

# OPTIONAL SERVICE BULLETIN

## OSB 42-098/1

## OSB 42NG-090

### supersedes OSB 42-098

## **I TECHNICAL DETAILS**

### **I.1 Category**

Optional.

### **I.2 Airplanes affected**

Type: DA 42 /M /NG /M-NG  
Serial numbers: 42.004 and subsequent  
42.AC001 and subsequent  
42.M001 and subsequent  
42.N001 and subsequent  
42.MN001 and subsequent  
DA 42 Airplane converted to DA 42NG via OSB 42-068  
DA 42 M Airplanes converted to DA 42M-NG via OSB 42-081

### **I.3 Date of effectivity**

11-Mar-2013

### **I.4 Time of Compliance**

At owner's discretion

### **I.5 Subject**

Installation of new power supplies for the taxi- and landing lights.

ATA-Code: 33-40

### **I.6 Reason**

The previous installed power supplies for the taxi- and landing lights are no longer available from the manufacturer and also not as spare part. In case of a malfunction, the power supplies have to be replaced by new power supplies, which require changes to the installation.

### **I.7 Concurrent Documents**

None.

### **I.8 Approval**

The technical information or instructions contained in this document relate to the Design Change Advisory No. OÄM 42-185/a, which has been approved under the authority of EASA Design Organization Approval ref. EASA.21J.052.

The technical content of this document has been approved under the authority of DOA ref. EASA.21J.052.

### **I.9 Accomplishments / Instructions**

See WI-OSB 42-098/ WI-OSB 42NG-090, latest effective issue.

### **I.10 Mass (Weight) and CG**

The change in mass and CG is negligible.

## **II PLANNING INFORMATION**

### **II.1 Material and Availability**

See WI-OSB 42-098/ WI-OSB 42NG-090, latest effective issue.

### **II.2 Special Tools**

None.

### **II.3 Labour Effort**

Approx. 6 hours.

### **II.4 Credit**

None.

### **II.5 Reference Documents**

DA 42 Airplane Maintenance Manual, Doc. No. 7.02.01, latest effective issue.

DA 42 NG Airplane Maintenance Manual, Doc. No. 7.02.15, latest effective issue.

## **III REMARKS**

1. All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. All work, particular that which is not especially described in this Service Bulletin, must be done in accordance with the referenced Maintenance Manual.
3. Completion of all work must be recorded in the log book.
4. In case of doubt contact Diamond Aircraft Industries GmbH.

**EXECUTION REPORT TO  
SERVICE BULLETIN  
OSB 42-098/1  
OSB 42NG-090****AIRPLANE DATA**

Airplane Serial Number \_\_\_\_\_

Airplane Registration \_\_\_\_\_

Airplane Operator \_\_\_\_\_

Hours of operation of airplane \_\_\_\_\_

No. of landings \_\_\_\_\_

Hours of operation-engine      LH: \_\_\_\_\_

   RH: \_\_\_\_\_

Typical operation of airplane      private, club, training, other \_\_\_\_\_

\_\_\_\_\_  
Date, Name, SignPlease send the completed form to [airworthiness-austria@diamondaircraft.com](mailto:airworthiness-austria@diamondaircraft.com)

# WORK INSTRUCTION

WI-OSB 42-098

WI-OSB 42 NG-090

## **I GENERAL INFORMATION**

### **I.1 Subject**

Installation of new power supplies and the required wiring for the taxi- and landing lights.

### **I.2 Reference Documents**

DA 42 Series Airplane Maintenance Manual, Doc. No. 7.02.01, latest effective issue.  
DA 42 NG Airplane Maintenance Manual, Doc. No. 7.02.15, latest effective issue.

### **I.3 Remarks**

- a) All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
- b) All work, in particular if not described in this work instruction, must be done i.a.w.the referenced maintenance manual.
- c) In case of doubt, contact Diamond Aircraft Industries GmbH.

## **II DRAWINGS, SPECIAL TOOLS & MATERIALS**

### **II.1 Drawings**

D64-5320-32-00x01

### **II.2 Special Tools**

None.

