contents

| PART | 0 MANUAL ADMINISTRATION                          | 2  |
|------|--|----|
| 0.1  | TABLE OF CONTENTS                                | 2  |
| 0.2  | DOCUMENT APPROVAL                                | 3  |
| 0.3  | AMENDMENT RECORD PROCEDURE                       | 3  |
| 0.4  | Effected Pages Procedure                         | 4  |
| 0.5  | DISTRIBUTION LIST                                | 4  |
| PART | 1 INSTALLATION INSTRUCTION                       | 5  |
| 1.1  | General  | 5  |
| 1.2  | CONTINUED AIRWORTHINESS                          | 5  |
| 1.3  | DESCRIPTION                                      | 5  |
| 1.4  | WING POSITION LIGHTS INSTALLATION                | 6  |
| 1.5  | REAR POSITION LIGHT INSTALLATION                 | 9  |
| 1.6  | Anti-colllision Lights Installation              | 11 |
| 1.7  | RECOGNITION LIGHTS INSTALLATION - WINGTIP        | 13 |
| 1.8  | Taxi and Landing Lights Installation – Nose Gear | 15 |
| PART | 2 COMPLIANCE DEMONSTRATION                       | 17 |

## 0.2 Document approval

This document has been established in accordance with an alternative procedure to DOA approved under EASA AP429.

This installation Instruction is applicable for the Beechcraft models B200, B200C, B200GT, B200CGT, B300 and B300C.

| Compiled by: | Petr Jaros<br>Engineer, Aveo Engineering Group, s.r.o.    | 12 - Dec - 2023 |
|--------------|---|-----------------|
| Approved by: | Georg Hartl<br>Head of DO, Aveo Engineering Group, s.r.o. | 12 - Dec - 2023 |

## 0.3 Amendment Record procedure

The master copy of this document shall be kept electronically as a read only document under the control of Aveo Engineering Group, s.r.o. as Master Copy.

ALL amendments to this manual will initiate a raise of Issue

**ALL** raises of issue will be given a sequential Alphabetic Issue Ident sequentially from 01 to 99 in Table 01 - *Issue No:* Column– Initial Issue of Document will be "**01**"

ALL Issues of this document will be approved by Head of DO

| Issue<br>No.                              | Details   | Date              | Effected<br>Pages |  |
|---|---|-------------------|-------------------|--|
| 01  | Initial Issue   | 15.Dec.2016       | ALL               |  |
| 02  | Add statement<br>Add removal of high-voltage unit<br>Correct typo |                   | 8<br>9-10<br>14   |  |
| 03  | Landing and TAXI Light P/N changed                                | 20. – Mar<br>2018 | 16                |  |
| 04  | Precise statement<br>Add step for corrosion protection            | 5.Apr.2018        | 5<br>8            |  |
| 05  | Adding Lights,connectors<br>Replacing Rear Position Light         |                   | 7, 11-14<br>9-10  |  |
| Table 01: Document Amendment Record Table |   |                   |                   |  |

## **0.4** Effected Pages Procedure

ALL pages affected by ANY raise of issue of this manual will be listed in Table 01 - Effected Pages Column.

The reason(s) for ALL raise of issue and description of change due to raise of issue will be provided for ALL raises of issue in Table 01 - Details Column.

Changes from the previous issue are highlighted by YELLOW HIGHLIGHTING over new content. AND YELLOW HIGHLIGHTING AND CROSSING OUT of deleted content. Example (CROSSING OUT)

#### 0.5 Distribution List

As stated in 0.3 above; the master copy of this document shall be kept electronically as a read only document under the control of Aveo Engineering Group, s.r.o. as Master Copy.

All holders of copies of this Document will be recorded by listing in Table 02 – Distribution List.

Copy holders listed will be issued a copy of this document with sequential copy number as shown in Table 02 – Distribution List

| Copy No.                    | Holder                         |  |
|-----------------------------|--------------------------------|--|
| MASTER                      | Aveo Engineering Group, s.r.o. |  |
|                             |                                |  |
|                             |                                |  |
|                             |                                |  |
| Table 02: Distribution List |                                |  |

## Part 1 Installation Instruction

#### 1.1 General

This installation is to be performed in accordance to common practice as described in FAR AC 43.13-2B Chapter 4 and in FAR AC 43.13 1B Chapter 11 Section 15 (Bonding) as published by FAA.

