

### **TEMPORARY REVISION**

## AMM-TR-MÄM 42-1219/a

## supersedes AMM-TR-MÄM 42-1219

## **New Fuel Pump**

This Temporary Revision AMM-TR-OÄM 42-1219/a is approved in conjunction with the Mandatory Design Change Advisory MÄM 42-1219/c 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
7.02.15	20-00-00	1a, 1aa
	20-80-00	1, 2
	28-20-00	222a, 222b, 222c, 222d, 222e, 222ee
	28-21-00	219a, 219b, 219c, 219cc

#### Instruction

- Print this document double-sided on yellow paper (odd pages and "a" pages on front sides, even pages and "aa" pages on reverse sides).
- Insert this cover page as the first page of the AMM.
- Insert the other pages of this Temporary Revision in front of the corresponding AMM pages.





#### **AFFECTED CHAPTERS:**

#### **CHAPTER 20 STANDARD PRACTICES**

#### 1. General

The following Section is added to the AMM:

- Section 20-80. Standard Practices - Low Pressure Fuel Pumps Assembly.





#### Section 20-80 **Standard Practices - Low Pressure Fuel Pump Assembly**

#### 1. General

This Section gives you data about the special torque values for the DA 42 NG airplane.

Note: Use the standard torque values where no specific values are given.



#### 2. Special Torque Values

Connection/Parts	Torque (Nm)	Torque (lbf.ft)
Hollow bolts torques.	D-08: 18 ± 2	D-08: 13.3 ± 1.5
	D-06: 18 ± 2	D-06: 13.3 ± 1.5
Prefilter torque.	18 ± 2	13.3 ± 1.5
Negative clamp torque.	1.6 - 2.0	1.2 - 1.5
Positive clamp torque.	1.2 - 1.6	0.9 - 1.2

#### If MÄM 42-480 is installed:

Connection/Parts	Torque (Nm)	Torque (lbf.ft)
Hollow bolts torques.	18 ± 2	13.3 ± 1.5
Plug nuts torque.	18 ± 2	13.3 ± 1.5
Prefilter torque.	18 ± 2	13.3 ± 1.5
Check valve torque.	18 ± 2	13.3 ± 1.5
Negative clamp torque.	1.6 - 2.0	1.2 - 1.5
Positive clamp torque.	1.2 - 1.6	0.9 - 1.2

#### If MÄM 42-1219 is installed:

	Connection/Parts	Torque (Nm)	Torque (lbf.ft)
	Pump fitting torque.	17 - 25	12.5 - 18.4
	Hollow bolts torque.	18 ± 2	13.3 ± 1.5
	Plug nuts torque.	18 ± 2	13.3 ± 1.5
	Prefilter torque.	18 ± 2	13.3 ± 1.5
	Check valve torque.	18 ± 2	13.3 ± 1.5
I	Negative clamp torque.	1.6 - 2.0	1.2 - 1.5
	Positive clamp torque.	1.2 - 1.6	0.9 - 1.2
I	Hose clamp torque.	3 - 3.5	2.2 - 2.6



# CHAPTER 28 FUEL Section 28-20 Fuel Distribution

#### **MAINTENANCE PRACTICES**

#### 7. Remove/Install the Low Pressure Fuel Pumps

The procedure is amended to read:

#### **B. Install Low Pressure Fuel Pumps**

	Detail Steps/Work Items	Key Items/References
(1)	Install the low pressure fuel pump assembly:	Refer to Figure 6.
	<ul> <li>Install the aluminum washers, the two prefilters, the solid bridges, and the hollow bolts.</li> </ul>	Hollow bolts torque: D-08: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.) D-06: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
		Prefilter torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
	<ul> <li>Install the fuel pumps assembly to the bracket.</li> </ul>	
	<ul> <li>Connect the electric wires to the fuel pumps.</li> </ul>	Negative clamp torque: 1.6 - 2.0 Nm (1.2 - 1.5 lbf.ft.)
		Positive clamp torque: 1.2 - 1.6 Nm (0.9 - 1.2 lbf.ft.)
	<ul> <li>Connect the fuel hoses to the solid bridges.</li> </ul>	
	<ul> <li>Secure hollow bolts with safety wire.</li> </ul>	



