

# OPTIONAL SERVICE BULLETIN

## OSB 42-145

### **I TECHNICAL DETAILS**

#### **I.1 Category**

Optional.

#### **I.1 Airplanes affected**

Type: DA 42, DA 42 M  
Serial numbers: 42.004 and subsequent  
42.AC001 and subsequent  
42.M001 and subsequent

#### **I.2 Date of effectivity**

01-Jun-2022

#### **I.3 Time of Compliance**

At owner's discretion.

#### **I.4 Subject**

Installation of SBAS Equipment and activation of SBAS.

#### **I.5 Reason**

SBAS and P-RNAV operation has been approved for DA 42 and DA 42 M. This Service Bulletin prescribes a check for the required hardware and software version, the update, if necessary, and subsequently the activation of SBAS operation.

#### **I.6 Concurrent Documents**

None.

### **I.7 Approval**

The technical information or instruction contained in this document relate to the Design Change Advisories No. OÄM 42-134/b, OÄM 42-179/e, OÄM 42-211/b and MÄM 42-1222, which have 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.8 Accomplishments / Instructions**

Comply with WI-OSB 42-145, latest effective issue.

### **II Mass (Weight) and CG**

Mass and Center of Gravity are not affected.

## **II PLANNING INFORMATION**

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

See WI-OSB 42-145, latest effective issue.

Materials including drawings are available from Diamond Aircraft Industries or Garmin.

### **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.

### **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 BILLETIN OSB 42-145

### AIRPLANE INFORMATION

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

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

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

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

Number of landings \_\_\_\_\_

Hours of operation – engine LH \_\_\_\_\_

RH \_\_\_\_\_

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

\_\_\_\_\_  
Date, Name, Sign

Please send the completed form  
to [executionreports@diamondaircraft.com](mailto:executionreports@diamondaircraft.com)

# WORK INSTRUCTION

## WI-OSB 42-145

### Installation of SBAS equipment and activation of SBAS

#### **I GENERAL INFORMATION**

##### **I.1 Subject**

This work instruction announces the installation of G1000 System Software Version P/N 010-00370-23.

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

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

Garmin G1000 System Maintenance Manual, P/N 190-00907-00, 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 in accordance with the referenced maintenance manual.
- c) For conversion factors between SI units and US/Imperial units refer to AMM Chapter 02.
- d) In case of doubt, contact Diamond Aircraft Industries GmbH.

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

##### **II.1 Drawings**

D60-3453-40-00x01

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

None.

### II.3 Material

| Quantity         | Part Number      | Description                               |
|------------------|------------------|---|
| 1                | 010-00370-23     | G1000 Software Loader Card (Diamond DA42) |
| 1 <sup>*1)</sup> | 006-D4862-00     | GIA63W Boot Block Loader Version 6.10     |
| 2 <sup>*2)</sup> | 011-01105-01     | GIA63W, Integrated Avionic Unit           |
| 2 <sup>*2)</sup> | 011-01105-20     | GIA63W, Integrated Avionic Unit           |
| 2                | 013-00235-00     | GA35, GPS Antenna                         |
| 2                | 010-00330-45     | G1000 Database SD Card, 4.9 arc seconds   |
| 2                | 5225554-6        | Coax Connector, TNC, 90°                  |
| 2                | D4D-3453-11-00   | Ground Plate, Assembly                    |
| 8                | DIN965-AM4x30-A2 | Screw, countersunk                        |

\*1) Optional software. A new data type has been added to configuration on the GIA for the DA 42 in the 010-00370-23 software update. This new data type requires a boot block software update for GIA63Ws with P/N: 011-01105-01 if fielded prior to July 2010. If it is unknown whether a 011-01105-01 GIA63W was fielded prior to July 2010, load the system software as usual. If the load fails on GIA configuration, the GIA needs the boot block update.

\*2) Two Integrated Avionic Units GIA63W are required in total. Either of the listed may be installed.

The required Garmin G1000 Cockpit Reference Guide (CRG) and Pilot's Guide (PG) are referenced to the System Software Version number. The System Software Version number is displayed at the top right side of the MFD Power-up page.

| System Software Version | Cockpit Reference Guide                                | Pilot's Guide  |
|-------------------------|--|--|
| 0370.23                 | P/N 190-00406-08, Rev. A or later appropriate revision | P/N 190-00649-04, Rev. A or later appropriate revision |

Material is available from Diamond Aircraft Industries or Garmin.



## III INSTRUCTIONS

| Hardware Installation |  |
|-----------------------|--|
| 1                     | For airplanes already equipped with WAAS (SBAS) Equipment (GIA63W, P/N 011-01105-01 or P/N 011-01105-20 with antenna GA36, P/N 013-00244-00 or GA35, P/N 013-00235-00), proceed with step 5. |

|  |  |
|--|--|
| 2  | Replace the installed GIA63 Integrated Avionics Units with the new units (GIA 63W) as listed in Section II.3 according AMM, Chapter 31-40.   |
| 3  | Replace the installed GPS antennas with the new GPS antennas (GA 35) as listed in Section II.3 according AMM, Chapter 34-50 and drawing D60-3453-40-00x01.   |
| 4  | Replace the co-axial connectors of the GPS antenna cables with new TNC connectors, P/N 5225554-6 using appropriate tools. Connect the cables to the antennas.  |
| <b>Software Installation</b>   |  |
| <p>NOTE</p> <p>Performing the software update described in this bulletin will delete all stored Pilot Profiles, user waypoints, stored flight plans, and map settings from memory.</p> |  |
| <b>Software Load Preparation</b>   |  |
| 5  | <p>Determine what optional equipment (i.e. ADF, DME, GWX Radar, WX500, etc.) is installed in the airplane before loading software.</p> <p>Determine what optional features (i.e. Synthetic Vision (SVT), Jeppesen ChartView, etc.) are installed before loading the AIRFRAME configuration file. If the AIRFRAME configuration file is loaded from the system software card, you will need to unlock the optional features using their unlock cards.</p> <p>Make sure that all of the required materials and equipment are on hand before you begin the upgrade procedure.</p> <ul style="list-style-type: none"> <li>• Software Loader Card</li> <li>• GIA63W Boot Block Loader (optional, see Section II.3)</li> <li>• Chart View Unlock Card (optional)</li> <li>• SVS Unlock Card (optional, OÄM 42-146)</li> <li>• SAR Unlock Card (optional, OÄM 42-236)</li> <li>• Enhanced SAR Unlock Card (optional, OÄM 42-236)</li> </ul> |
| 6  | While performing these procedures ensure the airplane is connected to and drawing power from a power cart. A loss of power during this procedure may result in a defective GIA.  |
| 7  | Disengage (pull) the MFD and PFD circuit breakers.   |
| 8  | Turn on the ELECT. MASTER switch.  |
| 9  | Turn on the AV MASTER switch.  |
| 10   | Turn on the ground power unit.   |
| 11   | While holding the ENT key on the MFD, engage the MFD circuit breaker.  |
| 12   | When the words appear <b>INITIALIZING SYSTEM</b> in the upper left corner of the MFD, release the ENT key.   |
| 13   | Repeat steps 11 and 12 for the PFD.  |