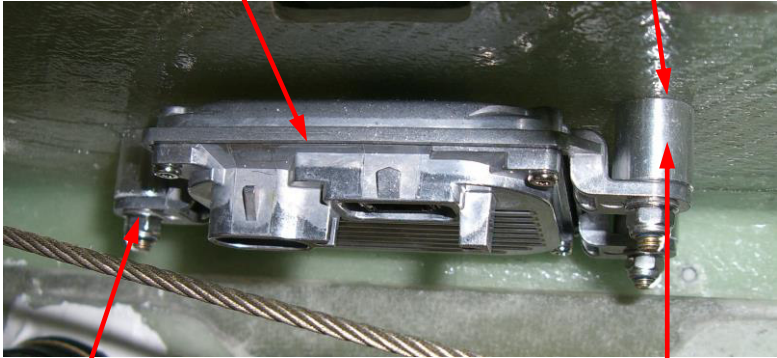
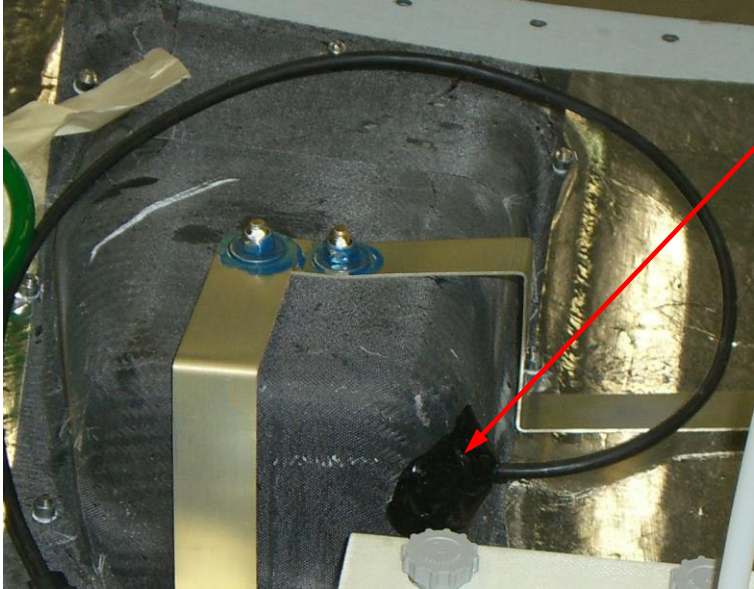
### II.3 Material

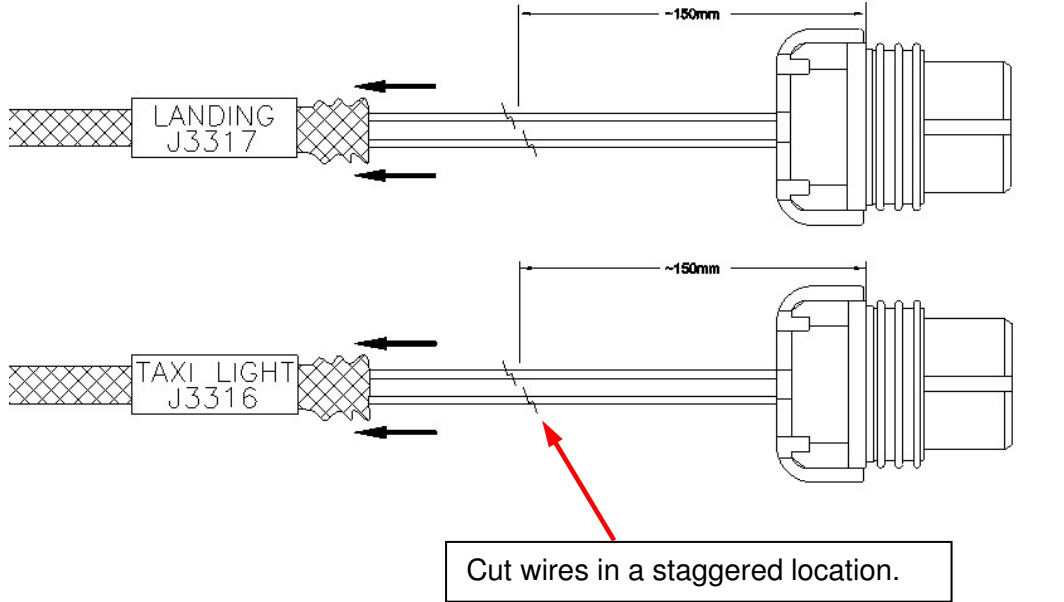
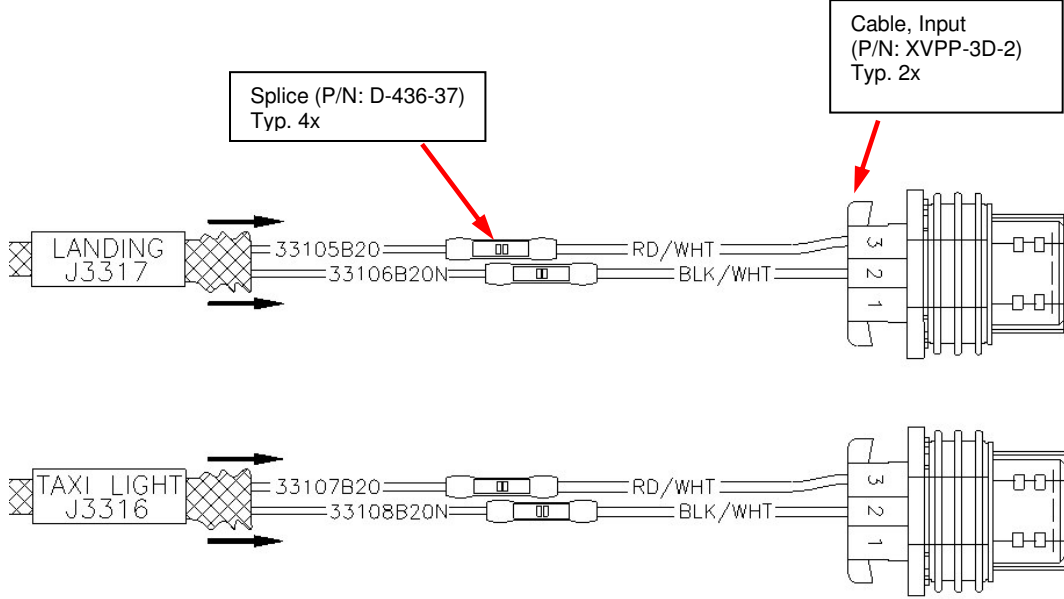
Quantity	Part Number	Description
2	XV4D-24-35-SHS-WT	HID Ballast (Power Supply)
2	XVLC-2-S	Cable, double shielded, 2 ft
2	XVPP-3D-2	Cable, Input
6	BU2-15-06-0150-B	Bushing
4	D-436-37	Splice, blue
6	LN 9037-05 026	Screw
6	DIN 985-M5-A2	Locknut
6	DIN 9021-A5.3-A2	Washer
6	DIN 125-A5.3-A2	Washer
10	PLT1MM30	Cable Tie

