



Diamond Aircraft Industries G.m.b.H.  
N.A. Otto-Straße 5  
A-2700 Wiener Neustadt

DAI OSB40-01  
Revision 2  
Page 1 of 11  
02-Dez-2005

## SERVICE BULLETIN NO. OSB40-01 Revision 2 (supersedes Revision 1)

### I. TECHNICAL DETAILS

#### 1.1 Category:

Optional

#### 1.2 Airplanes affected:

DA 40          all serial numbers

#### 1.3 Time of Compliance:

On holders discretion

#### 1.4 Subject:

ATA-Code:    N.a.

#### 1.5 Reason:

Retrofit installation of design changes not covered by the IPC (fit, form, function not affected) or separate SB's (changes requiring comprehensive work)

#### 1.6 Concurrent documents:

None

#### 1.7 Approval:

These information or instructions relate to design change nos. as given in the belonging lists which has been approved by the Authority or under the authority of EASA Design Organisation Approval No. EASA.21J.005.

The technical information contained in this document has been approved under the authority of EASA Design Organisation Approval No. EASA.21J.005.

### **1.8 Accomplishment/Instructions**

1. Abbreviations:
  - AMM: Aircraft Maintenance Manual
  - AFM: Aircraft Flight Manual
  - OÄM: Optional Design Change
  - MÄM: Mandatory Design Change (means being mandatory incorporated starting with the indicated serial number)
  - WI: Work Instructions
2. List of MÄM which can be retrofit installed
3. List of OÄM which can be retrofit installed
4. Table of Compatibility of Design Changes

### **1.9 Mass (Weight) and CG:**

Depending on the conducted installations:

- h** weigh the aircraft and determine the new empty weight and the new center of gravity
- h** report the new empty weight and the new center of gravity in AFM Chapter 6.3 (english version) or FHB Chapter 6.3 (german version)

## **II. PLANNING INFORMATION**

### **2.1 Material & Availability:**

N.a.

### **2.2 Special Tools:**

N.a.

### **2.3 Labour costs:**

N.a.

**2.4 Reference documents:**

AMM (Doc. No. 6.02.01-E), IPC (Doc. No. 6.03.01), MÄM, OÄM, AMM, WI

**2.5 Credit:**

N.a.

**III. REMARKS**

- 3.1 The list of MÄM contains design changes, which have been introduced during production and they are installed into the DA 40 from defined serial numbers and subsequent. These design changes are compatible with all other design changes. In different cases the installation of MÄM's is condition for the installation of further changes.
- 3.2 The list of OÄM contains optional design changes, which can be installed under specific conditions and they a compatible to other design changes according to the table of compatibility.
- 3.3 The table of compatibility must be read from left to right in the lines, do not read it in the columns.
- 3.4 For retrofitting Authorised Design Changes the following criteria apply for the approval of the implementation:
- h** If form, fit and function is NOT altered by the change - the IPC constitutes the approval of the retrofit.
  - h** If form, fit and function IS altered and the change in question for retrofit is classified as MINOR:  
This OSB will be altered to include the change in question. Generally, a Work Instruction (WI) will be prepared for the changes, which includes detailed instructions for the installation as well as required statements for the AFM and AMM.
  - h** If form, fit and function IS altered and the change is extensive or classified as MAJOR:  
An independent SB will be produced (e.g. IFR, towing,...).
  - h** All ÄMs, which are neither approved through the IPC, or a SB, nor are contained in another special arrangement, are not permitted to be installed.

**LIST OF MÄM**

ÄM Nr.	Modified part	Improvement	Necessary approved data	Part no.	Standard from S/N
40-007	Aircraft Flight Manual	Introduction of revisions	MÄM 40-007		
40-009	Flap control adjustment	Improved functioning	MÄM 40-009, AMM		40.013
40-011	Main landing gear strut light introduction	Weight reduction	MÄM 40-011, AMM		40.014
40-013/a	Change of trim range	Improved functioning	MÄM 40-013/a		40.030 and from 40.045
40-014/a	Preparation of trim for AP-installation	Installation prepared	WI MÄM 40-014/a	DA4-2738-11-00/1	40.030 and from 40.045, excl. 40.071 and 40.072
40-015	Landing light	Adjustment of lights	WI MÄM 40-015		40.045
40-017	Lightning protecting tubes ø30 wing	Adaption of size	WI MÄM 40-017, AMM		40.031
40-021	Capillary in the static system	Improved functioning	WI MÄM 40-021		40.023
40-022	Capillary in fuel system	Improved functioning	WI MÄM 40-022		40.021