|   |  |
|---|--|
| 14  | <p>While in configuration mode write down the following configuration settings:</p> <p><b>Transponder Configuration</b></p> <p>VFR Code: _____</p> <p>Address Type: _____</p> <p>Mode S Address: _____</p> <p>Flight ID Type: _____</p> <p><b>Audio Panel Configuration (GMA Configuration page)</b></p> <p>Marker Beacon HI SENSE THRESHOLD: _____</p> <p>Marker Beacon LO SENSE THRESHOLD: _____</p> |
| <p><b>GIA 63W Boot Block Load (optional, refer to Section II.3)</b></p> |  |
| 15  | <p>Disengage (pull) the MFD and PFD circuit breakers.</p>  |
| 16  | <p>Remove the SD terrain cards from the lower slots of the PFD and MFD, do not reinsert them or install new ones until instructed to at the end of this procedure.</p>   |
| 17  | <p>Insert the GIA63W Boot Block Loader Card into the PFD top card slot.</p>  |
| 18  | <p>While holding the ENT key on the PFD and MFD, engage the PFD and MFD circuit breakers.</p>  |
| 19  | <p>When the words appear <b>INITIALIZING SYSTEM</b> in the upper left corner of the PFD/MFD, release the ENT keys.</p>   |
| 20  | <p>Using the PFD, go to the SYSTEM UPLOAD page using the FMS knob.</p>   |

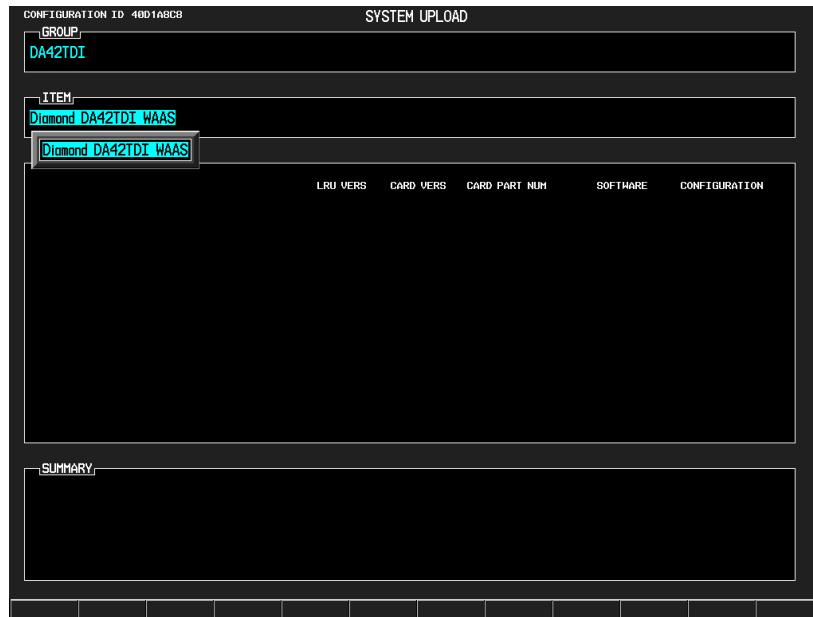


| 21        | <p>Activate the cursor and highlight the ITEM field.</p>   |           |               |                                     |               |          |               |           |      |      |              |                                     |     |
|-----------|--|-----------|---------------|-------------------------------------|---------------|----------|---------------|-----------|------|------|--------------|-------------------------------------|-----|
| 22        | <p>Select GIA #1 and press the ENT key.</p>  <table border="1" data-bbox="411 1249 1286 1570"> <thead> <tr> <th>PRODUCT</th> <th>LRU VERS</th> <th>CARD VERS</th> <th>CARD PART NUM</th> <th>SOFTWARE</th> <th>CONFIGURATION</th> </tr> </thead> <tbody> <tr> <td>GIA #1 BB</td> <td>7.60</td> <td>6.10</td> <td>006-B0544-BE</td> <td><input checked="" type="checkbox"/></td> <td>N/A</td> </tr> </tbody> </table> | PRODUCT   | LRU VERS      | CARD VERS                           | CARD PART NUM | SOFTWARE | CONFIGURATION | GIA #1 BB | 7.60 | 6.10 | 006-B0544-BE | <input checked="" type="checkbox"/> | N/A |
| PRODUCT   | LRU VERS   | CARD VERS | CARD PART NUM | SOFTWARE                            | CONFIGURATION |          |               |           |      |      |              |                                     |     |
| GIA #1 BB | 7.60   | 6.10      | 006-B0544-BE  | <input checked="" type="checkbox"/> | N/A           |          |               |           |      |      |              |                                     |     |
| 23        | <p>Press the LOAD softkey to begin the software loading process.</p>   |           |               |                                     |               |          |               |           |      |      |              |                                     |     |
| 24        | <p>Repeat steps 21 to 23 for the GIA #2.</p>   |           |               |                                     |               |          |               |           |      |      |              |                                     |     |
| 25        | <p>Press the UPDPT CFG softkey.</p>  |           |               |                                     |               |          |               |           |      |      |              |                                     |     |
| 26        | <p>Wait until the configuration module is updated and then press the ENT key to acknowledge.</p>   |           |               |                                     |               |          |               |           |      |      |              |                                     |     |