The installer is responsible to follow the installation instructions in the latest revision of:

- FAR AC 43.13-2B Chapter 4
- FAR AC 43.13 1B Chapter 11 Section 15
- AVE-WPS-64G-IM
- AVE-POSW-54G-IM
- AVE-PSPSYW-IM
- AVE-RBXP-001-IM
- AVE-N09PANSNT-0HA-IM
- AVE-H30-001-IM

All drawings applicable for this change are listed in the Drawing List:

AVE-MOD-008-DL, issue 01

The following appliances carry an ETSO authorization:

- AVE-WPSR-64G & AVE-WPSG-64G ETSOA 210.10053936
- AVE-RBXPR-001 ETSOA 210.10055069
- AVE-POSW-54G ETSOA.210.10053449
- AVE-PSPSYW-T01 ETSOA. 210.10068603

The change is to be performed using the document AVE-MOD-008-MCS in the latest issue.

The aircraft modified according to this instruction may not be released back to service without the EASA design approval certificate being provided.

#### 1.2 Continued Airworthiness

The aircraft manuals remain fully valid. The inspection intervals and the procedures of the aircraft override the general statements in the component manuals as listed under §1.1.

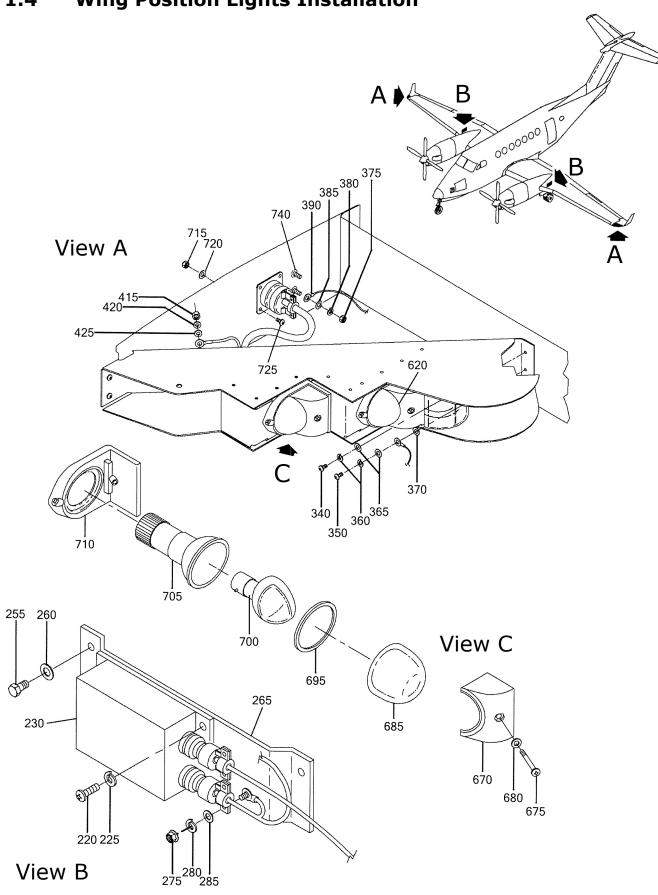
For inspection of the new lights themselves follow the procedure of the Aveo Installation Manuals referenced above.

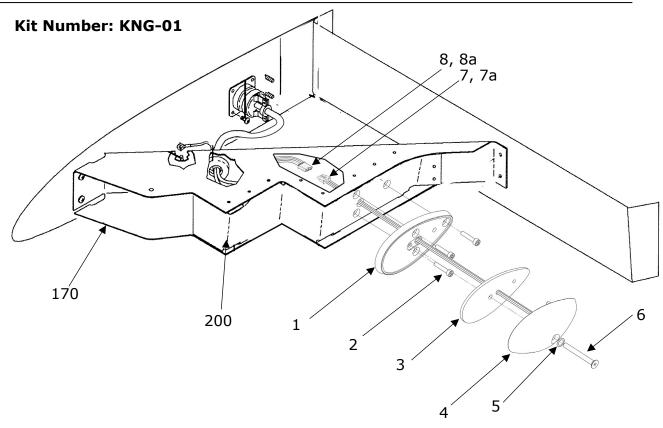
## 1.3 Description

This modification is the replacement of position lights (type I, II & III), anti-collision lights, strobe lights, taxi lights and the landing lights by LED type lights.