	Detail Steps/Work Items	Key Items/References
(2)	Install the low pressure fuel pump assembly (if MÄM 42-480 is installed):	Refer to Figure 7.
	<ul> <li>Install the aluminum washers, the two prefilters, the solid bridge, and the two</li> </ul>	Hollow bolts torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
	hollow bolts.	Plug nuts torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
		Prefilter torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
	<ul> <li>Install the washers, the two check valves,</li> <li>the solid bridge, and the two plug nuts.</li> </ul>	Check valve torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
	<ul> <li>Secure plug nuts with safety wire.</li> </ul>	
	<ul> <li>Install the fuel pumps assembly to the bracket.</li> </ul>	
	<ul> <li>Connect the electric wires to the fuel pumps.</li> </ul>	Negative clamp torque: 1.6 - 2.0 Nm (1.2 - 1.5 lbf.ft.)
		Positive clamp torque: 1.2 - 1.6 Nm (0.9 - 1.2 lbf.ft.)
	<ul> <li>Connect the fuel hoses to the solid bridges.</li> </ul>	
	<ul> <li>Secure hollow bolts with safety wire.</li> </ul>	



	Detail Steps/Work Items	Key Items/References
(3)	Install the low pressure fuel pump assembly (if MÄM 42-1219 is installed):	Refer to Figure 7A.
	<ul> <li>Install the fittings and copper washers provided with the fuel pumps.</li> </ul>	Pump fitting torque: 17 - 25 Nm (12.5 - 18.4 lbf.ft.)
	<ul> <li>Install the aluminum washers (new), the two pre-filters, the solid bridge, and the two</li> </ul>	Hollow bolts torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
	hollow bolts.	Plug nuts torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
ı		Prefilter torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
I	<ul> <li>Install the washers, the two check valves,</li> <li>the solid bridge, and the two plug nuts.</li> </ul>	Check valve torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
	<ul> <li>Secure plug nuts and hollow bolts with safety wire.</li> </ul>	
	<ul> <li>Install the T-fitting, the bypass valve and the bypass fuel line.</li> </ul>	
! !	<ul> <li>Install the fuel pumps assembly to the bracket.</li> </ul>	Hose clamp torque: 3 - 3.5 Nm (2.2 - 2.6 lbf.ft.)
	<ul> <li>Connect the electric wires to the fuel pumps.</li> </ul>	Negative clamp torque: 1.6 - 2.0 Nm (1.2 - 1.5 lbf.ft.)
1	<ul> <li>Connect the fuel hoses to the bypass valve</li> </ul>	Positive clamp torque: 1.2 - 1.6 Nm (0.9 - 1.2 lbf.ft.)
	and the T-fitting.	



	Detail Steps/Work Items	Key Items/References
(4)	Do a test for leaks of the filter assembly:	
	<ul> <li>Make sure that there is fuel in the related fuel tank.</li> </ul>	
	<ul> <li>Reset the circuit breaker of the fuel pumps.</li> </ul>	
	<ul> <li>Set the FUEL SELECTOR lever to the related tank.</li> </ul>	
	<ul> <li>Examine the filter assembly for leaks while both low pressure fuel pumps are running.</li> </ul>	



#### The following figure is added:

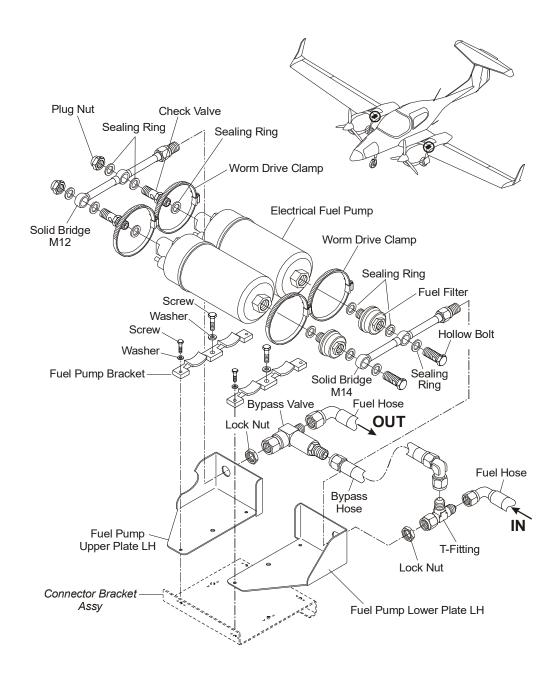


Figure 7A: Fuel Pumps Assembly (if MÄM 42-1219 is installed)





# Section 28-21 Fuel Distribution (if MÄM 42-600 is installed)

#### **MAINTENANCE PRACTICES**

#### 7. Remove/Install the Low Pressure Fuel Pumps

The procedure is amended to read:

**B. Install Low Pressure Fuel Pumps** 

	Detail Steps/Work Items	Key Items/References
(1)	Install the low pressure fuel pump assembly:	Refer to Figure 8.
	<ul> <li>Install the aluminum washers (new), the two pre-filters, the solid bridge, and the two</li> </ul>	Hollow bolts torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
hollow bolts.	hollow bolts.	Plug nuts torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
		Prefilter torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
	<ul> <li>Install the washers, the two check valves, the solid bridge, and the two plug nuts.</li> </ul>	Check valve torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
	<ul> <li>Secure plug nuts and hollow bolts with safety wire.</li> </ul>	
	<ul> <li>Install the T-fitting, the bypass valve and the bypass fuel line.</li> </ul>	
	<ul> <li>Install the fuel pumps assembly to the bracket.</li> </ul>	
	<ul> <li>Connect the electric wires to the fuel pumps.</li> </ul>	Negative clamp torque: 1.6 - 2.0 Nm (1.2 - 1.5 lbf.ft.)
		Positive clamp torque: 1.2 - 1.6 Nm (0.9 - 1.2 lbf.ft.)
	<ul> <li>Connect the fuel hoses to the bypass valve and the T-fitting.</li> </ul>	



	(2)	Install the low pressure fuel pump assembly (if MÄM 42-1219 is installed):	Refer to Figure 8A.
 		<ul> <li>Install the fittings and copper washers provided with the fuel pumps.</li> </ul>	Pump fitting torque: 17 - 25 Nm (12.5 - 18.4 lbf.ft.)
		<ul> <li>Install the aluminum washers (new), the two pre-filters, the solid bridge, and the two</li> </ul>	Hollow bolts torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
		hollow bolts.	Plug nuts torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
I			Prefilter torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
I		<ul> <li>Install the washers, the two check valves, the solid bridge, and the two plug nuts.</li> </ul>	Check valve torque: 18 ± 2 Nm (13.3 ± 1.5 lbf.ft.)
		<ul> <li>Secure plug nuts and hollow bolts with safety wire.</li> </ul>	
		<ul> <li>Install the T-fitting, the bypass valve and the bypass fuel line.</li> </ul>	
		<ul> <li>Install the fuel pumps assembly to the bracket.</li> </ul>	Hose clamp torque: 3 - 3.5 Nm (2.2 - 2.6 lbf.ft.)
I		<ul> <li>Connect the electric wires to the fuel pumps.</li> </ul>	Negative clamp torque: 1.6 - 2.0 Nm (1.2 - 1.5 lbf.ft.)
ı			Positive clamp torque: 1.2 - 1.6 Nm (0.9 - 1.2 lbf.ft.)
		<ul> <li>Connect the fuel hoses to the bypass valve and the T-fitting.</li> </ul>	
	(3)	Do a test for leaks of the filter assembly:	
		<ul> <li>Make sure that there is fuel in the related fuel tank.</li> </ul>	
		- Reset the circuit breaker of the fuel pumps.	
		<ul> <li>Set the FUEL SELECTOR lever to the related tank.</li> </ul>	
		<ul> <li>Examine the filter assembly for leaks while both low pressure fuel pumps are running.</li> </ul>	



#### The following figure is added:

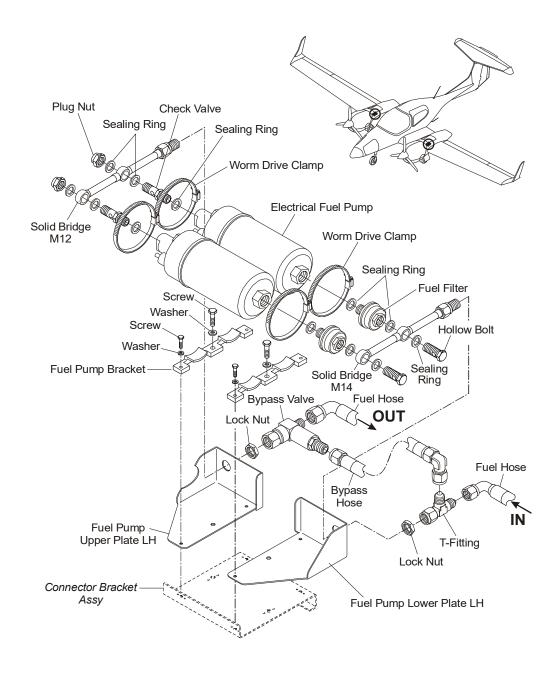


Figure 8A: Fuel Pumps Assembly (if MÄM 42-1219 is installed)