|                                   |  |
|-----------------------------------|--|
| 27                                | Disengage (pull) the MFD and PFD circuit breakers.   |
| 28                                | Remove the GIA63W Boot Block Loader Card from the PFD top card slot.   |
| 29                                | Continue from step 31 below.   |
| <b>MFD and PFD Software Load:</b> |  |
| 30                                | Disengage (pull) the MFD and PFD circuit breakers.   |
| 31                                | Remove the SD terrain cards from the lower slots of the PFD and MFD, do not reinsert them or install new ones until instructed to at the end of this procedure.  |
| 32                                | Insert the G1000 Software Loader Card into the MFD top card slot.  |
| 33                                | While holding the ENT key on the MFD, engage the MFD circuit breaker.  |
| 34                                | When the words appear <b>INITIALIZING SYSTEM</b> in the upper left corner of the MFD, release the ENT key.   |
| 35                                | Press the ENT key to acknowledge the following prompt (NOTE: A softkey labeled 'YES' appears in the lower right corner and may be used instead of the ENT key):<br><br><div style="background-color: black; color: white; padding: 5px; text-align: center;"> <b>DO YOU WANT TO UPDATE SYSTEM FILES?<br/>         NO WILL BE ASSUMED IN 30 SECONDS.</b> </div> |
| 36                                | The following screen is displayed.<br><br><div style="background-color: black; color: white; padding: 5px; text-align: center;"> <b>DO YOU WANT TO UPDATE SYSTEM FILES?<br/>         NO WILL BE ASSUMED IN 20 SECONDS.<br/>         UPDATING SYSTEM FILES, PLEASE WAIT.</b> </div>   |
| 37                                | When the "DO YOU WANT TO UPDATE SPLASHSCREEN" prompt appears, press the YES softkey.   |
| 38                                | Press any key to confirm update completion after the splash screen has finished loading.   |
| 39                                | If a message appears about verifying the database basemap, press any key to continue.  |
| 40                                | New software is loaded to the MFD. When complete, the MFD starts in configuration mode.  |
| 41                                | Pull the MFD circuit breaker.  |
| 42                                | Remove the G1000 Loader Card from the MFD and insert it into the top card slot on the PFD.   |
| 43                                | While holding the ENT key on the PFD, engage the PFD circuit breaker.  |
| 44                                | When the words appear <b>INITIALIZING SYSTEM</b> in the upper left corner of the PFD, release the ENT key.   |

|  |  |
|--|--|
| 45   | <p>Press the ENT key to acknowledge the following prompt (NOTE: A softkey labeled 'YES' appears in the lower right corner and may be used in lieu of the ENT key):</p> <div style="background-color: black; color: white; padding: 5px; text-align: center;"> <p>DO YOU WANT TO UPDATE SYSTEM FILES?<br/>         NO WILL BE ASSUMED IN 30 SECONDS.</p> </div>                                 |
| 46   | <p>The following screen is displayed.</p> <div style="background-color: black; color: white; padding: 5px; text-align: center;"> <p>DO YOU WANT TO UPDATE SYSTEM FILES?<br/>         NO WILL BE ASSUMED IN 20 SECONDS.<br/>         UPDATING SYSTEM FILES, PLEASE WAIT.</p> </div>   |
| 47   | <p>When the "DO YOU WANT TO UPDATE SPLASHSCREEN" prompt appears, press the YES softkey.</p>  |
| 48   | <p>Press any key to confirm update completion after the splash screen has finished loading.</p>  |
| 49   | <p>If a message appears about verifying the database basemap, press any key to continue.</p>   |
| 50   | <p>New software is loaded to the PFD. When complete, the PFD starts in configuration mode. Do not remove power.</p>  |
| 51   | <p>Start the MFD in configuration mode by pressing the ENT key and engaging the MFD circuit breaker.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">For the rest of the software/configuration procedure, do not operate the MFD while loading software or configuration files unless specifically instructed to do so. A failed or cancelled load may result.</p> |
| <p><b>Initial G1000 Software and Configuration Upload:</b></p> |  |
| 52   | <p>Using the PFD, go to the SYSTEM UPLOAD page using the FMS knob.</p>   |
| 53   | <p>Activate the cursor and highlight the GROUP field.</p>  |
| 54   | <p>Using the FMS knob select DA42TDI.</p>  |
| 55   | <p>Press the ENT key.</p>  |

56 Using the FMS knob and select Diamond DA42TDI WAAS in the ITEM field.





57 Once the file has been selected, press the ENT key.

58 Press the LOAD softkey to begin the software and configuration loading process.



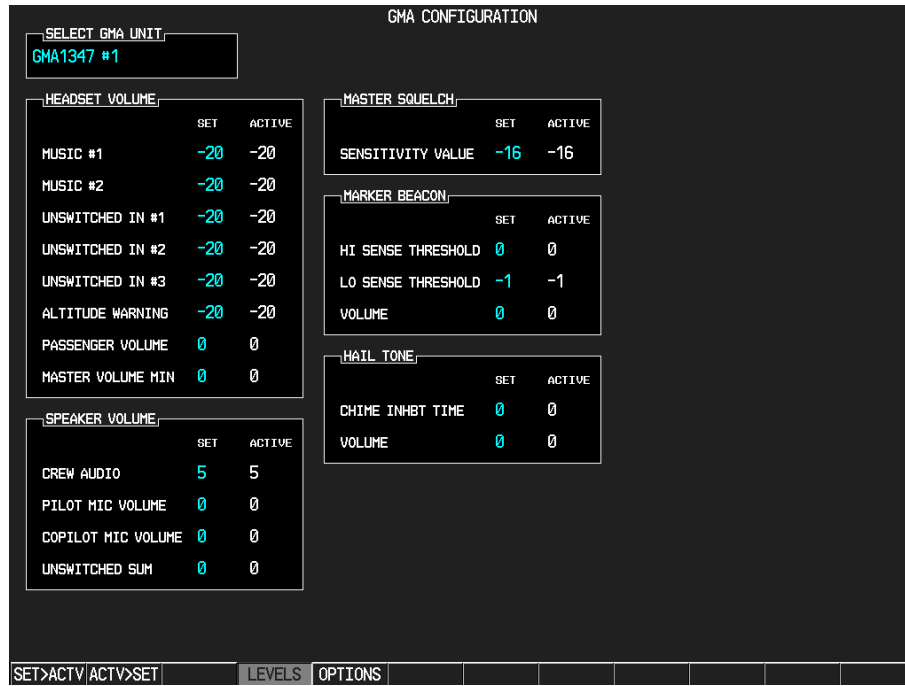
59 Monitor the status of the upload process.

