

SERVICE BULLETIN NO. OSB 40-004/3

SUPERSEDES SERVICE BULLETIN NO. OSB 40-04 Rev.2

RETROFIT INSTALLATION FOR IFR OPERATION

I. TECHNICAL DETAILS

1.1 Category

Optional.

1.2 Airplanes affected

DA 40

For serial numbers refer to item III.3.4.

1.3 Time of Compliance

n.a.

1.4 Subject

Retrofit installation for IFR Operation.

1.5 Reason

Modification of the DA 40 to obtain approval for IFR Operation.

1.6 Concurrent Documents

- h DA 40 Airplane Flight Manual (AFM), Doc. No. 6.01.01-E, or appropriate national version
- h DA 40 Airplane Maintenance Manual (AMM), Doc. No. 6.02.01
- h Work Instruction WI-OÄM-40-067

1.7 Approval

The information or instructions contained in this document relate to the Design Change Advisory No. OÄM 40-067 which has been approved by ACG.

The technical information contained in this document has been approved under the authority of MOT Design Organization Approval No. MOT JA-01.

1.8 Accomplishment/Instructions

1. To implement this OSB 40-04 into the airplane the Modification Status of the airplane must be assessed. Only if the following Design Change Advisories have been carried out, the implementation of this OSB 40-04 is possible:

Mandatory Design Change Advisories: corresponding
Work Instruction

MÄM 40-015 . .	Landing Light I	WI-MÄM-40-015
MÄM 40-021 . .	Capillary in the Static System	WI-MÄM-40-021
MÄM 40-022 . .	Capillary in the Fuel System	WI-MÄM-40-022
MÄM 40-025 . .	Battery mount made from GFRP	WI-MÄM-40-025
MÄM 40-032 . .	Lightning protection tubes in fuselage	WI-MÄM-40-032

Optional Design Change Advisories: corresponding
Work Instruction

OÄM 40-059 . .	Illuminated Placards	WI-OÄM-40-059
OÄM 40-060 . .	Optional installation of White Wire Information Display Center	WI-OÄM-40-060
OÄM 40-068 . .	Essential Bus System	WI-OÄM-40-068
OÄM 40-072 . .	Alternate Static System	WI-OÄM-40-072
OÄM 40-082 . .	Lightning Protection consistent with IFR	WI-OÄM-40-082
OÄM 40-083 . .	Bendix/King COM/NAV KX 165A	WI-OÄM-40-083

2. Carry out the missing Design Change Advisories according to the corresponding work instructions.

3. The following Design Change Advisories must not be carried out:

Optional Design Change Advisory:

- | | | |
|----------------|---------------------------------|--------------------------------|
| OÄM 40-051a . | GPS KLN89 B | (part of OÄM 40-067) |
| OÄM 40-052 . . | Equipment Cooling Fan Cyclon 21 | (part of OÄM 40-067) |
| OÄM 40-056 . . | Attitude Indicator AIM 1100-28L | |
| OÄM 40-063 . . | Glider Towing Operation | |
| OÄM40-065 . . | Bendix/King GPS KLN 94 | (GPS limited to VFR operation) |
4. Carry out the IFR Design Change Advisories according to work instruction WI-OÄM-40-067.
5. If an Auto Pilot, OÄM40-061 will be incorporated together with the IFR-retrofit, MÄM40-032 must be complied with.
6. Perform DA 40 IFR Post Installation Test according to DA 40 IFR Post Installation Test report IG.002, Chapter 2.
7. Furnish the airplane with AFM, Doc. 6.01.01-E, Revision 4 or higher (English version), or with the appropriate national version.
8. Complete the modification status of the airplane (AFM Section 1.1).
9. Complete the Equipment Inventory (AFM Secion 6.5). Consider the new equipment.
10. Complete the Supplement List (AFM Section 9.2) and add the required supplements to the AFM.
11. If AMM is required by national regulations furnish the airplane with AMM, Doc. 6.02.01, Revision 3 or higher.

1.9 Mass (Weight) and CG:

- h weigh the airplane and determine the new empty mass and the new center of gravity
- h report the new empty mass and the new center of gravity in AFM Section 6.3 (English version) or in the appropriate national version

II. PLANNING INFORMATION

2.1 Material & Availability:

The information about the necessary materials and parts is published in the work instructions.

The work instructions are available from Diamond Aircraft Industries, N.A. Otto-Straße 5, A-2700 Wr. Neustadt (Phone. +43(0)2622/26700-52, Fax: +43(0)2622/26620) or a Diamond Aircraft General Distributor.

2.2 Special Tools:

The information about the necessary tools is published in the work instructions.

2.3 Labor Consumption:

Depends on the modification status of the airplane.

2.4 Reference documents:

Diamond Aircraft DA 40 Airplane Flight Manual, Doc. No. 6.01.01-E or appropriate national version.

Diamond Aircraft DA 40 Airplane Maintenance Manual, Doc.No.6.02.01
DA 40 IFR Post Installation Test Report IG.002, Chapter 2.

2.5 Credit:

n.a.

III. REMARKS

- 3.1 The measures must be carried out by a competent person.
- 3.2 Accomplishment of the measures must be confirmed in the log book.
- 3.3 At the time all retrofit IFR-installations are being conducted by Diamond Aircraft.
- 3.4 Prior to the retrofit IFR-installation Diamond Aircraft has to be contacted for a review of the actual airplane Mod.-status and the incorporation of the serial number into the Service Bulletin.
- 3.5 In case of doubt, contact Diamond Aircraft.