

OPTIONAL SERVICE BULLETIN

NO. OSB-42-001/2

SUPERSEDES OSB-42-001/1

I TECHNICAL DETAILS

I.1 Category

Optional

I.2 Airplanes Affected

Type: DA 42

Serial Numbers: all serial numbers

I.3 Time of Compliance

On holders discretion

I.4 Subject

Possible retrofit installation of design changes.

ATA code: n. a.

I.5 Reason

DAI is continuously improving its products. Since some of those improvements can be installed retrofit, this service bulletin gives owners the possibility to take advantage of DAI's improvements in the field.

I.6 Concurrent Documents

n. a.

I.7 Approval

This information or instructions relate to design changes as given in the lists below, which have been approved under the authority of EASA DOA No. EASA.21J.052.

The technical information contained in this document has been approved under the authority of EASA DOA No. EASA.21J.052.

I.8 Accomplishment/Instructions

For retrofit installation follow the instructions for each item intended to be installed given in the attached lists below

Abbreviations:

AMM:	Aircraft Maintenance Manual
AFM:	Aircraft Flight Manual
ÄM:	Design Change
OÄM:	Optional Design Change
MÄM:	Mandatory Design Change (means being mandatory incorporated starting with the indicated serial number)
WI:	Work Instructions
TR:	Temporary Revision

I.9 Mass (Weight) and CG

Depending on the conducted installations:

- weigh the aircraft and determine the new empty mass and the new centre of gravity
- report the new empty mass and the new centre of gravity in AFM Chapter 6.3

II PLANNING INFORMATION

II.1 Material & Availability

Material and Parts can be obtained through your the local Diamond Aircraft general distributor or Diamond Aircraft service center.

II.2 Special Tools

None

II.3 Labor Effort

Depending on conducted installation.

II.4 Credit

None

II.5 Reference Documents

DA42 Series Airplane Maintenance Manual, Doc. No. 7.02.01, latest effective revision.
WI, TR as stated in the ÄM-lists.

III REMARKS

1. The list of MÄM contains design changes, which have been introduced during production and they are installed into the DA 42 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.
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. The table of compatibility must be read from left to right in the lines, do not read it in the columns.
4. For retrofitting authorized Design Changes the following criteria apply for the approval of the implementation:
 - a. If form, fit and function is NOT altered by the change - the IPC constitutes the approval of the retrofit.
 - b. If form, fit and function IS altered and the change in question for retrofit is classified as MINOR: this OSB will, if necessary, be altered to include the change in question, whereby, generally, a Work Instruction (WI) will be prepared, which includes detailed instructions for the installation as well as required statements for the AFM and AMM.
 - c. If form, fit and function IS altered and the change is classified as MAJOR: an independent SB will be produced (e.g. IFR, towing,...).
 - d. All ÄMs, which are neither approved through the IPC, or a SB, nor are contained in a special arrangement according to DAI form A57 (which is only applicable for DAI Maintenance), are not permitted to be installed.
 - e. Repairs are dealt with by an RÄM.
5. All measures must be carried out by a certified aircraft station or a certified aircraft mechanic.
6. In case of any doubt, contact Diamond Aircraft Industries.

IV LIST OF MÄMs

No.	Subject	Improvement	Approved Change	Part No./ Kit No.	Accomplishment/ Instructions to comply with	Standard for S/N	Remark
1	New Coolant Tank Design	More rigid design on shock absorbers.	MÄM 42-072/c MÄM 42-165	MAM-42-072_C	AMM-TR-MÄM-42-072	42.070. through 42.106, 42.108, 42.114 through 42.176, 42.178 and subsequent	-
2	Oversized Universal Joint MLG	Installation of the suitable oversized universal joint as a substitute to shims in the damper assembly to adjust the position of the MLG wheel within the wheel bay.	MÄM 42-077	See WI	WI-MÄM42-077	42.017 and subsequent	-
3	Fuel Selector Redesign	Improved spare part possible for retrofit.	MÄM 42-118	See WI	WI-MÄM42-118	42.069 through 42.106, 42.108, 42.114 through 42.176, 42.178 and subsequent	-
4	Leading Edge Protection Center Wing	Prevents leading edge from wear	MÄM 42-145/a	D60-1127-10-55 D60-1127-10-56	WI-MÄM42-145	42.085, 42.114 through 42.176, 42.178 and subsequent	-
5	Safety Walk	Improved appearance and surface	MÄM 42-163	D60-1127-10-51_1 D60-1127-10-52_1	s. AMM Chapter 11-00-00	42.090 through 42.108, 42.114 through 42.176, 42.178 and subsequent	This safety walk can be used instead of Part No. D60-1127-10-51 to comply with MSB 42-006/1

V LIST OF OÄMs

No.	Subject	Improvement	Approved Change	Part No./ Kit No.	Accomplishment/ Instructions to comply with	Standard for S/N	Remark
1	Oversized Rod Assembly – MLG	Spare part for better MLG safety hook adjustment.	OÄM 42-081	See WI	WI-MÄM42-081	-	
2	Debris Protection	Surface protection of nose section in the area of the propellers to avoid damage due to impacts of propeller-ice.	OÄM 42-088 or OÄM 42-089 or OÄM 42-090	OÄM 42-088 (PM): D60-1123-20-21 D60-1123-20-22 D60-1123-20-23 OÄM 42-089 (3M): D60-1123-20-24 OÄM 42-090 (FRP): D60-5310-11-00 D60-5310-12-00	s. AMM-TR-OÄM-42-088 s. AMM-TR-OÄM-42-089 s. AMM-TR-OÄM-42-090	-	-
3	GDU 1040 P/N 011-00972-03	New version of display units	OÄM 42-082	011-00972-03	Garmin Software Version 13 or higher must be used (see MSB 42-008 latest effective version) Settings of units in accordance with AMM-TR-OÄM-42-082	-	-