|   |   |
|---|---|
| 60  | <p>Once all files have been successfully loaded, press the ENT key to acknowledge the Upload Complete prompt.</p> <div data-bbox="667 365 1015 636" data-label="Image"> </div>  |
| <b>Optional Equipment:</b>  |   |
| 61  | <p>If the airplane is equipped with any of the following optional equipment, perform the procedure below to load software and configuration files. If the DA42 is not equipped with any of the following options, proceed to Step 71 of this bulletin.</p> <ul style="list-style-type: none"> <li>• DA42 Option – 1.7 Liter Engine</li> <li>• DA42 Option – ADF</li> <li>• DA42 Option – Aux Fuel Tanks</li> <li>• DA42 Option – Deicing</li> <li>• DA42 Option – DME</li> <li>• DA42 Option – GFC 700</li> <li>• DA42 Option – GWX 68</li> <li>• DA42 Option – TAS600 Series Installation</li> <li>• DA42 Option – Stormscope</li> </ul> |
| <b>Loading Optional Equipment Software and Configuration Files:</b> |   |
| 62  | <p>If not already there, go to the SYSTEM UPLOAD page using the FMS knob.</p>   |
| 63  | <p>Activate the cursor and highlight the GROUP field.</p>   |
| 64  | <p>Using the FMS knob select DA42TDI Options.</p>   |
| 65  | <p>Press the ENT key.</p>   |

|    |  |
|----|--|
| 66 | <p>Using the FMS knob select the appropriate option and press the ENT key.</p>  |
| 67 | <p>Press the LOAD softkey, to begin the software and configuration loading process.</p>  |
| 68 | <p>Press the ENT key to acknowledge the Upload Complete prompt.</p>             |
| 69 | <p>View the SUMMARY field and ensure that all items are "COMPLETED".</p>   |
| 70 | <p>Repeat steps 62 through 69 to load any other equipped options.</p>  |

71

Re-enter the configuration settings of the Audio Panel as noted in Step 14 of this bulletin.



**GMA CONFIGURATION**

SELECT GMA UNIT:  
GMA1347 #1

| HEADSET VOLUME    |     |        |
|-------------------|-----|--------|
|                   | SET | ACTIVE |
| MUSIC #1          | -20 | -20    |
| MUSIC #2          | -20 | -20    |
| UNSWITCHED IN #1  | -20 | -20    |
| UNSWITCHED IN #2  | -20 | -20    |
| UNSWITCHED IN #3  | -20 | -20    |
| ALTITUDE WARNING  | -20 | -20    |
| PASSENGER VOLUME  | 0   | 0      |
| MASTER VOLUME MIN | 0   | 0      |

| MASTER SQUELCH    |     |        |
|-------------------|-----|--------|
|                   | SET | ACTIVE |
| SENSITIVITY VALUE | -16 | -16    |

| MARKER BEACON      |     |        |
|--------------------|-----|--------|
|                    | SET | ACTIVE |
| HI SENSE THRESHOLD | 0   | 0      |
| LO SENSE THRESHOLD | -1  | -1     |
| VOLUME             | 0   | 0      |

| HAIL TONE        |     |        |
|------------------|-----|--------|
|                  | SET | ACTIVE |
| CHIME INHBT TIME | 0   | 0      |
| VOLUME           | 0   | 0      |

| SPEAKER VOLUME     |     |        |
|--------------------|-----|--------|
|                    | SET | ACTIVE |
| CREW AUDIO         | 5   | 5      |
| PILOT MIC VOLUME   | 0   | 0      |
| COPILOT MIC VOLUME | 0   | 0      |
| UNSWITCHED SUM     | 0   | 0      |

SET>ACTV/ACTV>SET    LEVELS    OPTIONS

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Enter the Aircraft Registration, ICAO Address and VFR Code on the Aircraft Configuration Page. Press the SET GTX1 softkey after the data entry.

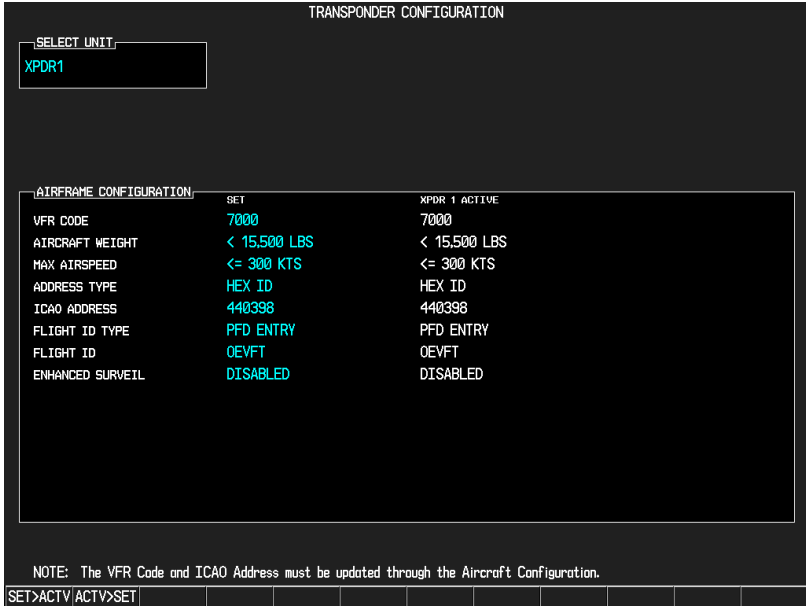
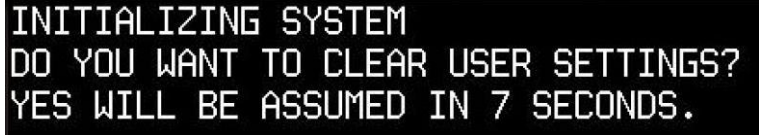


**AIRCRAFT CONFIGURATION**

LRU CONFIGURATION STATUS:  
GTX 1

AIRCRAFT CONFIGURATION:  
 AIRCRAFT REGISTRATION: 0EVFT  
 ICAO ADDRESS: 440398  
 ICAO AIRLINE DESIGNATOR:  
 IATA AIRLINE DESIGNATOR:  
 COUNTRY CODE:  
 VFR CODE: 7000

