

TEMPORARY REVISION

AMM-TR-MÄM 42-1133

Centrifugal Oil Separator on TAE 125-02-99

This Temporary Revision AMM-TR-MÄM 42-1133 is approved in conjunction with the Mandatory Design Change Advisory MÄM 42-1133/a and is valid in conjunction with the Airplane Maintenance Manual (AMM) until this Temporary Revision has been incorporated into the AMM.

The limitations and information contained herein either supplement or, in the case of conflict, override those in the AMM.

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

Doc. No.	Section	Affected Pages
7.02.01	05-28-00	6a, 6aa, 12a, 12aa
	71-00-00	212a, 212aa, 227a, 227aa
	71-70-00	1a, 1aa, 3a, 4a
	79-00-00	1a, 2a, 3a, 4a

Instruction

- Print this document on yellow paper (double-sided).
- Insert this cover page as the first page of the AMM.
- Insert the other pages of this Temporary Revision adjacent to or in front of the corresponding AMM pages.

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CHAPTER 05
TIME LIMITS AND MAINTENANCE CHECKS

Section 05-28-00

Maintenance Checklist DA 42 Engines

3. Maintenance Checklist Engines

A. LH Engine

The following row is amended to read:

		Interval					
	Inspection Items, LH Engine	100	200	1000	2000	Time	Initials
13.	Examine the oil radiator (if TAE 125-01 or TAE 125-02-99 with oil separator tank is installed). Refer to Chapter 79. – Look specially for leakage, damage, and insecure attachment. – Make sure the cooling fins are not blocked.		X	X	X		

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B. RH Engine

The following row is amended to read:

		Interval					
	Inspection Items, RH Engine	100	200	1000	2000	Time	Initials
13.	Examine the oil radiator (if TAE 125-01 or TAE 125-02-99 with oil separator tank is installed). Refer to Chapter 79. – Look specially for leakage, damage, and insecure attachment. – Make sure the cooling fins are not blocked.		X	X	X		

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CHAPTER 71
POWER PLANT
Maintenance Practices

3. Remove/Install the Engine

B. Remove the Engine

(2) TAE 125-02-99 Engine Installed (MÄM 42-198 carried out)

The following row is amended to read:

	Detail Steps/Work Items	Key Items/References
(24)	Remove the oil separator (if the oil separator tank is installed).	Refer to Section 79-00.

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C. Install the Engine**(2) TAE 125-02-99 Engine (MÄM 42-198 carried out)**

The following rows are amended to read:

	Detail Steps/Work Items	Key Items/References
	(8) Install the oil separator (if the oil separator tank is installed).	Refer to Section 79-00.
	(9) Connect the oil hoses between the oil radiator and the engine (if the oil separator tank is installed).	At the oil filter housing. Refer to Section 79-00.

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Section 71-70

Engine Drains

The following paragraphs are amended to read:

1. General

The DA 42 has a breather for the oil separator tank and an overflow for the liquid coolant system expansion tank for each engine nacelle.

Refer to Chapter 72 for more data about the engine oil system and refer to Chapter 75 for more data about the engine liquid cooling system.

2. Description

Figure 1 shows the engine drains for the TAE 125-01 engine. Figure 2 shows the engine nacelle drains for the TAE 125-02-99 engine with oil separator tank. Figure 3 shows the engine nacelle drains for the TAE 125-02-99 and -114 engines with centrifugal oil separator.

The breather hose connects to the outlet on top of the oil separator. A worm-drive-clamp secures the hose at the outlet. The other end of the breather hose passes through a guide tube at the bottom of the related engine nacelle to atmosphere. The hoses are secured to the engine mounting frame and the drain hose for the liquid cooling expansion tank with a P-clamp and cable ties.

The drain hose for the liquid cooling expansion tank connect to an outlet at the filler cap for the expansion tank. A worm-drive-clamp secures the hose at the outlet. The other end of the drain hose passes through a guide tube at the bottom of the related engine nacelle to atmosphere. The hose is secured to the engine mounting frame and the oil separator breather hose with a P-clamp and cable ties.

