



Mandatory Service Bulletin  
No. MSB-E4-020

Austro Engine GmbH  
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# MANDATORY SERVICE BULLETIN No. MSB-E4-020

## 1. BASIC INFORMATION

### 1.1. SUBJECT

Inspection of gearbox housing

### 1.2. ENGINES AFFECTED

Engine affected: E4 Series

Serial numbers affected: All engines having gearbox with the part no.:  
E4A-70-000-000 Rev.070 up to and including Rev.101 installed

### 1.3. REASON

On few gearboxes a burr between the sealing surface and plane plug screw surface of the filter housing has been detected which could damage the O-ring. A damaged O-ring could lead to leakage between the sealing surface and the gearbox filter plug screw.

### 1.4. TIME OF COMPLIANCE

If a leakage at the stated position of the gearbox housing is detected or as part of the next 100h maintenance check, but not later than 30<sup>th</sup> June, 2016.

### 1.5. CONCURRENT DOCUMENTS / REFERENCES

- Work Instruction – Doc. No.: WI-MSB-E4-020, Rev. 0
- Maintenance Manual – Doc. No.: E4.08.04, latest effective issue

### 1.6. OTHER PUBLICATIONS AFFECTED

None.

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## 2. TECHNICAL DETAILS

### 2.1. ACCOMPLISHMENT / INSTRUCTIONS

Inspect the gearbox filter housing for an existing burr between the sealing surface and the plane plug screw surface if a leakage at the stated position of the gearbox housing is detected or as part of the next 100h maintenance check.

1. Remove the Gearbox Oil Filter according to Maintenance Manual E4.08.04 Chapter 85-10-31.
2. Inspect the O-Ring for damages. A damaged O-ring is an indication for a possible existing burr at the sealing surface.



Discard the O-Ring!

3. Conduct a visual inspection for an existing burr at the end of the chamfer of the thread where the filter plug screw is installed. Compare to the example given below:



**Fig. 1: Gearbox filter housing**




**Fig. 2: Detail (burr detected - within the red oval)**



If a burr is existing, the gearbox filter housing must be re-worked according to Work Instruction WI-MSB-E4-020 Rev.0.

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4. Install the Gearbox Oil Filter according to Maintenance Manual E4.08.04. Chapter 85-10-32.

 Only use a new O-ring!

5. Perform an engine ground run according to Maintenance Manual E4.08.04 Chapter 71-00-03.
6. After ground run inspect the gearbox oil system for leakage.

## 2.2. ILLUSTRATIONS

None.

## 2.3. MASS (WEIGHT)

Not affected.

## 2.4. 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

Amount	Part Name	Part Number	Rev. Number
1	O-ring	DIN 3771 26x2.0 FPM 70 (use alternatively FPM 75)	---

#### 3.2. SPECIAL TOOLS

Required material if the plane surface at the gearbox housing must be re-worked:

Amount	Part Name	Part Number
1	Deburring tool	AEP-00208-01
1	Special gearbox filter housing plug screw	AEP-00208-02

#### 3.3. LABOR EFFORT

Not specified; conducted during line maintenance.

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## 4. REMARKS

### **NOTE:**

- All measures must be carried out by a certified engine station and certified engine mechanics.
- The accomplishment of the instructions shown under chapter 2.1 must be confirmed in the respective engine log book.
- The accomplishment of the instructions must be carried out within the time of compliance according chapter 1.
- 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)

## 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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