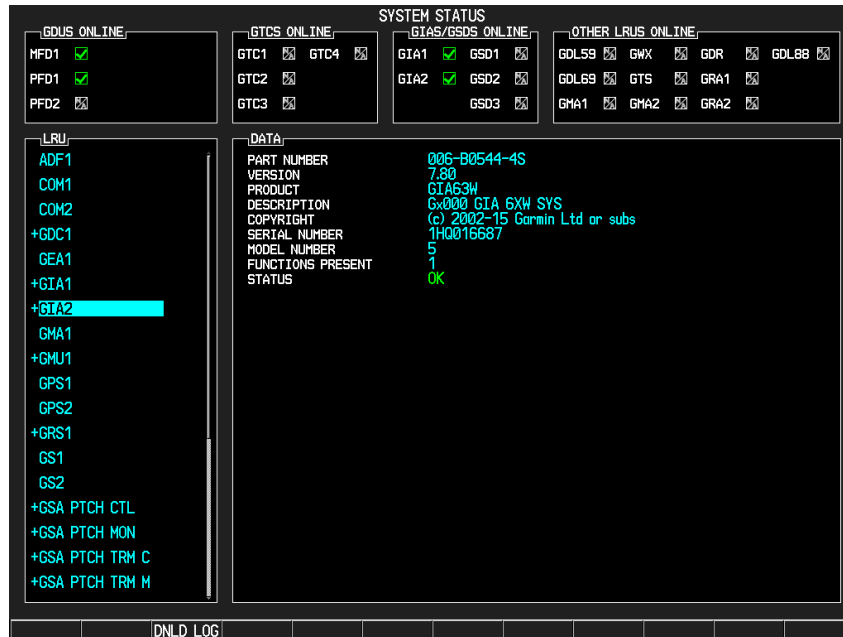
SET GTX1

|    |  |
|----|--|
| 73 | <p>Re-enter the configuration settings of the Transponder as noted in Step 14 of this bulletin.</p>  <p>NOTE: The VFR Code and ICAO Address must be updated through the Aircraft Configuration.</p> <p>SET&gt;ACTV/ACTV&gt;SET</p> |
| 74 | Refer to the DA 42 Airplane Maintenance Manual Section 31-40-00 for instructions on manually setting other configuration settings.   |
| 75 | If not already there, go to the SYSTEM UPLOAD page using the FMS knob.   |
| 76 | Press the UPDT CFG softkey.  |
| 77 | Wait until the configuration module is updated and then press the ENT key to acknowledge.  |
| 78 | Disengage (pull) the MFD and PFD circuit breakers.   |
| 79 | While holding the CLR key on the MFD, engage the MFD circuit breaker.  |
| 80 | <p>Press the ENT key to acknowledge the following prompt (NOTE: A softkey labeled 'YES' appears in the lower right corner and may be used instead of the ENT key):</p>   |
| 81 | Repeat steps 78 and 80 with the PFD.   |
|    |  |



### Software Load Confirmation.

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- 83 Using the PFD, go to the System Status page using the FMS knob. Activate the cursor and toggle to the LRU window.
- 84 In the LRU window, highlight each of the items listed in the following table and verify that the software part number and version displayed on the System Status page matches those listed in the table in MSB 42-008 latest effective issue.
- 85 De-activate the cursor.
- 86 Turn off system power.
- 87 Remove the G1000 System Software Loader Card from the PFD and set it aside.


### Software Operational Test

#### CAUTION

Do not insert the obstacle/terrain data SD cards into the bottom slot of both the PFD and MFD until all software and configuration files have been loaded and all displays have been powered up in normal mode at least one time subsequent to loading software. Failure to do so may result in obstacles not displaying correctly.

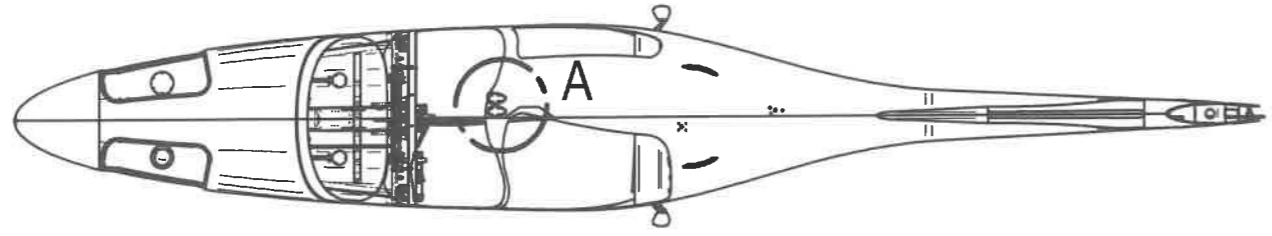
- 88 Turn system on in normal mode and wait until it is completely powered up.
- 89 Turn off system power.
- 90 Insert the new database cards P/N 010-00330-45. A checklist file may be installed onto the MFD database card first.
- 91 Turn system on in normal mode.
- 92 If messages appear about verifying databases, press any key to continue.

|           |   |
|-----------|---|
| <p>93</p> | <p>Look at the MFD power-up screen. In the upper right corner, the display shows 'Diamond DA42 System 0370.23':</p> <div data-bbox="678 421 1214 622" data-label="Image"> </div> <div data-bbox="258 703 896 1176" data-label="Image"> <p>The MFD power-up screen displays the following information:</p> <ul style="list-style-type: none"> <li><b>Logo:</b> Diamond AIRCRAFT DA42 Twin Star</li> <li><b>System Info:</b> Diamond DA42 System 0370.23 (c) 2002-16 Garmin Ltd or subs</li> <li><b>DATABASE:</b> <ul style="list-style-type: none"> <li>Checklist File: Diamond DA42 Twin St</li> <li>Basecamp Land 5.19</li> <li>SafeTaxi Expires 2-DEC-2021</li> <li>Terrain 3.00</li> <li>Obstacle Expires 2-DEC-2021</li> <li>Navigation Expires 2-DEC-2021</li> <li>Apt Directory Expires 2-DEC-2021</li> <li>Chart data is out of date!</li> </ul> </li> <li><b>PILOT PROFILE:</b> DEFAULT PROFILE</li> <li><b>Instructions:</b> Press FMS knob to change profile. Press "ENT" or rightmost softkey to continue.</li> </ul> </div> |
| <p>94</p> | <p>Verify that the System Software Version is correct.</p>  |
| <p>95</p> | <p>Press the ENT key to acknowledge the agreement on the MFD (the rightmost softkey may also be used to acknowledge the agreement).</p>   |
| <p>96</p> | <p>Allow the displays to initialize for approximately one minute. The GDC 74A and GRS 77/GMU 44 require a longer initialization period than do other LRUs. During normal operation, this causes the attitude, heading, airspeed, altitude, vertical speed, and OAT fields to be invalid during the first 40-60 seconds of PFD power-up.</p>   |