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The following figure is amended to read:

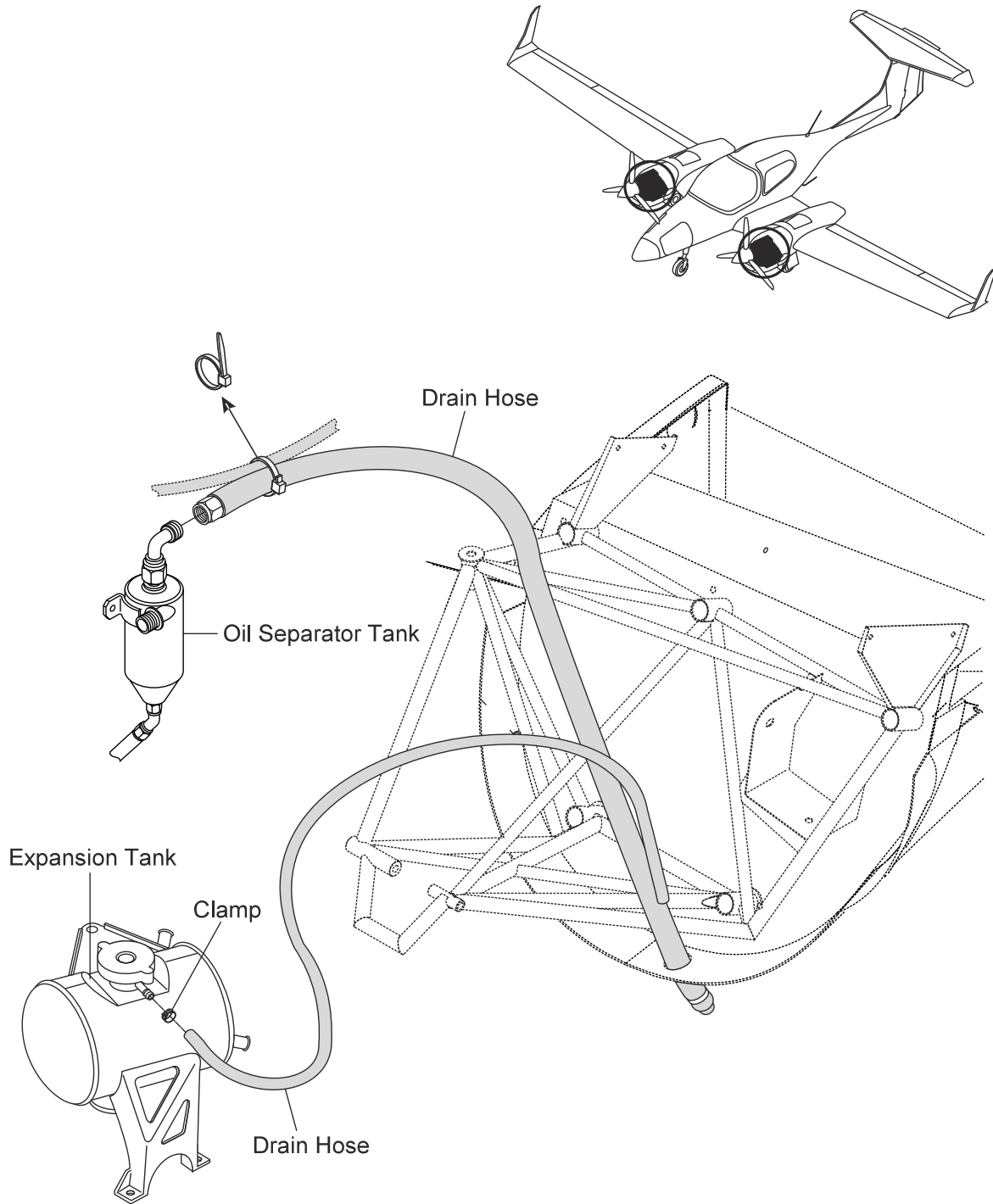


Figure 2: Engine Nacelle Drains (TAE 125-02-99 Engine with Oil Separator Tank)

The following figure is amended to read:

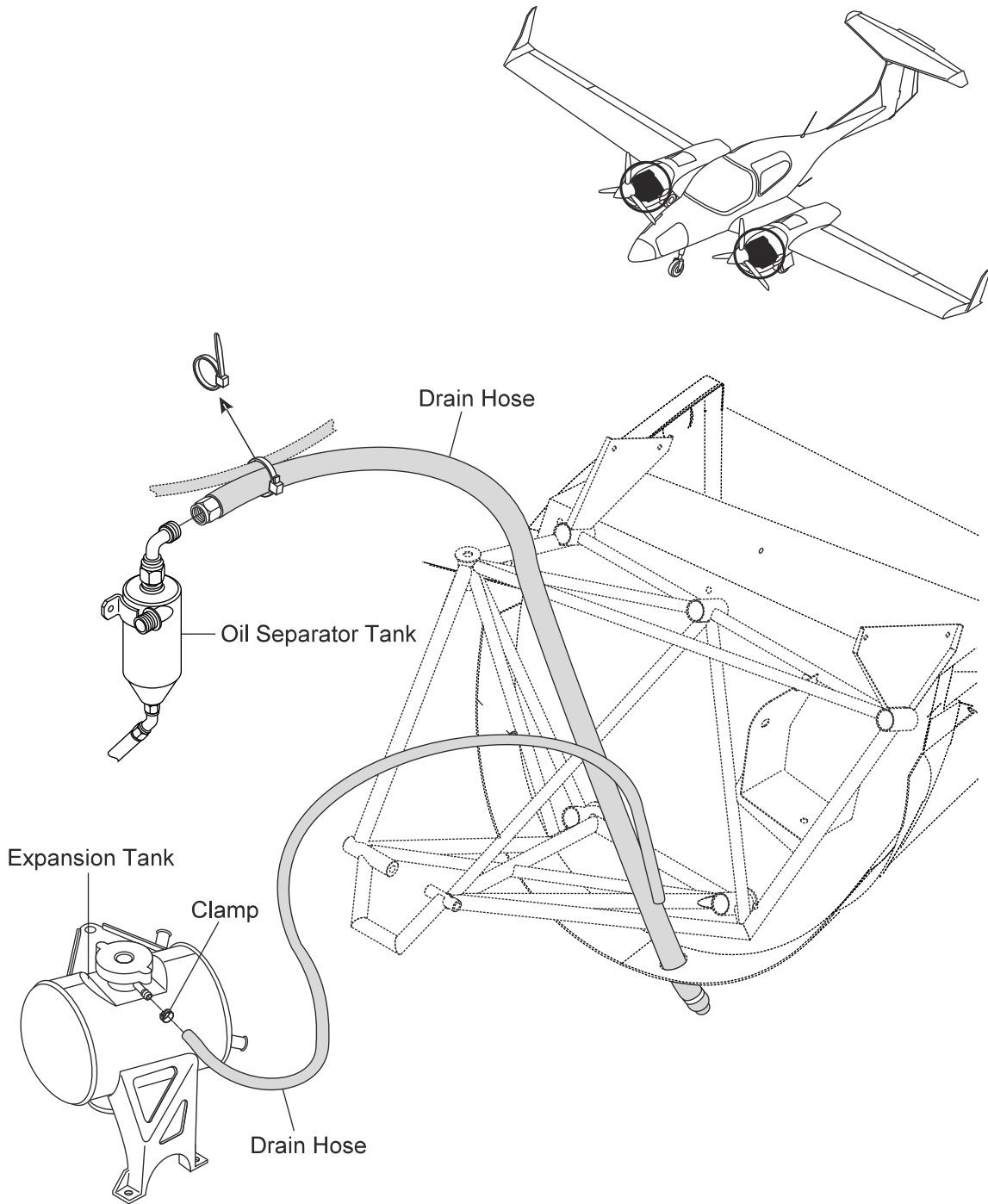


Figure 3: Engine Nacelle Drains (TAE 125-02-99 and -114 Engines
with Centrifugal Oil Separator)

CHAPTER 79

OIL COOLING

The following paragraphs are amended to read:

1. General

This Section tells you about the airframe parts of the engine oil system. These are the only parts that you can replace except the engine and gearbox oil filters. Refer to Chapter 72 for data about the oil filters.