ÄM Nr.	Modified part	Improvement	Necessary approved data	Part no.	Standard from S/N
40-025	Battery mounting made from GRP	Material	WI MÄM 40-025	D41-7143-10-00	40.045
40-026	Fire resistant wires for engine cableform	Material	WI MÄM 40-026, AMM		40.024
40-027	Loss of placard for temperature limitation of XPDR KT76A	Manufacturing simplified	MÄM 40-027, AMM		40.024
40-028	Stiffener at fuselage canopy-frame	Stability increased	MÄM 40-028, AMM		40.037
40-029	Change of P/N flight timer		MÄM 40-029, AMM		40.028
40-032/a	Lightning protection tubes in fuselage	Installation simplified	WI MÄM 40-032, AMM		40.030 and from 40.044
40-035	Elevator mass balance	Increase of safety	WI MÄM 40-035, AMM	D41-5529-90-00	40.027
40-036	Drain	Manufacturing simplified	MÄM 40-036	D41-7176-10-00	40.037
40-037/a	Pitot static cap	Installation adjusted	MÄM 40-037/a	DA4-3417-10-00/1	40.040
40-038	Flux valve	Installation adjusted	MÄM 40-038	DA4-3420-10-00	40.030 and from 40.045

ÄM Nr.	Modified part	Improvement	Necessary approved data	Part no.	Standard from S/N
40-039/a	Design change Vision Microsystem	Easier exchange	MÄM 40-039/a		40.030
40-041	Cowling shott	Stiffness decreased	WI MÄM 40-041, AMM	D41-7116-04-00	40.039
40-043	Side cover	Production simplified	WI MÄM 40-043, AMM	D41-5311-20-00/1 D41-5312-20-00/1	40.039
40-044/a	Collar bush	Production simplified	MÄM 40-044/a		40.054
40-046/a	Canopy hinge frame change	More room	MÄM 40-046/a, AMM	D41-5210-60-00/1	40.052
40-047	Fuel probe modification	Fuel measuring range enlarged	WI MÄM 40-047, AMM	DA4-2817-10-00/1	40.055
40-048	Additional emergency window		WI MÄM 40-048, AMM	DA4-5210-20-00	40.037-39 and from 41
40-051	HLW-tip	additional drainhole	MÄM 40-051, AMM	D41-5535-00-00 D41-5536-00-00	40.037
40-052	Pedal-stop	Improved functioning	MÄM 40-052, AMM	D41-5320-30-00	40.050
40-053	Sealing fuselage fin	New material	MÄM 40-053		40.050

ÄM Nr.	Modified part	Improvement	Necessary approved data	Part no.	Standard from S/N
40-055/a	Buffles	Production simplified	MÄM 40-055/a, AMM	D41-7166-10-00/1	40.045
40-057	Design change relais box	Function improved	MÄM 40-057, AMM	DA4-2466-11-00	40.050
40-058	Air diffusor vents	Additional parts	WI MÄM 40-058, AMM	DA4-2153-50-00	40.057
40-059	Side cover	Design improvement	WI MÄM 40-059, AMM		40.065
40-064	Lightning protection HLW	Design improvement	WI MÄM 40-064	D41-5510-00-00/1	40.076
40-065	Improvement of heating performance	Design improvement	WI MÄM 40-065, AMM	D41-7806-80-00	40.210

**LIST OF OÄM**

ÄM Nr.	Description	Necessary approved data	Remarks	Kind of operation
40-001/b	Operation in Austria	OÄM 40-001/b		VFR, N-VFR, IFR
40-002/b	Operation in Germany	OÄM 40-002/b		VFR, N-VFR, IFR
40-003/a	Operation in Switzerland	OÄM 40-003/a		VFR, N-VFR, IFR
40-004/a	Operation in U.K.	OÄM 40-004/a		VFR, N-VFR, IFR
40-005/b	Operation in France	OÄM 40-005/b		VFR, N-VFR, IFR
40-006	Operation in Netherlands	OÄM 40-006		VFR, N-VFR, IFR
40-007/b	Operation in USA	OÄM 40-007/b		VFR, N-VFR, IFR
40-013	Operation in Sweden	OÄM 40-013		VFR, N-VFR, IFR
40-014	Operation in Denmark	OÄM 40-014		VFR, N-VFR, IFR
40-051/a	GPS KLN 89B	OÄM 40-051/a		
40-052	Equipment cooling fan Cyclon 21	WI OÄM 40-052		
40-053	Digital clock LC-2	WI OÄM 40-053		
40-054	Second altimeter	OÄM 40-054		
40-055	Directional gyro AIM 205 1 BLD	WI OÄM 40-055		





Diamond Aircraft Industries G.m.b.H.  
N.A. Otto-Straße 5  
A-2700 Wiener Neustadt

