

SERVICE INFORMATION NO. SI 42NG-017

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:

FAA Airworthiness Directive 2010-23-09
ATA-Code: 73-20

1.3 Reason:

FAA has issued an Airworthiness Directive mandating accomplishment with Austro Engine Mandatory Service Bulletin MSB-E4-009, which prescribes the analysis of the fuel pressure supply quality to the engine high pressure pump and the possible exchange of the high pressure pump.

1.4 Information:

For detailed technical information refer to FAA AD 2010-23-09 which is applicable without any further additions or restrictions.

II. OTHERS

The FAA AD 2010-23-09 is attached to this SI.

In case of doubt contact Austro Engine GmbH.

Airworthiness Directive 2010-23-09 Summary

Subject:	To prevent engine power loss or in-flight shutdown		
Manufacturer:	Austro Engine GmbH	Category:	Engine
Effective Date:	11/22/2010	Recurring:	Yes
Supersedes:	N/A	Superseded By:	N/A

For complete information on this AD, please see:

[AD 2010-23-09 FAA Copy](#)

[AD 2010-23-09 Preamble](#)

[AD 2010-23-09 CFR Copy](#)

Model Applicability:

Austro Engine GmbH model E4 diesel piston engines

Applicable Manufacturers Service Information:

[Austro Engine GmbH Work Instruction No. WI-MSB-E 4-009](#), dated October 7, 2010

Summary:

We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as: Several power loss events have been reported, due to rail pressure control failures. Analyses have shown that high pressure (HP) fuel pumps failed as a result of pressure oscillations in the fuel supply line. We are issuing this AD to prevent engine power loss or in-flight shutdown, which could result in loss of control of the airplane.

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2010-1055; Directorate Identifier 2010-NE-35-AD; Amendment 39-16498; AD 2010-23-09]

RIN 2120-AA64

Airworthiness Directives; Austro Engine GmbH Model E4 Diesel Piston Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Several power loss events have been reported, due to rail pressure control failures. Analyses have shown that high pressure (HP) fuel pumps failed as a result of pressure oscillations in the fuel supply line.

We are issuing this AD to prevent engine power loss or in-flight shutdown, which could result in loss of control of the airplane.

DATES: This AD becomes effective November 22, 2010.

We must receive comments on this AD by December 6, 2010.

The Director of the Federal Register approved the incorporation by reference of Austro Engine GmbH Work Instruction No. WI-MSB-E4-009, dated October 7, 2010, listed in the AD as of November 22, 2010.

ADDRESSES: You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- *Mail:* U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- *Fax:* (202) 493-2251.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is the same as the Mail address provided in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT:

James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.lawrence@faa.gov; telephone (781) 238-7176; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION:

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2010-0206-E, dated October 8, 2010 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Several power loss events have been reported, due to rail pressure control failures. Analyses have shown that high pressure (HP) fuel pumps failed as a result of pressure oscillations in the fuel supply line.

Frequent inspections of the fuel pressure supply for excessive oscillations are required to determine if high-pressure fuel pumps have been exposed to damaging pressure oscillations. Pumps that have been exposed require replacement before further flight. We are issuing this AD to prevent engine power loss or in-flight shutdown, which could result in loss of control of the airplane.

Relevant Service Information

Austro Engine GmbH has issued Work Instruction No. WI-MSB-E4-009, dated October 7, 2010. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA’s Determination and Requirements of This AD

This product has been approved by the aviation authority of Austria and is approved for operation in the United States. Pursuant to our bilateral agreement with Austria, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This AD requires initial and repetitive inspections of the fuel pressure supply for excessive oscillations and replacement before further flight of the high-pressure fuel pump if the fuel pressure supply oscillations are excessive.

Interim Action

We consider this AD interim action.

FAA’s Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because of the short compliance time of within 10 flight hours, in the AD. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the **ADDRESSES** section. Include “Docket No. FAA-2010-1055; Directorate Identifier 2010-NE-35-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of the Web site, anyone

can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT’s complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78).

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator,

the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by adding the following new AD:

2010–23–09 Austro Engine GmbH:
Amendment 39–16498; Docket No.

FAA–2010–1055; Directorate Identifier 2010–NE–35–AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective November 22, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Austro Engine GmbH model E4 diesel piston engines. These engines are installed on, but not limited to, Diamond Aircraft Industries DA 40 NG and DA 42 NG airplanes.

Reason

(d) Several power loss events have been reported, due to rail pressure control failures. Analyses have shown that high pressure (HP) fuel pumps failed as a result of pressure oscillations in the fuel supply line.

We are issuing this AD to prevent engine power loss or in-flight shutdown, which could result in loss of control of the airplane.

Actions and Compliance

(e) Unless already done, do the following actions.

(1) Inspect the fuel pressure supply for excessive oscillations using the inspection schedule in Table 1 of this AD.

TABLE 1—INSPECTION SCHEDULE

Accumulated time-since-new:	Compliance time:
45 flight hours or more, on the effective date of this AD.	Within 10 flight hours after the effective date of this AD.
Fewer than 45 flight hours, on the effective date of this AD.	At the next scheduled 50 flight hour inspection.
Repetitive inspections.	At each 50 flight-hour scheduled inspection.

(2) Replace the high-pressure fuel pump before further flight with a serviceable high-pressure fuel pump if the oscillations exceed 300mV (750hPa).

(3) Use Austro Engine GmbH Work Instruction No. WI–MSB–E4–009, dated October 7, 2010, to do the inspections.

FAA AD Differences

(f) None.

Alternative Methods of Compliance (AMOCs)

(g) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(h) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2010–0206–E, dated October 8, 2010, and Austro Engine GmbH Mandatory Service Bulletin No. MSB–E4–009, dated October 7, 2010, for related information. Contact Austro Engine GmbH, Rudolf-Diesel-Strasse 11, A–2700 Weiner Neustadt, Austria, telephone: +43 2622 23000; fax: +43 2622 23000–2711, or go to: <http://www.austroengine.at>, for a copy of this service bulletin.

(i) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.lawrence@faa.gov; telephone (781) 238–7176; fax (781) 238–7199, for more information about this AD.

Material Incorporated by Reference

(j) You must use Austro Engine GmbH Work Instruction No. WI–MSB–E4–009, dated October 7, 2010, to do the inspections required by this AD.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Austro Engine GmbH, Rudolf-Diesel-Strasse 11, A–2700 Weiner

Neustadt, Austria, *telephone:* +43 2622 23000; *fax:* +43 2622 23000–2711, or go to: <http://www.austroengine.at>.

(3) You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741–6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on October 27, 2010.

Karen M. Grant,

Acting Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2010–27609 Filed 11–4–10; 8:45 am]

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