



# MANDATORY SERVICE BULLETIN

No. MSB-E4-022/2  
SUPERSEDES MSB-E4-022/1

## 1. BASIC INFORMATION

### 1.1. SUBJECT

Waste Gate Control Rod.

### 1.2. ENGINES AFFECTED

Engine type: E4  
Engine model(s): E4, E4P  
Serial number(s): all

### 1.3. REASON

Waste gate control rods with insufficient fatigue life have been identified. Failure of the waste gate control rod will lead to a partial loss of power.  
As precautionary action Austro Engine prescribes a time limit for the waste gate controllers in service.

The investigation is ongoing and this Service Bulletin will be revised accordingly.

### 1.4. TIME OF COMPLIANCE

Initial action:

- Upon reaching 250 flight hours in service time of the waste gate controller
- For E4-B and E4-C engines installed on DA 42 M-NG with external containers and E4-A engines:  
For waste-gate controllers with more than 200 flight hours as of 27-Nov-2017 within the next 50 flight hours, but not later than 28-Feb-2018 if 250 flight hours in service time of the waste gate controller are exceeded as of 28-Feb-2018.
- All other engines:  
For waste-gate controllers with more than 200 flight hours as of 27-Nov-2017 within the next 100 flight hours, but not later than 31-May-2018 if 250 flight hours in service time of the waste gate controller are exceeded as of 31-May-2018.

First Issue Date			Rev. No.	Revision Date				Page
02	Nov	2017	02	27	Nov	2017	1-4	



Repetitive Action:

- Upon reaching 250 flight hours in service time of the waste gate controller

Prior compliance with MSB-E4-022 or MSB-E4-022/1 is considered equivalent to the initial action.

## 1.5. CONCURRENT DOCUMENTS / REFERENCES

- Maintenance Manual E4 Series – Doc. No.: E4.08.04, latest effective issue

## 1.6. OTHER PUBLICATIONS AFFECTED

None.

## 2. TECHNICAL DETAILS

### 2.1. ACCOMPLISHMENT / INSTRUCTIONS

Initial Action:

1. Make sure MM-TR-MDC-E4-386 and MM-TR-MDC-E4-399 are inserted into the Maintenance Manual E4.08.04 or a revision of the MM with the Temporary Revisions incorporated is used.
2. Replace the waste gate controller according to Maintenance Manual section 81-00-33.
3. Install a new the spring loaded circlip E4A-41-100-801. Refer to figure 4

Repetitive Action:

1. Replace the waste gate controller according to Maintenance Manual section 81-00-33.
2. Install a new the spring loaded circlip E4A-41-100-801. Refer to figure 4.

First Issue Date			Rev. No.	Revision Date			Page
02	Nov	2017	02	27	Nov	2017	2-4

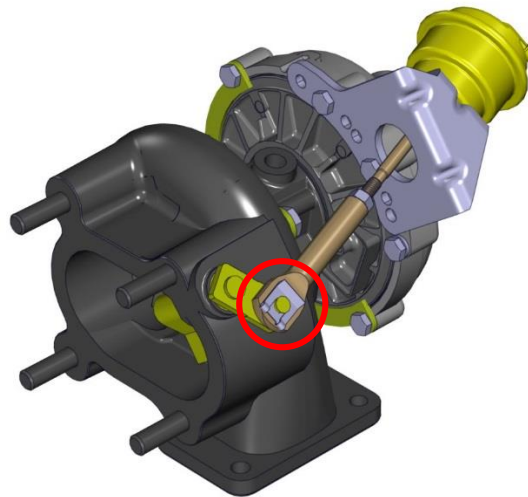


Figure 4: Waste Gate Circlip

## 2.2. MASS (WEIGHT)

Negligible.

## 2.3. APPROVAL STATEMENT

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

## 3. PLANNING INFORMATION

### 3.1. MATERIAL & AVAILABILITY

Qty	Part Number	Description
1	E4A-41-120-000	Waste Gate Controller
1	E4A-41-100-801	Spring loaded circlip

### 3.2. SPECIAL TOOLS

As stated in the Maintenance Manual E4.08.04.

### 3.3. LABOR EFFORT

0.5 hours.

First Issue Date			Rev. No.	Revision Date			Page
02	Nov	2017	02	27	Nov	2017	3-4



## 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

First Issue Date			Rev. No.	Revision Date			Page
02	Nov	2017	02	27	Nov	2017	4-4