In general the lights are direct replacements and do not require any structural change on the A/C side. Only exemption may be additional attachment holes and installation of anchor nuts in the secondary bracket of the wingtip light installation. The changes in wiring are very minor and are to be done according to referenced standard practice.

# 1.4 Wing Position Lights Installation





| Figure<br>and<br>Index<br>Number   | Part Number   | Description  | Parts<br>Avail. | QTY.<br>Per<br>assy.                                |
|--|---|--|-----------------|---|
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>7a<br>8   | AVS-P000100175-A6C<br>AVS-93615A216<br>AVS-P001290550-A1A<br>AVE-WPSR-64G Mod(4)<br>AVE-WPSG-64G Mod(4)<br>AVS-OR00480190N70-D0A<br>AVS-79840905045<br>03-09-1041<br>02-09-2116<br>03-09-2041<br>02-09-1117 | Ultra NG Adapter M5 Screw#6-32 x1/2" LPSHS Gasket Ultra Galactica Embedded Red Ultra Galactica Embedded Green O-ring 4,8x1,9, NBR 70 Mounting Screw M5 x 45 4-Pole Connector – Male Pin 4-Pole Connector - Female Socket |                 | 2<br>6<br>2<br>1<br>1<br>2<br>2<br>2<br>8<br>2<br>8 |
| 170<br>(175)<br>(180)<br>(185)<br>(200)<br>(205)<br>220<br>225<br>230<br>255<br>260<br>265 | Original parts 130-170033-19 130-170033-35 130-170033-20 130-170033-23 130-170033-24 MS35206-245 NAS1149F0332P 100-384118-19 130909B12 NAS1149F0332P 101-361163-5   | Bracket-LH Bracket-RH Bracket-RH Bracket-RH Bracket-RH Screw Washer Power supply-wingtip Bolt Washer Bracket – wing tip power supply   |                 | 1<br>1<br>1<br>1<br>1<br>1<br>8<br>8<br>8<br>2<br>8 |

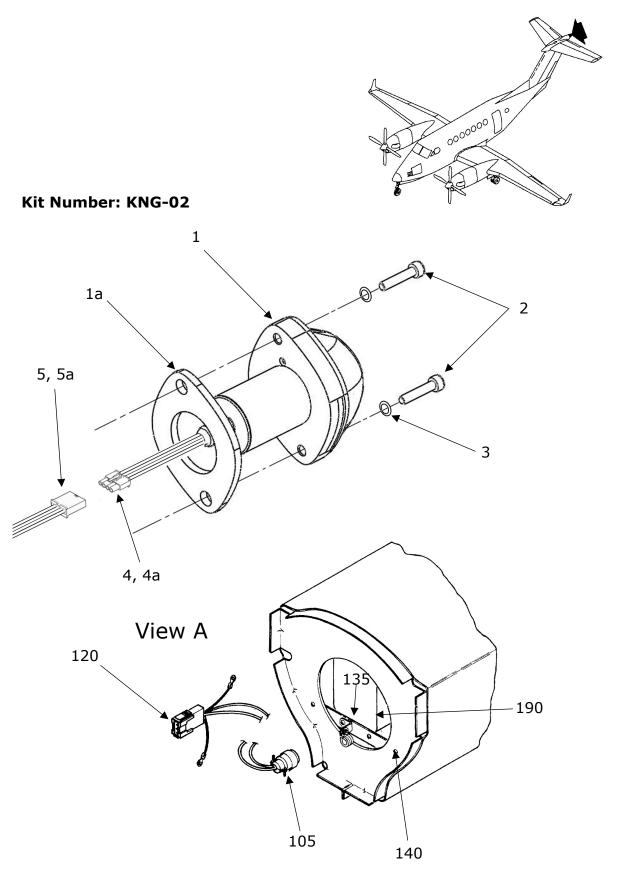
#### **BEECHCRAFT KING AIR 200, 300 & 350**

