

OPTIONAL SERVICE BULLETIN

OSB 42-144

I TECHNICAL DETAILS

I.1 Category

Optional.

I.1 Airplanes affected

Type: DA 42, DA 42 M,

Serial numbers: All airplanes with TAE 125-02-99 installed.

I.2 Date of effectivity

03-Feb-2022

I.3 Time of Compliance

At owner's discretion.

I.4 Subject

Modification of the breather line installation.

I.5 Reason

The engine manufacturer has changed the location of the breather line connection to the centrifugal oil separator. All new TAE 125-02-99 engines (engine serial number 02-02-04889 and subsequent) are produced with this modification.

This Service Bulletin describes the modification of the airframe breather line necessary for these engines on airplane already in service.

I.6 Concurrent Documents

None

I.7 Approval

The technical information or instruction contained in this document relate to the Design Change Advisory No. MÄM 42-1133, 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.8 Accomplishments / Instructions

See WI-OSB 42-144, latest effective issue.

Make all necessary entries in the airplane logs.

II Mass (Weight) and CG

The change in mass and CG is negligible.

II PLANNING INFORMATION

II.1 Material and Availability

See WI-OSB 42-144, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approx. 1 hour.

II.4 Credit

None.

II.5 Reference Documents

DA 42 Series, 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, in 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 42-144

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, SignPlease send the completed form to executionreports@diamondaircraft.com

WORK INSTRUCTION

WI-OSB 42-144

I GENERAL INFORMATION

I.1 Subject

Modification of the breather line installation.

I.2 Reference Documents

DA 42 Series Airplane Maintenance Manual, Doc. No. 7.02.01, 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 that, which is not described in this work instruction, must be done in accordance with the referenced maintenance manual.
- c) In case of doubt, contact Diamond Aircraft Industries GmbH.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

D60-7906-00-00_02

II.2 Special Tools

None.

II.3 Material

The material is included with the engine kit from Continental Aerospace.

Quantity	TAE Part Number	DAI Part Number	Description
2 (2x320mm)	NM-0000-0210701	D60-9079-06-20X20	Drain Hose I TAE 125-02-114
2 (2x400mm)	NM-0000-0210701	D60-9079-06-21X20	Drain Hose II TAE 125-02-114
2	NM-0000-0147001	D60-9079-06-22X20	Fitting Breather Line Bypass TAE125-02-114
2	NM-0000-0016201	RSGU1-30/20-W1	Clamp
2	NM-0000-0041001	RSGU1-15/15-W1	Clamp
2	NM-0000-0019801	DIN 933 – M6X25-8.8-gv	Screw
2	NM-0000-0018101	DIN 985 – M6-A2	Nut
4	NM-0000-0003801	DIN 125A-6,3-A2	Washer
4	NM-0000-0016901	ABA 19-28x12-W1	Hose Clamp
2	NM-0000-0077901	SHL 16 _70mm	Silicon Hose 70mm

III INSTRUCTIONS

1. Install the breather line on LH and RH engine installation:

Install the breather line in pre-assembled breather assy clamps in according to drawing D60-7906-00-00_02 View A and Detail B, tighten clamps and install drain line.

Use tie wraps to attach the drain line on the engine mount.

Install the chafing protector on the engine mount (SHL 16_70mm).