DAI OSB40-01  
Revision 2  
Page 9 of 11  
02-Dez-2005

ÄM Nr.	Description	Necessary approved data	Remarks	Kind of operation
40-056	Attitude indicator AIM 1100-28L	WI OÄM 40-056		
40-057	Turn Coordinator 1394 T 100-3Z	WI OÄM 40-057		
40-058a	CDI, VOR/LOC KI208, Removal of placards	WI OÄM 40-058a		
40-058/b	CDI, VOR/LOC KI208	WI OÄM 40-058		
40-059	Illuminated placards	WI OÄM 40-059		
40-060	Information display centers	WI OÄM 40-060		
40-061	Installation AP KAP 140	WI OÄM 40-061, AMM		
40-063/b	Glider towing equipment	WI OÄM 40-063, AMM		VFR, N-VFR
40-065/a	Bendix/King GPS KLN94	OÄM 40-065/a, AMM		
40-068	Optional installation of the essential bus for power supply	WI OÄM 40-068		N-VFR, IFR
40-069	Gust lock	OÄM 40-069, AFM		
40-070	Tow bar	OÄM 40-070, AFM		

ÄM Nr.	Description	Necessary approved data	Remarks	Kind of operation
40-072	Alternate static valve	WI OÄM 40-072		N-VFR
40-073/b	Slick start	WI OÄM 40-073, AMM		
40-078	Winterisation kit	OÄM 40-078, AMM		
40-080	B/K KAP 140 with altitude preselect	OÄM 40-080		
40-081	Door lock	WI OÄM 40-081		
40-082/b	Consistently lightning protection system with IFR	WI OÄM 40-082/b		IFR
40-083/a	Bendix/King COM/NAV KX 165a	WI OÄM 40-083/a		
40-085/a	Bendix/King COM/NAV KX 155a	WI OÄM 40-085		VFR
40-086	Pop out window	WI OÄM 40-086, AMM		
40-087	Attitude indicator AIM 1100-28LK	WI OÄM 40-087		VFR, IFR
40-088/a	Instrument panel version 4	WI OÄM 40-088		IFR
40-090/a	ELT, Jolliet JE2-NG	WI OÄM 40-090/a		N-VFR, IFR
40-091	Instrument panel DA4-3122-00-00	WI OÄM 40-091		IFR
40-092	Airspeed indicator LUN 1116	OÄM 40-092		

ÄM Nr.	Description	Necessary approved data	Remarks	Kind of operation
40-093	Altimeter LUN 1128	OÄM 40-093		
40-094	Vertical speed indicator LUN 1144	OÄM 40-094		
40-097	Garmin equipment, dual GNS 430	WI OÄM 40-097		IFR
40-098	Garmin equipment, GNS 530, GNS 430	WI OÄM 40-098		IFR
40-099/a	Ventilation	WI OÄM 40-099		
40-103	Bendix/King MFD/GPS KMD 150	OÄM 40-103		
40-104	Insight Strike Finder , SF2000	OÄM 40-104		
40-108	JAR OPS Package	OÄM 40-108		
40-111	Sandia Avionics cooling fan ACF 328	OÄM 40-111		
40-112	Sandia Altitude Data System SAE5-35	OÄM 40-112		
40-113	Flux valve switched	OÄM 40-113		
40-114	Garmin dual GNS 430 in asymmetrical I-Panel	WI OÄM 40-114		IFR
40-115	GNS 430/ GNS 530 in asymmetrical I-Panel	WI OÄM 40-115		IFR



(read only from left to right)