Material including drawing is available from Diamond Aircraft Industries.

### III INSTRUCTIONS

1	Set the ELECT. MASTER, TAXI light and LANDING light switches to OFF.
2	Set the LH BATT, RH BATT circuit breakers open (pull).
3	Remove the pilot and co-pilot seats i.a.w. AMM Section 25-10.
4	Remove the taxi- and landing light power supplies (electronic controllers) i.a.w. AMM Section 33-40.
5	Remove the taxi- and landing lights i.a.w. AMM Section 33-40.
6	Remove the electrical cables that route from the power supplies to the lights.
7	Drill new holes for the power supplies i.a.w. drawing D64-5320-32-00x01.

8	<p>Install the new power supplies as shown below.</p> <div data-bbox="359 387 802 432">Power Supply: XV4D-24-35-SHS-WT</div> <div data-bbox="943 320 1268 439">           Screw: LN 9037-05 026            Typ. 3x <b>(backside)</b>            Washer: DIN 9021-A5.3-A2            Typ. 3x <b>(backside)</b> </div>  <div data-bbox="359 936 675 1030">           Washer: DIN 125-A5.3-A2            Locknut: DIN 985-M5-A2            Typ. 3x         </div> <div data-bbox="963 936 1279 1005">           Bushing: BU2-15-06-0150-B            Typ. 3x         </div>
9	<p>Route the new double shielded cable assemblies (P/N: XVLG-2-S) as the previous cables and connect them the power supplies and the taxi- and landing lights. Modification to the structure is necessary to route the connector through it. Make a cutout of 25 mm x 15 mm.</p>
10	<p>Install the taxi- and landing lights i.a.w. AMM Section 33-40.</p>
11	<p>Seal the connector feed through with sealing compound (Easy Gasket or equivalent).</p> 

12	<p>Pull back Expando and cut-off approximately 150mm of the wires with connectors J3316 and J3317 from the center harness</p>  <p>Cut wires in a staggered location.</p>
13	<p>Splice the new cable connectors (P/N XVPP-3D-2) onto the wires of J3316 and J3317 as shown below.</p>  <p>Splice (P/N: D-436-37) Typ. 4x</p> <p>Cable, Input (P/N: XVPP-3D-2) Typ. 2x</p>
14	Connect the connectors J3316 and J3317 to their associated power supplies.
15	Secure all loose wires using cable ties.
16	Clean working areas, check for foreign objects.
17	Re-set the LH BATT, RH BATT circuit breakers (press).

18	Incorporate TR-MÄM 42-185 into the Airplane Flight Manual or use a revision into which the TR has been incorporated. Note: The content of TR-MÄM 42-185 has already been incorporated into the initial issue of Doc. No. 7.01.16-E.
19	Check all altered, replaced, repaired parts for proper function.
20	Install the pilot and co-pilot seats i.a.w. AMM Section 25-10.
21	Test all systems in working area for function.
22	Make all necessary entries in the airplane logs.