## Installation Instructions AVE-MOD-008-INS Issue 05

| _ |     |               |                                      | <del>_</del>     |
|---|-----|---------------|--------------------------------------|------------------|
|   | 275 | 130909N29     | Nut                                  | 2                |
|   | 280 | MS35338-43    | Washer lock                          | 2                |
|   | 285 | NAS1149F0332P | Washer                               | 2<br>3<br>3<br>1 |
|   | 340 | MS35207-263   | Screw                                | 3                |
|   |     | NAS1096-3-8   | Screw                                | 3                |
|   | 350 | MS35207-264   | Screw                                |                  |
|   |     | NAS1096-3-9   | Screw                                | 1                |
|   | 360 | MS35338-43    | Washer lock                          | 4                |
|   | 365 | NAS1149F0332P | Washer                               | 4                |
|   | 370 | NAS1149D0316H | Washer                               | 1                |
|   | 375 | 130909N29     | Nut                                  | 1                |
|   | 380 | MS35338-43    | Washer lock                          | 1<br>1           |
|   | 385 | NAS1149F0332P | Washer                               | 1                |
|   | 390 | MS205832BB12  | Jumper assy bonding                  | 1 2              |
|   | 415 | 130909N29     | Nut                                  | 2                |
|   | 420 | MS35338-43    | Washer lock                          | 2 2              |
|   | 425 | NAS1149F0332P | Washer                               |                  |
|   | 620 | 130-381000-1  | Light assy – LH, position and strobe | 1                |
|   | 625 | 130-381000-2  | Light assy – RH, position and strobe | 1                |
|   | 670 | A6177         | Retainer-Lens                        | 1                |
|   | 675 | NAS388-6-16   | Screw                                | 1                |
|   | 680 | MS35336-9     | Washer lock                          | 1                |
|   | 685 | A1280-2       | Lens – LH red                        | 1 1              |
|   | 690 | A1280-3       | Lens – RH green                      | 1                |
|   | 700 | A7512-24      | Lamp – navigation light              | 1<br>1           |
|   | 705 | A1825         | Lamp holder assembly                 | 1                |
|   | 710 | A1811         | Base – navigation light              | 1                |
|   | 715 | MS21042L04    | Nut                                  | 1                |
|   | 720 | NAS1149FN416P | Washer                               | 4                |
|   | 725 | MS35206-216   | Screw                                | 4                |
|   | 740 | 131270-3      | Stud - Ground                        | 2                |
|   |     |               |                                      |                  |
|   |     |               |                                      |                  |

- 1. Remove both position and the strobe lights (View C) in accordance to the aircraft maintenance manual.
- 2. Disconnect the wire bundle from the position and the strobe light
- 3. Inspect the installation area for corrosion and correct according to AMM if required
- 4. Install item 1 to 5 as described. Holes on bracket items 170 to 205 are to be drilled on installation and anchor nuts installed as required. Items 170 to 205 may be trimmed as necessary. After trimming remove sharp edges and apply primer.
- 5. Apply corrosion protection to all unused holes as per AMM.
- 6. Wiring for forward position light is to be capped and stowed.
- 7. Splice the new light's wires into the bundle according to the referenced installation manuals and the common practice FAR AC 43.13-2B Chapter 4
- 8. Remove strobe box (View B) according to the aircraft maintenance manual and remove connectors on both sides. Splice the wires in accordance to common practice FAR AC 43.13-2B Chapter 4as follows:
  - a. 28VDC to ANODE
  - b. SYNC to TRIGGER
  - c. GND to CATHODE