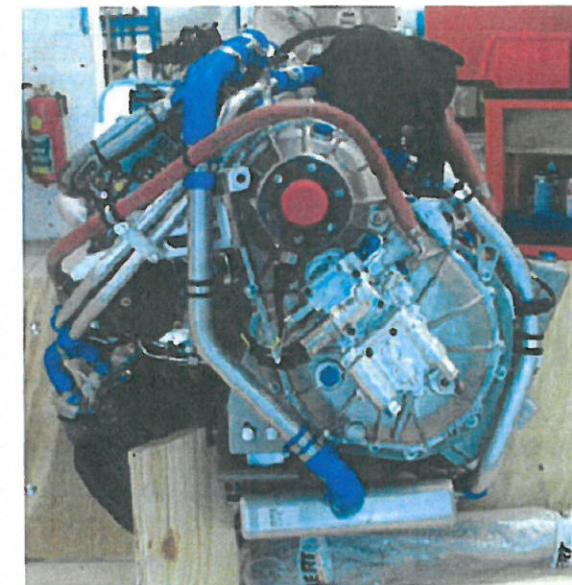
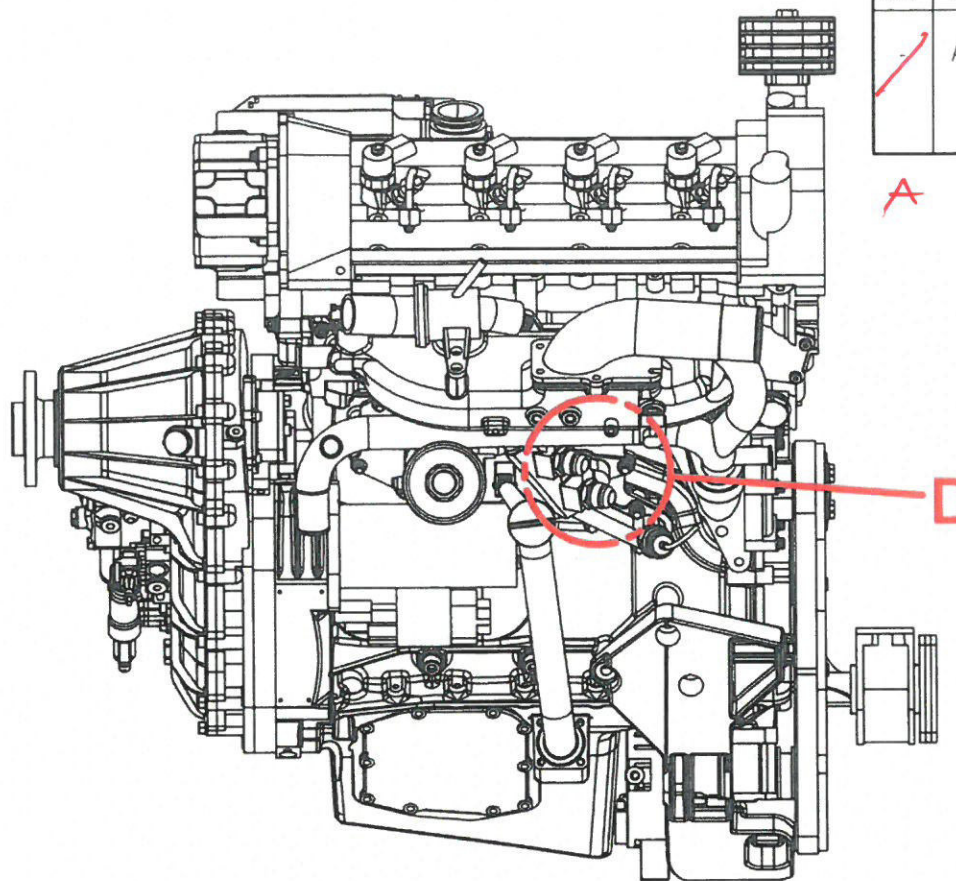
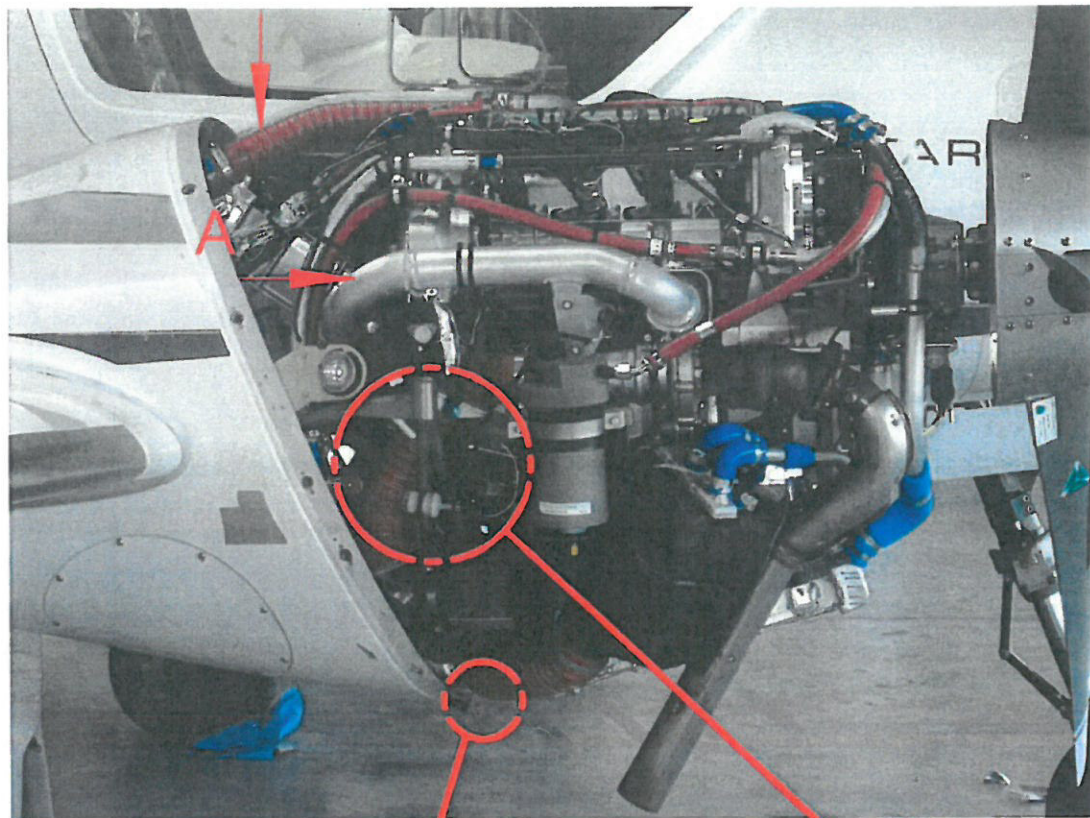
Chafing
Protector