	OÄM 40-090/a	OÄM 40-091	OÄM 40-092	OÄM 40-093	OÄM 40-094		OÄM 40-097	OÄM 40-098	OÄM 40-099/a		OÄM 40-101	OÄM 40-102	OÄM 40-103	OÄM 40-104		OÄM 40-108		OÄM 40-111	OÄM 40-112	OÄM 40-113	OÄM 40-114	OÄM 40-115	MÄM 40-001	MÄM 40-002	MÄM 40-006	MÄM 40-007	MÄM 40-010	MÄM 40-013	MÄM 40-014	MÄM 40-015	MÄM 40-020	MÄM 40-021	MÄM 40-022	MÄM 40-025	MÄM 40-030	MÄM 40-032	MÄM 40-040	MÄM 40-059						
OÄM 40-001/b	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																					
OÄM 40-002/b	x	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																					
OÄM 40-003/a	x	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																					
OÄM 40-004/a	x	o	o	o	o		o	o	o		o	o	o	o		o	●	o	o	o	o	o	o																					
OÄM 40-005/b	x	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																					
OÄM 40-006	●	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																					
OÄM 40-007/b	x	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																					
OÄM 40-013	x	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																					
OÄM 40-014	x	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																					
OÄM 40-051/a	x	x	o	o	o		x	x	o		o	o	x	o		o		o	x	o	x	x																						
OÄM 40-052	o	x	o	o	o		x	x	o		o	o	o	o		o		x	x	o	x	x																						
OÄM 40-053	o	x	o	o	o		x	x	o		o	o	o	o		o		o	o	o	x	x																						
OÄM 40-054	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o																						
OÄM 40-055	o	o	o	o	o		x	x	o		o	o	o	o		o		o	o	o	x	x																						
OÄM 40-056	o	o	o	o	o		x	x	o		o	o	o	o		o		o	o	o	x	x																						
OÄM 40-057	o	o	o	o	o		x	x	o		o	o	o	o		o		o	o	o	x	x																						
OÄM 40-058/a	o	o	o	o	o		x	x	o		o	o	o	o		o		o	o	o	x	x																						
OÄM 40-058/b	x	x	x	x	x		x	x	x		x	x	x	x		o		x	x	x	x	x																						
OÄM 40-059	o	o	o	o	o		x	x	o		o	o	o	o		o		o	o	o	o	o																						
OÄM 40-060	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o																						
OÄM 40-061	o	o	o	o	o		o	o	o		o	o	x	o		o		o	o	o	●	●						●	●		●													
OÄM 40-063/b	o	x	o	o	o		x	x	o		o	o	o	x		o		o	o	o	x	x																						
OÄM 40-064	x	o	x	o	o		x	x	o		o	o	o	x		o		o	x	x	x	x		●	●	●		●		●	●	●	●		●				●		●			
OÄM 40-065/a	o	x	o	o	o		x	x	o		o	o	o	x		o		o	o	o	x	x																						
OÄM 40-067/a	o	o	o	o	o		o	o	o		o	o	x	o		o		o	o	o	o	o		●	●	●		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
OÄM 40-068	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o																						
OÄM 40-069	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o																						
OÄM 40-070	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o																						
OÄM 40-072	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o																						
OÄM 40-073/b	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o																						

X = not compatible    o = optional (according to conditions of OÄM 40-xxx)    ● = required



(read only from left to right)

	OÄM 40-090/a	OÄM 40-091	OÄM 40-092	OÄM 40-093	OÄM 40-094		OÄM 40-097	OÄM 40-098	OÄM 40-099/a		OÄM 40-101	OÄM 40-102	OÄM 40-103	OÄM 40-104		OÄM 40-108		OÄM 40-111	OÄM 40-112	OÄM 40-113	OÄM 40-114	OÄM 40-115	MÄM 40-001	MÄM 40-002	MÄM 40-006	MÄM 40-007	MÄM 40-010	MÄM 40-013	MÄM 40-014	MÄM 40-015	MÄM 40-020	MÄM 40-021	MÄM 40-022	MÄM 40-025	MÄM 40-030	MÄM 40-032	MÄM 40-040	MÄM 40-059							
OÖM 40-078	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-080	o	o	o	o	o		o	o	o		o	o	x	o		o		o	o	o	o	o	o																						
OÄM 40-081	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-082/b	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-083/a	o	o	o	o	o		x	x	o		o	o	x	o		o		o	o	o	o	x	x																						
OÄM 40-085/a	o	x	o	o	o		x	x	o		o	o	o	o		o		x	x	x	x	x	x																						
OÄM 40-086	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-087	o	x	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	x	x																						
OÄM 40-088/a	o	x	o	o	o		x	x	o		o	o	x	x		o		x	x	o	x	x																							
OÄM 40-090/a		x	o	o	o		x	x	o		o	o	x	o		o		o	o	o	o	o	o																						
OÄM 40-091	x		o	o	o		x	x	o		o	o	x	x		o		o	o	o	x	x																					●		
OÄM 40-092	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-093	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-094	o	o	o	o			o	o	o		o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-097	x	x	o	o	o			x	o		o	o	x	x		o		o	o	o	o	o	o																					●	
OÄM 40-098	x	x	o	o	o		x	o	o		o	o	x	x		o		o	o	o	o	o	o																					●	
OÄM 40-099/a	o	o	o	o	x		o	o			o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-101	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-102	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-103	x	x	o	o	o		x	x	o		o	o		x		o		x	x	x	x	x	x																						
OÄM 40-104	x	x	o	o	o		x	x	o		o	o	x			o		x	x	o	x	x																							
OÄM 40-111	o	o	o	o	o		o	●	o		o	o	x	x		o		o	o	o	o	o	o																						
OÄM 40-112	x	x	o	o	o		o	●	o		o	o	x	x		o		o	o	o	o	o	o																						
OÄM 40-113	o	o	o	o	o		o	o	o		o	o	o	o		o		o	o	o	o	o	o																						
OÄM 40-114	x	x	o	o	o		x	x	o		o	o	x	x		o		o	o	o	o		x																						
OÄM 40-115	x	x	o	o	o		x	x	o		o	o	x	x		o		o	o	o	x		o																						

X = not compatible    o = optional (according to conditions of OÄM 40-xxx)    ● = required