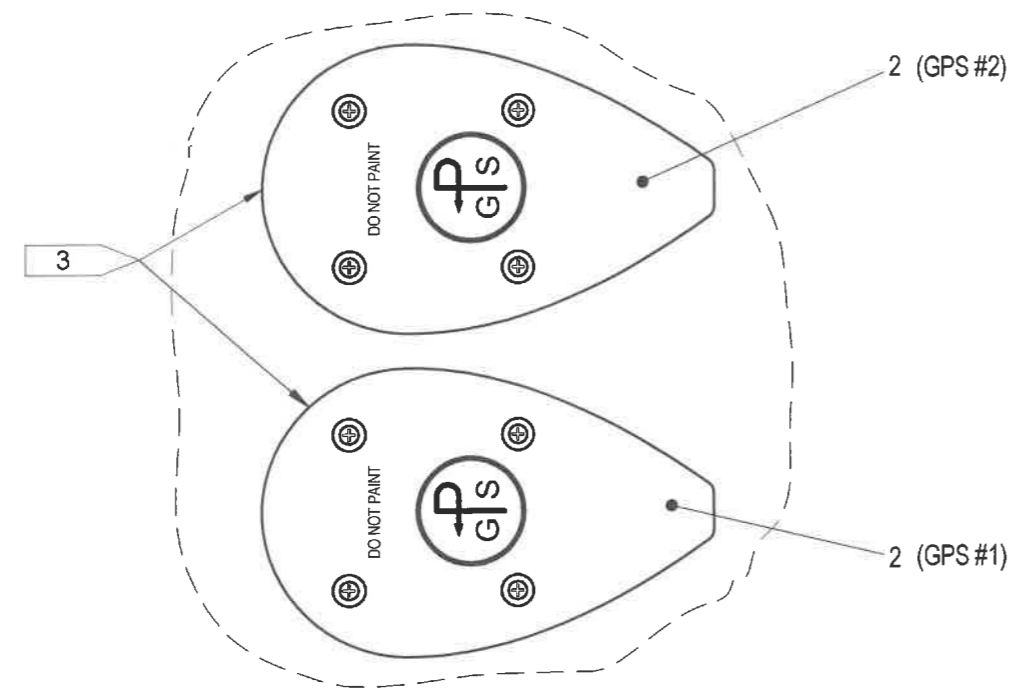
|                          |  |
|--------------------------|--|
| <p>97</p>                | <p>Verify that no 'Manifest' errors appear when the ALERTS softkey is pressed.</p> <p>NOTE: A 'FAILED PATH' message is normal, as long as both Engine Master Switches are switched off.</p>   |
| <p>98</p>                | <p>Perform additional testing of the G1000 in accordance with the Garmin G1000 System Maintenance Manual, P/N 190-00907-00.</p> <p>NOTE: After installation of new software into the G1000, the optional Synthetic Vision (SVT), Chart View, etc. must be re-activated.</p>  |
| <p>99</p>                | <p>SBAS Selection/Enabling</p> <ul style="list-style-type: none"> <li>• On the MFD use the FMS knob and navigate to the AUX – GPS STATUS page.</li> <li>• If necessary, push the SBAS softkey.</li> <li>• Push the FMS Knob, and turn the large FMS Knob to highlight 'EGNOS', 'MSAS' or 'WAAS'.</li> <li>• Press the ENT Key to check the selected box.</li> <li>• Push the FMS Knob to remove the cursor.</li> </ul> |
| <p><b>FINAL WORK</b></p> |  |
| <p>100</p>               | <p>If installed, remove and discard the limitation placard on the instrument panel.</p> <div style="text-align: center; background-color: black; color: white; padding: 5px; width: fit-content; margin: 0 auto;"> <p><b>GPS NOT APPROVED<br/>FOR WAAS OPERATIONS</b></p> </div>   |
| <p>101</p>               | <p>Replace the G1000 Pilot's Guide and Cockpit Reference Guide with the new Pilot's Guide P/N 190-00649-04, Rev. A or later appropriate revision; and Cockpit Reference Guide P/N 190-00406-08, Rev. A or later appropriate revision</p>   |

|     |   |
|-----|---|
| 102 | If applicable, insert the temporary AFM revisions for OÄM 42-134, OÄM 42-179 and/or OÄM 42-211 into the AFM.<br>Insert Supplement A33 into the AFM. |
| 103 | Make all necessary entries in the airplane logs.  |

| REVISION |    |      |   |             |  |
|----------|----|------|---|-------------|--|
| REV      | SH | ZONE | DESCRIPTION   | DATE        |  |
| -        | 01 | ALL  | OAM 42-134/b<br>NEW DRAWING, DOES NOT SUPERSEDE ANOTHER DRAWING | 20-MAY-2022 |  |