Note: On the LH side the alternate Air Bowden Cable must be in front of the breather line.

2.	Clean working areas, check for foreign objects.
3.	Check all altered, replaced, repaired parts for proper function.
4.	Test all systems in working area for function.
5.	Install engine cowlings according to AMM section 71-10.
6.	Do all necessary entries in the airplane log. Record MÄM 42-1133 as installed in the modification status.

REVISION				
REV	SH	ZONE	DESCRIPTION	DATE
1	ALL	ALL	MÄM 42-1133 NEW DRAWING, SUPERSEDES D60-7906-00-00_01. CONVERSION TO NEW DRAWING STANDARD. PARTS REQUIRED FOR OLD OIL SEPARATOR REMOVED, PARTS REQUIRED FOR CENTRIFUGAL OIL SEPARATOR ADDED.	28.08.2019



After Installation



(4)

GENERAL NOTES

1. PRODUCED ACCORDING TO DPS 0.09.012-CHAPTER 6
2. PLACARD INSTALLATION FOR OIL HOSES BY LN 9105



PRINT IN COLOR

ITEM	QTY	PART NUMBER	DESCRIPTION	MAT. TYPE	MATERIAL SIZE	SPECIFICATION
20	1	SLH 16	Silicon Hose	Silicon	70 mm	
19	1	RSGU1-40/20-W1	CLAMP			
18	1	RSGU1-30/20-W1	CLAMP			
17	1	RSGU1-15/15-W1	CLAMP			
15	2	DIN 985 - M6-A2	NUT			
14	4	DIN 933 - M6x25-8.8-gv	SCREW			
13	2	DIN 933 - M5x16-8.8-gv	SCREW			
16	6	DIN 933 - M5x12-8.8-gv	SCREW			
12	4	DIN 9021 - 5	WASHER			
11	4	DIN 125A-5-3-A2-6,3-A2	WASHER			
10	8	DIN 125 - 5-200HV-gv	WASHER			
9	2	ABA 19-28x12-W1	HOSE CLAMP			
8	1	A 23310-01	HOSE			Titeflex
7	1	A 23291-01	HOSE			Titeflex
6	1	10598R	OIL COOLER			Steward Warner
5	1	D60-9079-06-22X20	FITTING BREATHER LINE BYPASS TAE125-02-114			Continental Aerospace
4	1	D60-9079-06-21X20	DRAIN HOSE II TAE 125-02-114			Continental Aerospace
3	1	D60-9079-06-20X20	DRAIN HOSE I TAE 125-02-114			Continental Aerospace
2	1	D60-9079-06-01	BREATHER LINE BYPASS			
1	2	D60-7906-00-31	SPACER			

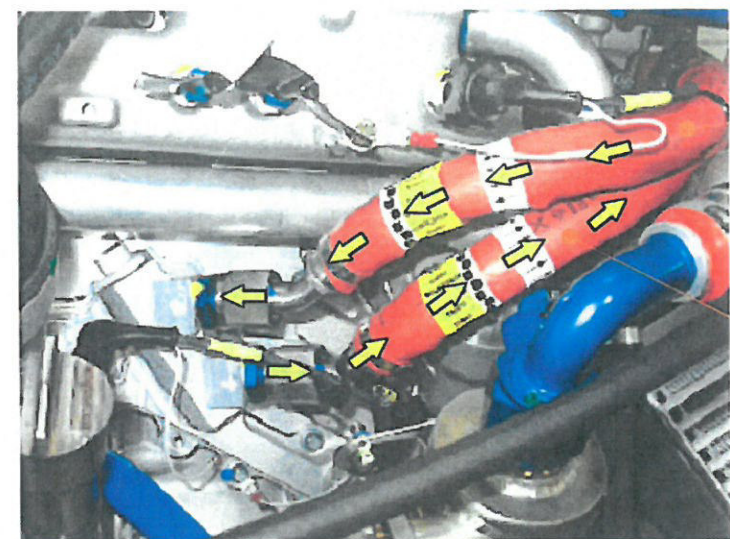
IDENTIFICATION MARKINGS DP-S-17-00001	FIRST ANGLE PROJECTION	DIMENSIONS METRIC / mm	PROJECT DA 42	Diamond Aircraft Industries GmbH
CLASSIFICATION: NONE	NAME / SIGN / DATE Stern 28.8.19	WEIGHT:	INTERCHANGEABLE PART NO	
IF NOT OTHERWISE SPECIFIED GEOMETRIC DIMENSIONING AND TOLERANCING ACC. TO ISO 2768- mK	DRAWN: C. Burger 24. SEP. 19	TITLE OIL SYSTEM INSTALL. TAE 125-02-99	REV A	
SCALE NTS	CHECKED: C. Burger 24. SEP. 19	DWG. NO. D60-7906-00-00_02	NEXT HIGHER ASSY D60-7106-01-00_02	
FORMAT A3	RELEASED: C. Burger 24. SEP. 19	FILENAME D60-7906-00-00_02.dft	SH 01 OF 02	
SOLID EDGE PDM NO				