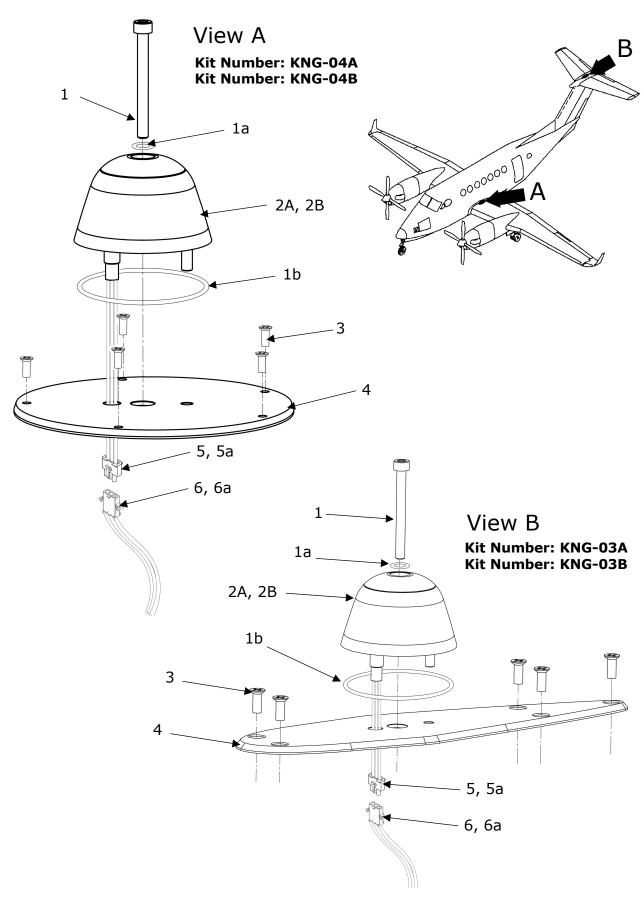
# 1.5 Rear Position Light Installation



| Figure<br>and<br>Index<br>Number        | Part Number  | Description   | Parts<br>Avail. | QTY.<br>Per<br>assy.            |
|---|--|---|-----------------|---------------------------------|
| 1<br>1a<br>2<br>3<br>4<br>4a<br>5<br>5a | AVE-PSPSYW-T01<br>AVS-P000105638-A10<br>AVS-92196A152<br>AVS-90295A359<br>03-09-1041<br>02-09-2116<br>03-09-2041<br>02-09-1117 | PosiStrobe Titania Gasket Screw UNC#6-32 Thread, 7/8" LSHS Flat Washer – Nylon 4-Pole Connector – Male Pin 4-Pole Connector - Female Socket |                 | 1<br>1<br>2<br>2<br>1<br>4<br>1 |
| 105<br>120<br>135<br>140<br>190         | View A<br>MS3456L10SL3S<br>207573-1<br>101-361159-9<br>MS35206-245<br>100-384118-9<br>100-384118-21                            | Connector Housing Pin Strap Screw Power Supply – Strobe Light   |                 | 1<br>1<br>1<br>5                |

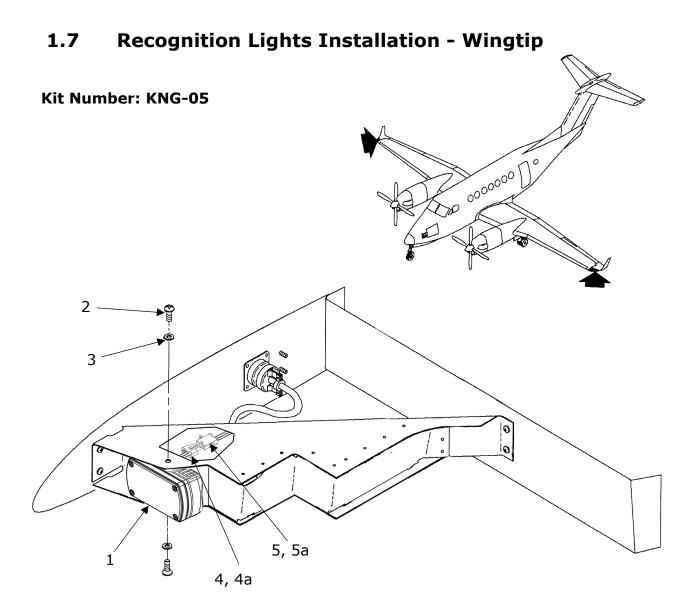
- 1. Remove position light in accordance to the aircraft maintenance manual.
- 2. Disconnect the wire bundle from the position light
- 3. Inspect the installation area for corrosion and correct according to AMM if required
- 4. Splice the new light's wires into the bundle according to the referenced installation manuals and the common practice FAR AC 43.13-2B Chapter 4
- 5. Install item 1 to 3 as described.
- 6. Remove strobe box (View A) according to the aircraft maintenance manual and remove connectors on both sides. Splice the wires in accordance to common practice FAR AC 43.13-2B Chapter 4as follows:
  - a. 28VDC to ANODE
  - b. SYNC to TRIGGER
  - c. GND to CATHODE

