

# SERVICE INFORMATION

## NO. SI 42NG-070

**NOTE:** SI's are used only:  
1) To distribute information from DAI to our customers.  
2) To distribute applicable information/documents from our suppliers to our customers with additional information.  
Typically there is no revision service for SI's. Each new information or change of that will be sent along with a new SI.

### I. TECHNICAL DETAILS

#### 1.1 Airplanes affected:

All DA 42 NG and DA 42 M-NG airplanes

#### 1.2 Subject:

Austro Engine Mandatory Service Bulletin No. MSB-E4-017  
ATA-Code: 72-00

#### 1.3 Reason:

Austro Engine has issued the Mandatory Service Bulletin MSB-E4-017 prescribing a check and if necessary the replacement of the Timing Chain on E4 engines.

#### 1.4 Information:

For detailed technical information refer to Austro Engine Mandatory Service Bulletin No. MSB-E4-017 which is applicable without any further additions or restrictions.

### II. OTHERS

Austro Engine Mandatory Service Bulletin No. MSB-E4-017 is attached to this Service Information.

In case of doubt contact Austro Engine GmbH



Mandatory Service Bulletin  
No. MSB-E4-017

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# MANDATORY SERVICE BULLETIN

## No. MSB-E4-017

### 1. BASIC INFORMATION

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#### 1.1. SUBJECT

Check/Exchange of timing chain.

#### 1.2. ENGINES AFFECTED

Type: E4 Engine  
Serial numbers: All

#### 1.3. REASON

On few engines considerable wear of the timing chain has been detected, which could lead to a fraction of the timing chain and a subsequent loss of power. A check of the condition of the timing chain has been defined including instructions for exchanging the timing chain and the chain wheel if applicable. Refer to the maintenance manual of the E4 engine for details.

#### 1.4. TIME OF COMPLIANCE

Ensure that Temporary Revision MM-TR-MDC-E4-325 is incorporated into the maintenance manual E4.08.04. Refer to section 05-20-00 "Schedule Maintenance Inspections and Checks" of the maintenance manual of the E4 engine for details.



#### **CAUTION:**

Engines with more than 1000 hours operation time have to conduct a check of the timing chain according to section 85-40-40 of the maintenance manual within the next 100 hours.

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## 1.5. CONCURRENT DOCUMENTS / REFERENCES

Maintenance Manual – Doc. No.: E4.08.04, latest effective issue with  
Temporary Revision MM-TR-MDC-E4-325 incorporated.

## 1.6. OTHER PUBLICATIONS AFFECTED

None.

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## 2. TECHNICAL DETAILS

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Ensure that Temporary Revision MM-TR-MDC-E4-325 is incorporated into the maintenance manual E4.08.04. Refer to instructions given in the maintenance manual section 85-40-40 "Check of timing chain".

### 2.1. ILLUSTRATIONS

None.

### 2.2. MASS (WEIGHT)

Not affected.

### 2.3. APPROVAL STATEMENT

The technical content of this document has been approved under the authority of DOA No. EASA.21J.399.

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### 3. PLANNING INFORMATION

#### 3.1. MATERIAL & AVAILABILITY

Required material for checking the tension of the timing chain:

Amount	Part Name	Part Number	Rev. Number
1	Seal Boost Pressure Manifold	E4A-04-000-004	000
1	Seal Drive Train	E4A-75-600-401	000

Required material if the timing chain and the timing chain wheel have to be replaced:

Amount	Part Name	Part Number	Rev. Number
6	Toothed Washer	DIN 6797 A6,4-VZ	---
2	Ring Seal	DIN 7603-C12x16x2 CU	---
4	Ring Seal	E4A-03-000-801	000
4	Screw (Injector Fixing)	E4A-03-000-802	000
1	Seal Boost Pressure Manifold	E4A-04-000-004	000
3	O-Ring Oil Return Line	E4A-05-000-103	000
1	Seal Oil Return Line	E4A-05-000-104	000
1	Chain wheel	E4A-07-000-101	000
3	Screws for chain wheel	E4A-07-000-402	000
3	Screws for assy sensor housing	E4A-22-000-803	000
1	Timing chain, open version	E4A-75-100-000	020

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### 3.2. SPECIAL TOOLS

Required material for checking the tension of the timing chain:

Amount	Part Name	Part Number
1	Timing chain measuring tool	AEP-00150

Required material if the timing chain and the timing chain wheel have to be replaced:

Amount	Part Name	Part Number
1	Camshaft adjusting tool	AE300T009
1	Sealant Pistol	AE300T027
1	Sealant (black)	AE300T028
1	Grease for Injectors	AE300T029
1	Chain guiding bar	AEP-00139
1	Chain opening tool	AEP-00158
1	Chain closing tool	AEP-00159
1	Chain coupling	AEP-00160

### 3.3. LABOR EFFORT

Not specified; conducted during line maintenance.

### 3.4. CREDIT

None.

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## 4. REMARKS

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### **NOTE:**

- All measures must be carried out by a certified engine station and certified engine mechanics.
- The accomplishment of the instructions shown under section 2 TECHNICAL DETAILS must be confirmed in the respective engine log book.
- The accomplishment of the instructions must be carried out within the time of compliance according to section 1.4.
- In case of doubt please contact the Austro Engine GmbH – After Sales Support (e-mail: [service@austroengine.at](mailto:service@austroengine.at); Tel: +43 2622 23000 2525).
- For credit information contact Austro Engine GmbH – After Sales Support (e-mail: [service@austroengine.at](mailto:service@austroengine.at); Tel: +43 2622 23000 2525).

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## 5. EXPLANATORY NOTES

### 5.1. SYMBOL EXPLANATION



**WARNING:** Disregarding these safety rules can cause personal injury or even death.



**CAUTION:** Disregarding these special instructions and safety measures can cause damage to the engine or other components.



**NOTE:** Additional note or instruction for better understanding of an instruction.

## 6. APPENDIX

None

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