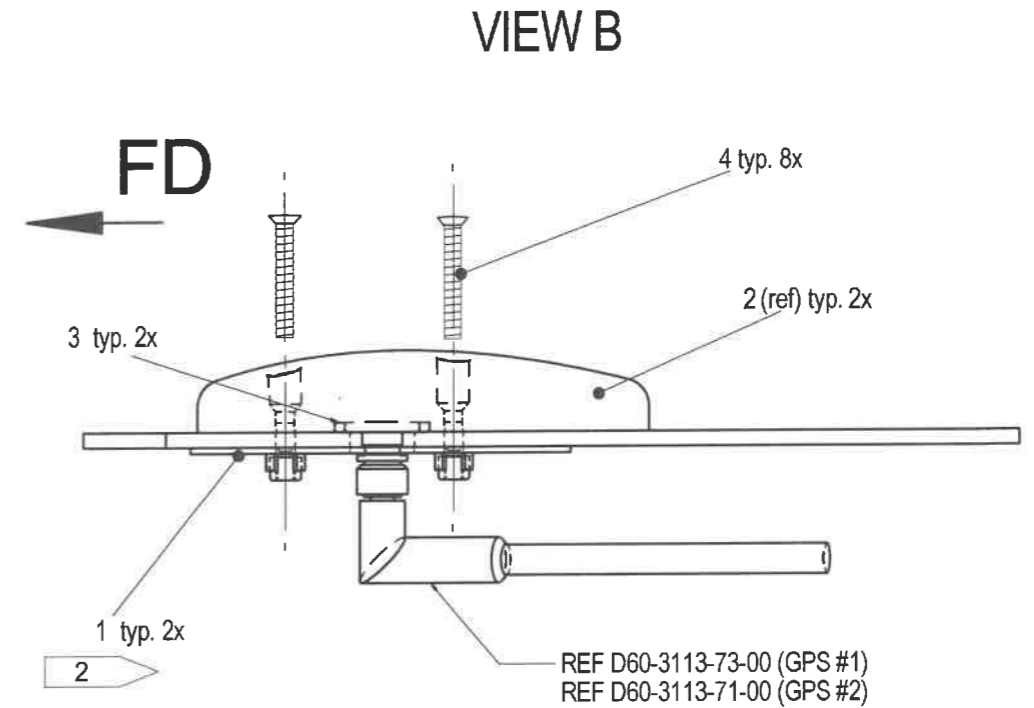


DETAIL A



VIEW B

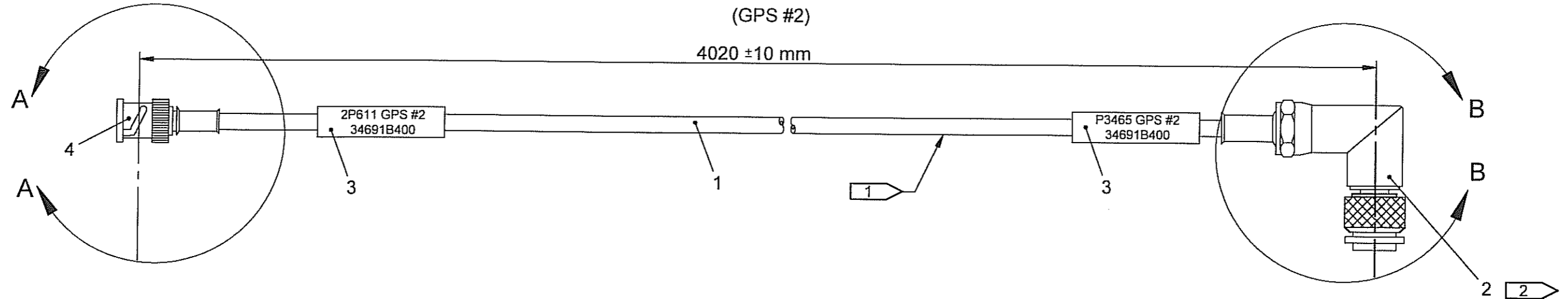
- FLAG NOTES**
- 1 ITEM 3 IS PART OF ITEM 2.
  - 2 ENSURE ITEMS 1 ARE CONNECTED TO THE LIGHTNING PROTECTION SYSTEM.
  - 3 APPLY APPROVED SEALANT AROUND ANTENNA EDGE AND AIRCRAFT SKIN AFTER INSTALLATION



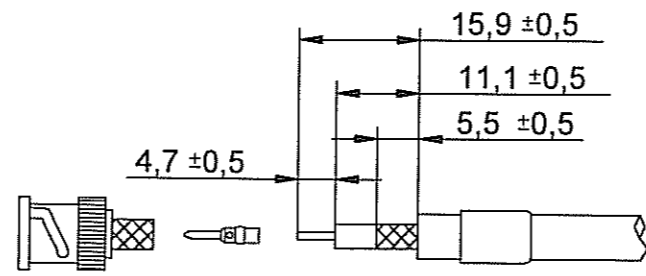
| ITEM | QTYL | QTYR | PART NUMBER      | DESCRIPTION            | MATERIAL TYPE | MATERIAL SIZE | SPECIFICATION |
|------|------|------|------------------|------------------------|---------------|---------------|---------------|
| 4    | 8    | -    | DIN965-AM4x30-A2 | Screw                  |               |               |               |
| 3    | 2    | -    | MS28775-116      | O-Ring                 |               |               |               |
| 2    | 2    | -    | 013-00235-00     | GPS Antenna, GA35      |               |               | Garmin        |
| 1    | 2    | -    | D4D-3453-11-00   | Ground Plate, Assembly |               |               |               |

|   |                                   |   |                                       |   |
|---|-----------------------------------|---|---------------------------------------|---|
| IDENTIFICATION MARKINGS<br><b>DP-S-17-00001</b>   | FIRST ANGLE PROJECTION            | DIMENSIONS<br><b>METRIC / mm</b>              | PROJECT <b>DA 42</b>                  | <b>Diamond Aircraft Industries GmbH</b> |
| CLASSIFICATION:<br><b>NONE</b>  | NAME / SIGN / DATE                | WEIGHT:                                       | INTERCHANGEABLE PART<br><b>NO</b>     |   |
| IF NOT OTHERWISE SPECIFIED GEOMETRIC DIMENSIONING AND TOLERANCING ACC. TO<br><b>ISO 2768-mK</b> | DRAWN: C. Dvorak<br>20 MAY 2022   | TITLE<br><b>GPS Antenna GA35 Installation</b> | DWG.NO.<br><b>D60-3453-40-00x01</b>   |   |
| SCALE<br>NTS  | CHECKED: M. Kowarsch<br>20 MAY 22 | DWG.NO.<br><b>D60-3453-40-00x01</b>           | REV<br>"-"                            |   |
| FORMAT <b>A3</b>  | RELEASED: S. Posch<br>20 MAY 22   | NEXT HIGHER ASSY<br>N/A                       | FILENAME <b>D60-3453-40-00x01.asm</b> | SH <b>01</b> OF <b>01</b>               |
| SOLID EDGE<br>PDM N   |                                   |   |                                       |   |

| REVISIONS |      |             |
|-----------|------|-------------|
| Rev.      | Zone | Description |
| "-"       | all  | new drawing |



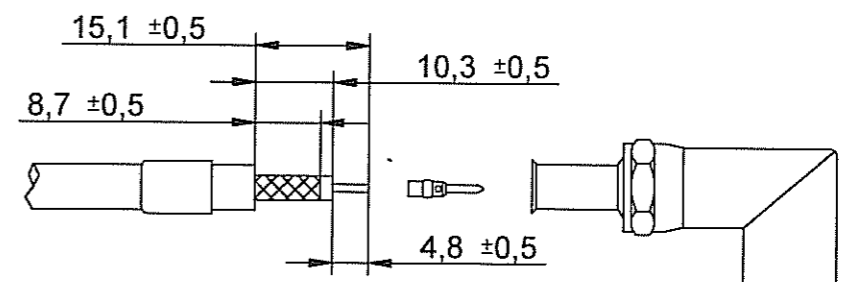
**-DETAIL A-**  
SCALE 1:1



**BNC CONNECTOR ASSEMBLY**

STRIP RG/U-400 CABLE AS PER DIMENSIONS AND CRIMP BNC CONNECTOR WITH APPROPRIATE CRIMPING TOOL.

**-DETAIL B-**  
SCALE 1:1



**TNC CONNECTOR ASSEMBLY**

STRIP RG/U-400 CABLE AS PER DIMENSIONS AND CRIMP TNC CONNECTOR WITH APPROPRIATE CRIMPING TOOL.