# 1.6 Anti-collision Lights Installation



| Figure<br>and<br>Index<br>Number | Part Number   | Description  | Parts<br>Avail. | QTY.<br>Per<br>assy.                      |
|----------------------------------|---|--|-----------------|---|
| A  1 1a 1b 2A 2B 3 4 5 5a 6      | View A  AVS-79840905050  AVS-170299005  AVS-OR05300200N70-D0A  AVE-RBXPR-001  AVE-RBXPW-001  AVS-P000600093-A60 03-09-1031 02-09-2116 03-09-2031        | BOTTOM ANTI-COLLISION LIGHT INSTALLATION Screw M5x50mm Flat Washer – Nylon O-Ring RedBaron XP Galactica Red RedBaron XP Galactica White Original Fasteners RedBaron XP Light Replacement Adapter 2 3-Pole Connector – Male Pin 3-Pole Connector - Female       |                 | 1<br>1<br>1<br>1<br>5<br>1<br>3<br>1      |
| 6a                               | 02-09-1117  | Socket   |                 | 3   |
| B 1 1a 1b 2A 2B 3 4 5 5a 6 6a    | View B  AVS-79840905050 AVS-170299005 AVS-OR05300200N70-D0A AVE-RBXPR-001 AVE-RBXPW-001  AVS-P000600092-A60 03-09-1031 02-09-2116 03-09-2031 02-09-1117 | UPPER ANTI-COLLISION LIGHT INSTALLATION Screw M5x50mm Flat Washer – Nylon O-Ring RedBaron XP Galactica Red RedBaron XP Galactica White Original Fasteners RedBaron XP Light Replacement Adapter 1 3-Pole Connector – Male Pin 3-Pole Connector - Female Socket |                 | 1<br>1<br>1<br>1<br>5<br>1<br>3<br>1<br>3 |
| 3                                | Original parts<br>AVS-94023A117   | Original Fasteners   |                 | 10  |

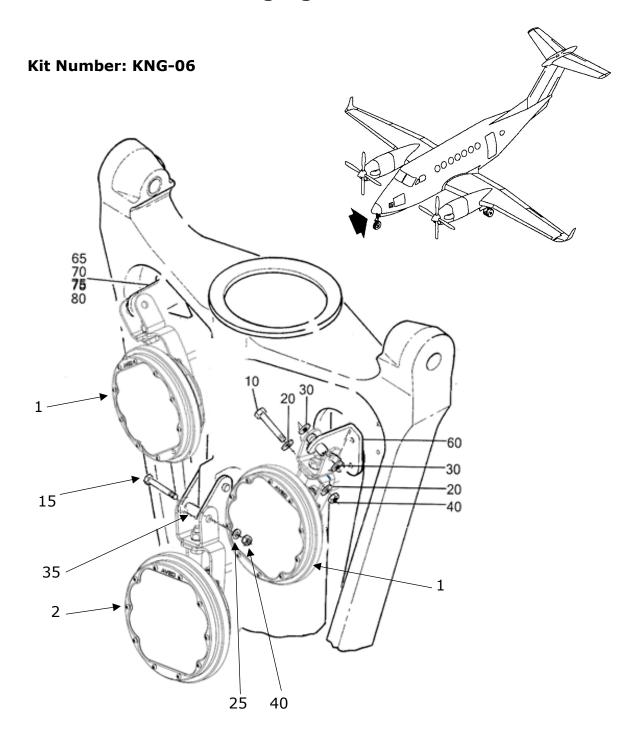
- 1. Remove A523 lower flashing beacon in accordance to the aircraft maintenance manual.
- 2. Disconnect the wire bundle from the flashing beacon
- 3. Inspect the installation area for corrosion and correct according to AMM if required
- 4. Splice the new light's wires into the bundle according to the referenced installation manuals and the common practice FAR AC 43.13-2B Chapter 4
- 5. Install item A1 to 5 as described in view A. Drill hole to substructure for antirotation pin as required.
- 6. Remove A524 upper flashing beacon in accordance to the aircraft maintenance manual.
- 7. Disconnect the wire bundle from the flashing beacon
- 8. Splice the new light's wires into the bundle according to the referenced installation manuals and the common practice FAR AC 43.13-2B Chapter 4
- 9. Install item B1 to 5 as described in view B. Drill hole to substructure for antirotation pin as required.