2. Engine Oil System

Figure 1 shows the oil system schematic diagram for TAE 125-01 and TAE 125-02-99 engines with oil separator tank. Figure 2 shows the oil system schematic diagram for the TAE 125-02-99 and -114 engines with centrifugal oil separator. Each engine has the usual wet-sump lubrication system. The bottom part of the engine crankcase makes the sump. An oil filler tube with a screw cap connects to the crankcase on the left of the engine.

Two flexible hoses adjacent to the engine oil filter housing connect to the oil radiator. The oil cooler is located to the rear of the engine nacelle, at the top. If the TAE 125-02-99 or the TAE 125-02-114 engine with the centrifugal oil separator is installed the engine oil is cooled via an integrated oil/coolant heat exchanger.

The oil breather system has an oil pre-separator located on the engine crankcase adjacent to the oil filler. A flexible hose connects the oil pre-separator to the oil separator. The oil separator is located at the left of the engine behind the oil filter tube. A flexible hose from the top of the oil separator vents blow-by gases and any remaining oil mist overboard. If the TAE 125-02-99 or the TAE 125-02-114 engine with the centrifugal oil separator is installed the oil separator is an integral part of the engine (see Figure 2). A small flexible hose connects the bottom of the oil separator to the turbo charger cage tank. An oil pump at the gear box pumps the oil from the turbo charger cage tank to the engine sump.

An oil pump in the engine takes oil from the sump. The oil flows through a filter and oil thermostat to the oil cooler. Air passing through the oil cooler cools the oil. The cool oil returns to the engine. Oil galleries in the engine take the oil to all bearings. If the oil is colder than 80 °C, the oil thermostat sends the oil directly to the engine oil galleries.

The following figure is amended to read:

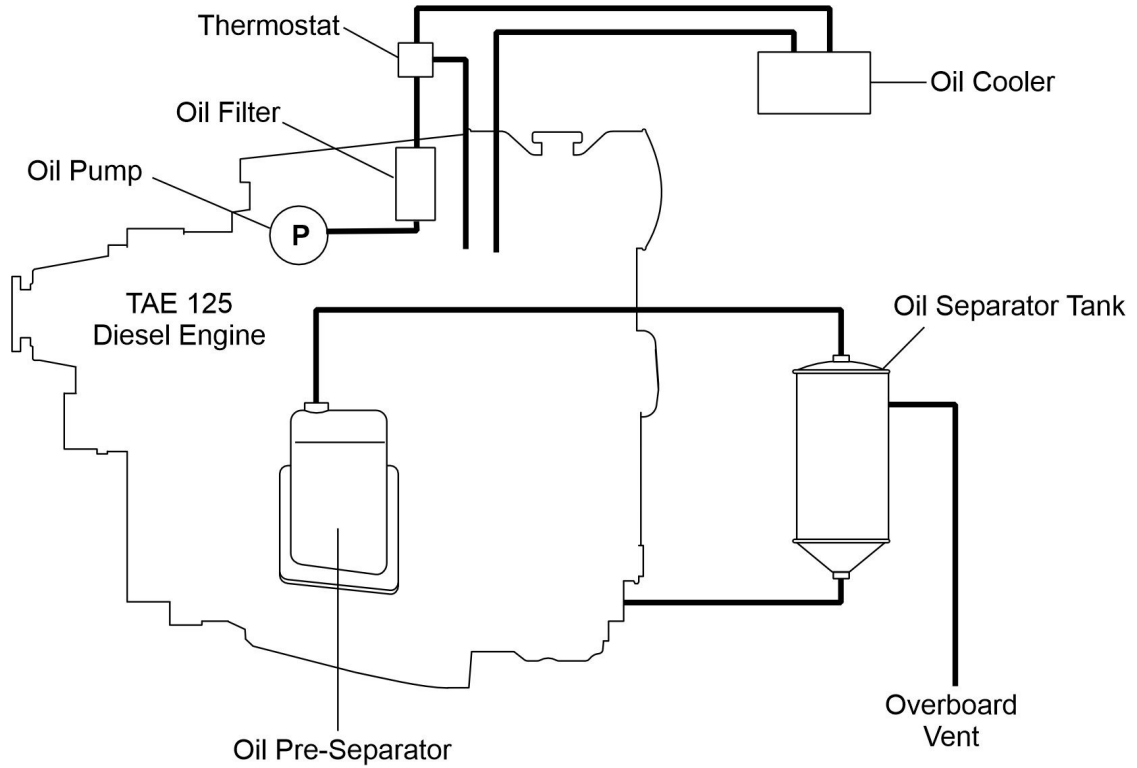


Figure 1: Engine Oil System Schematic Diagram for TAE 125-01 and TAE 125-02-99 Engines with the Oil Separator Tank

The figure description is amended to read:

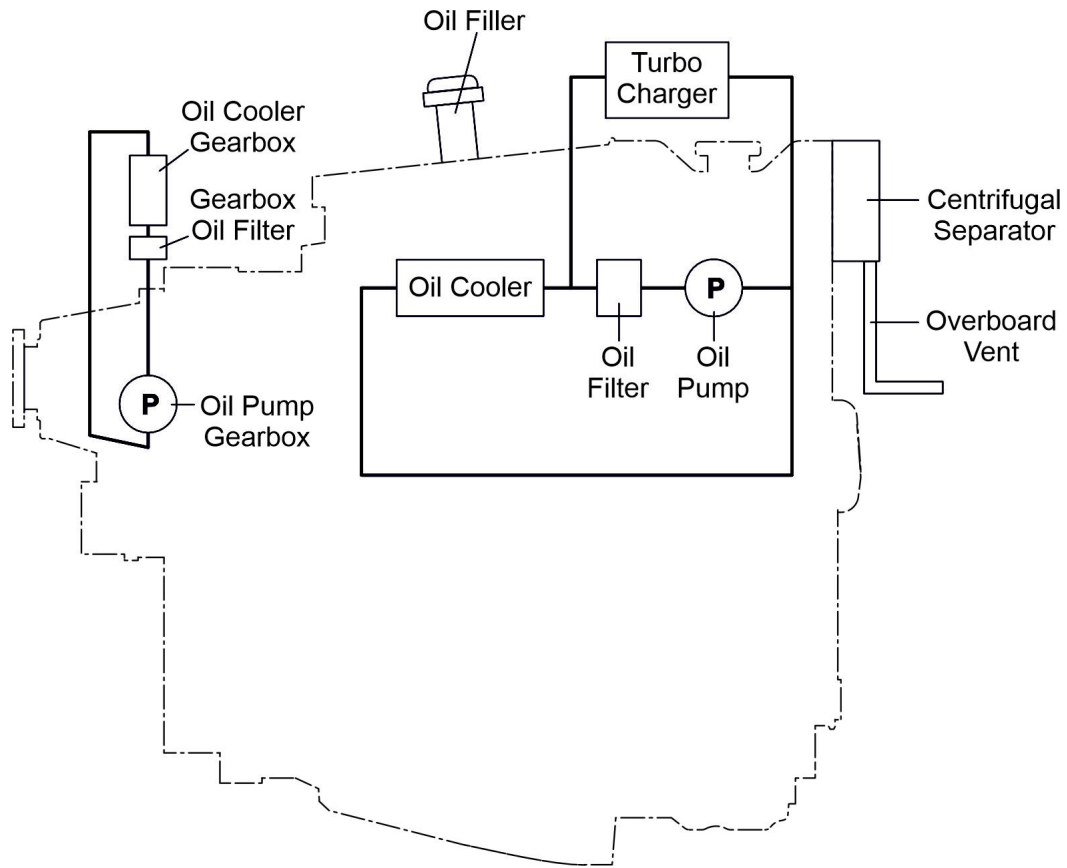


Figure 2: Engine Oil System Schematic Diagram for TAE 125-02-99 or
TAE 125-02-114 Engines with Centrifugal Oil Separator

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