**NOTE:**

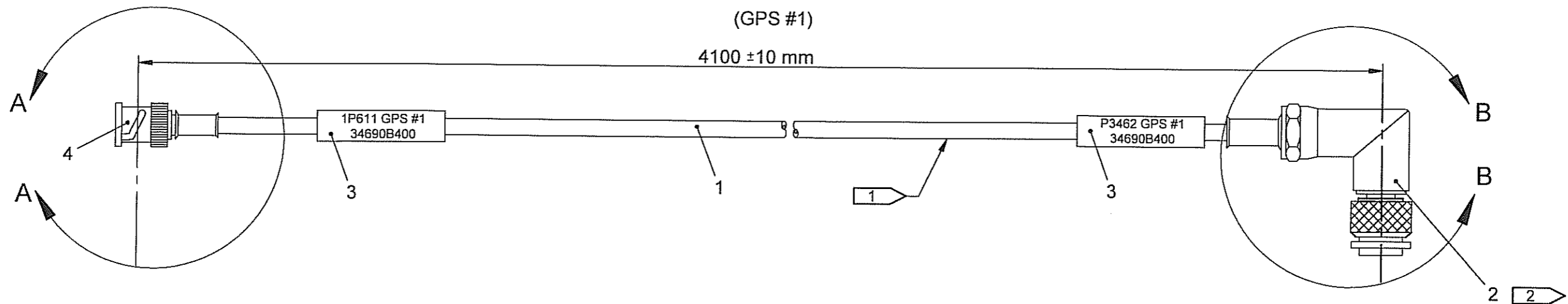
- 1. CHECK FOR NO CONTINUITY BETWEEN CENTER CONDUCTOR AND SHIELD AFTER ASSEMBLY OF EACH.
- 2. SUPPLY LOOSE. TO BE ASSEMBLED AFTER AIRCRAFT INSTALLATION.

|                    |     |
|--------------------|-----|
| Weight:            | N/A |
| Calculated Weight: | N/A |

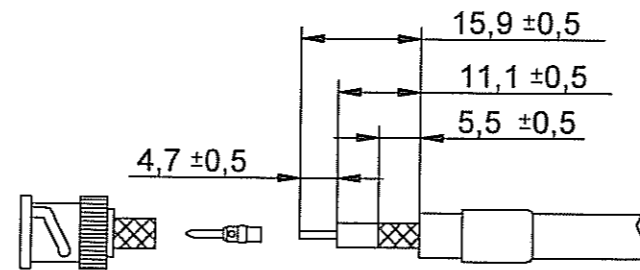
| 4                    | 1      | -                   | 225395-6      | BNC Connector                        |               | AMP                                   |
|----------------------|--------|---------------------|---------------|--------------------------------------|---------------|---------------------------------------|
| 3                    | 2      | -                   | 3PS-250-2W-2  | Label, Heat Shrinkable               |               | Raychem                               |
| 2                    | 1      | -                   | 5225554-6     | 90° TNC Connector                    |               | AMP                                   |
| 1                    | 4.02 M | -                   | M17/128-RG400 | Co-Ax Cable                          |               |                                       |
| Pos.                 | QTYL   | QTYR                | Part Number   | Description                          | Specification | Supplier                              |
| Approved: Krennitzer |        | Checked: Kowarsch   |               | General Tolerance: ISO 2768 medium   |               | Scale: NTS                            |
| Date: 09. NOV. 2008  |        | Date: 02. OKT. 2008 |               | Next Higher Assembly: D60-3113-62-00 |               | Title: <b>Cable, GPS #2 Antenna</b>   |
|                      |        |                     |               | Diamond AIRCRAFT Industries GmbH     |               |                                       |
|                      |        |                     |               | DA 42 Twin Star                      |               | Drawing Number: <b>D60-3113-71-00</b> |
| Rev. Change          |        | Date                | Name          | Saved under: D60-3113-71-00.dft      |               | Sheet 1 from 1                        |

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| REVISIONS |      |             |
|-----------|------|-------------|
| Rev.      | Zone | Description |
| ".."      | all  | new drawing |



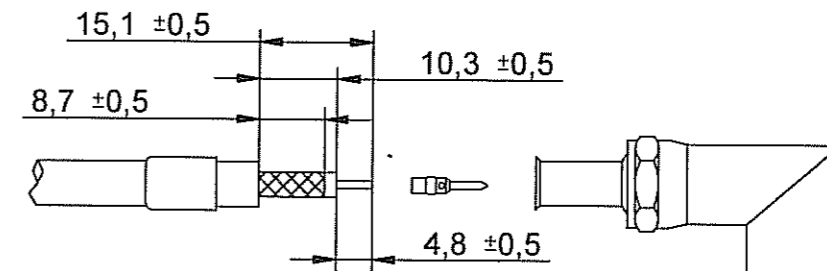
**-DETAIL A-**  
SCALE 1:1



**BNC CONNECTOR ASSEMBLY**

STRIP RG/U-400 CABLE AS PER DIMENSIONS AND CRIMP BNC CONNECTOR WITH APPROPRIATE CRIMPING TOOL.

**-DETAIL B-**  
SCALE 1:1



**TNC CONNECTOR ASSEMBLY**

STRIP RG/U-400 CABLE AS PER DIMENSIONS AND CRIMP TNC CONNECTOR WITH APPROPRIATE CRIMPING TOOL.

**NOTE:**

- 1. CHECK FOR NO CONTINUITY BETWEEN CENTER CONDUCTOR AND SHIELD AFTER ASSEMBLY OF EACH.
- 2. SUPPLY LOOSE. TO BE ASSEMBLED AFTER AIRCRAFT INSTALLATION.

|   |       |   |               |                        |         |
|---|-------|---|---------------|------------------------|---------|
| 4 | 1     | - | 225395-6      | BNC Connector          | AMP     |
| 3 | 2     | - | 3PS-250-2W-2  | Label, Heat Shrinkable | Raychem |
| 2 | 1     | - | 5225554-6     | 90° TNC Connector      | AMP     |
| 1 | 4.1 M | - | M17/128-RG400 | Co-Ax Cable            |         |

| Pos.                                 | QTYL | QTYR | Part Number                  | Description | Specification                      | Supplier   |
|--------------------------------------|------|------|------------------------------|-------------|------------------------------------|------------|
| Approved: R. Krimm                   |      |      | Checked: M. Kowarsch         |             | General Tolerance: ISO 2768 medium | Scale: NTS |
| Date: 09. JUL 2008                   |      |      | Date: 02. OKT. 2008          |             |                                    |            |
| Next Higher Assembly: D60-3113-62-00 |      |      | Title: Cable, GPS #1 Antenna |             |                                    |            |
| Rev. Change                          |      |      | Date                         |             | Drawing Number: D60-3113-73-00     |            |
| OÄM 42-134                           |      |      | 24.09.08 Kowarsch            |             | Sheet 1 from 1                     |            |
| Rev.                                 |      |      | Name                         |             | Saved under: D60-3113-73-00.dft    |            |

Weight: N/A  
Calculated Weight: N/A