| Figure<br>and<br>Index<br>Number | Part Number   | Description  | Parts<br>Avail. | QTY.<br>Per<br>assy.            |
|----------------------------------|---|--|-----------------|---------------------------------|
| 1<br>2<br>3<br>4<br>4a<br>5<br>5 | AVE-N09PANSNT-3WAMod(2)<br>AVS-91400A191<br>AVS-92146A545<br>03-09-1031<br>02-09-2116<br>03-09-2031<br>02-09-1117 | Nubion Taxi Screw #8-32 x 5/16" PHPS #8 Self-Retaining Washer 3-Pole Connector – Male Pin 3-Pole Connector - Female Socket |                 | 2<br>2<br>2<br>2<br>6<br>2<br>6 |

- 1. Remove recognition light in accordance to the aircraft maintenance manual.
- 2. Disconnect the wire bundle from the recognition light
- 3. Inspect the installation area for corrosion and correct according to AMM if required
- 4. Splice the new light's wires into the bundle according to the referenced installation manuals and the common practice FAR AC 43.13-2B Chapter 4
- 5. Install item 1 to 3 as described.

# 1.8 Taxi and Landing Lights Installation - Nose Gear



| Figure<br>and<br>Index<br>Number                   | Part Number  | Description   | Parts<br>Avail. | QTY.<br>Per<br>assy.                      |
|--|--|---|-----------------|---|
| 1  | AVE-H30-W-112 Mod(1)   | Hercules LLP Landing  |                 | 2   |
| 2  | AVE-H30-W-111 Mod(1)   | Hercules LLP Taxi   |                 | 1   |
| 10<br>15<br>20<br>25<br>30<br>35<br>40<br>60<br>60 | Original parts 130909B46 130909B44 NAS1149F0432P NAS1149F0463P MS35333-40 NAS43DD4-48 130909N32 90-360010-1 90-360010-17 | Bolt Bolt Washer Washer Washer Spacer Nut Bracket assy-LH Bracket assy-LH For spares order:90-360042-0001 Bracket assy-LH Spares replacement for 90-360010-17 |                 | 2<br>1<br>4<br>1<br>4<br>1<br>3<br>1<br>1 |
| 65   | 90-360010-2  | Bracket assy-RH   |                 | 1   |
| 65   | 90-360010-18   | Bracket assy-RH   |                 | 1   |
| 65   | 90-360042-0002   | For spares order: 90-360042-0002 Bracket assy-RH Spares Replacement for 90-360010-18  |                 | 1   |
| 70   | 130909B19  | Bolt  |                 | 4   |
| 75   | NAS1149F0332P  | Washer  |                 | 8   |
| 80   | 130909N29  | Nut   |                 | 4   |

- 1. Remove landing and taxi light in accordance to the aircraft maintenance manual.
- 2. Disconnect the wire bundle from the landing and taxi lights.
- 3. Inspect the installation area for corrosion and correct according to AMM if required
- 4. Install connector item 3 in accordance with referenced installation manual
- 5. Install item 1 and 2 using the original hardware as described and in accordance to the aircraft maintenance manual.

# Part 2 Compliance demonstration

This document is in relation to the certification program AVE-MOD-007-PFC. The compliance is demonstrated for the following certification specification:

| Requirements  | MoC   | Statement of Compliance   |
|---|-------|---|
| CS 23.609 Protection of structure                   | MoC 0 | <ul> <li>(a) All parts installed are verified to be suitable. The installation instruction requests the aircraft structure to be inspected for probable corrosion before installing the new lights.</li> <li>(b) Not applicable</li> </ul>  |
| CS 23.1301 Function and installation                | MoC 0 | <ul> <li>(a) All navigation and anti-collision lights are ETSO certified. All landing lights are qualified according to RTCA DO160 as per AVE-H30-001-CCL.</li> <li>(b) Only one optional switch may be installed an label is defined herein.</li> <li>(c) All equipment is installed within their limits.</li> </ul> |
| CS 23.1529 Instructions for Continued Airworthiness | MoC 0 | The modification does not require any changes to the aircraft maintenance procedure which is clearly stated in §1.1 General.  |