Confidential 8 7 6 5 4 3 2 1

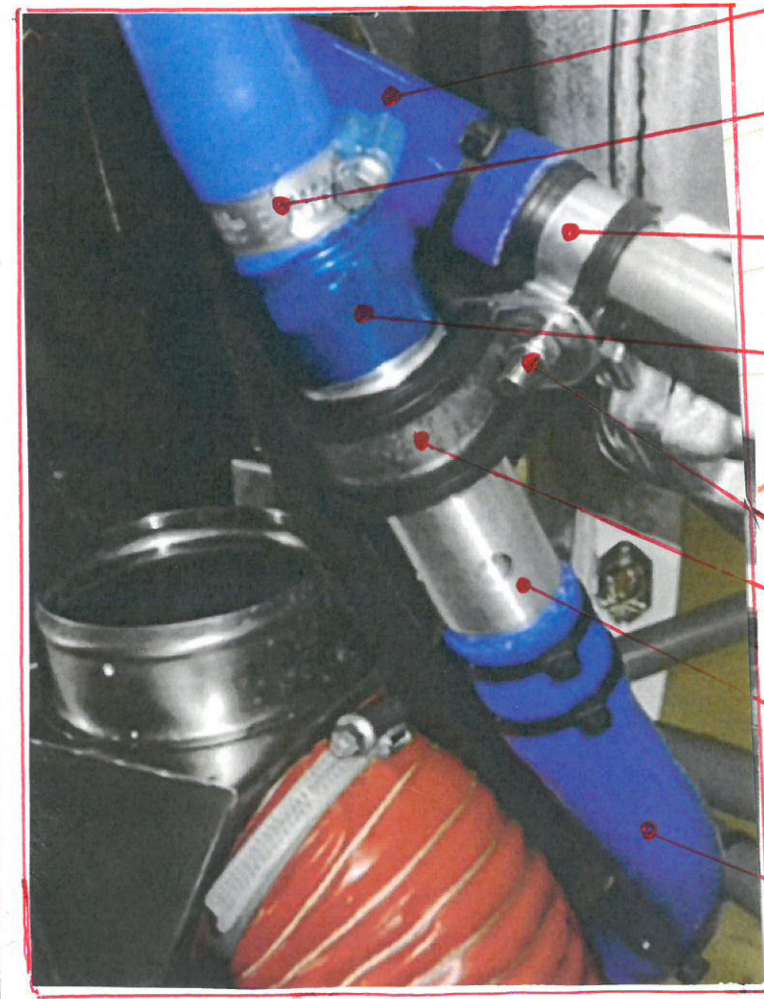
VIEW A



DETAIL D



DETAIL B



VIEW C



preliminary assembly
to
secure alignment
(see picture below)



Ref. Charge Air Inst.
D60-8126-00-00_01

IDENTIFICATION MARKINGS DP-S-17-00001		FIRST ANGLE PROJECTION	DIMENSIONS METRIC / mm		PROJECT DA 42	
CLASSIFICATION: NONE			NAME / SIGN / DATE		WEIGHT:	
IF NOT OTHERWISE SPECIFIED GEOMETRIC DIMENSIONING AND TOLERANCING ACC. TO ISO 2768- mK		3.2	DRAWN: 	TITLE OIL SYSTEM INSTALL. TAE 125-02-99		
SCALE NTS		CHECKED: 	DWG. NO. D60-7906-00-00_02			
FORMAT A3		RELEASED: 	NEXT HIGHER ASSY D60-7106-01-00_02			
SOLID EDGE PDM NO		FILENAME D60-7906-00-00_02.dft				REV A
		SH 02 OF 02				

1 Install chafing protection on engine mount with tie wraps.

8 7 6 5 4 3 2 1 Confidential