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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2000-CE-79-AD; Amendment 39-12843; AD 2002-16-04]**

**RIN 2120-AA64**

### **Airworthiness Directives; Univair Aircraft Corporation Models (ERCO) 415-C, (ERCO) 415-CD, (ERCO) 415-D, (ERCO) 415-E, (ERCO) 415-G, (Forney) F-1, and (Forney) F-1A Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

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**SUMMARY:** This amendment supersedes two different airworthiness directives that require you to inspect the fuel line nipple for damage, replace any suspect part, and replace the elbow fitting on certain Univair Aircraft Corporation (Univair) Models (ERCO) 415-C, (ERCO) 415-CD, (ERCO) 415-D, (ERCO) 415-E, (ERCO) 415-G, (Forney) F-1, and (Forney) F-1A airplanes. This AD requires you to accomplish the following on airplanes with the gascolator connected to the side of the carburetor: Replace any aluminum fuel line nipple or elbow fitting with a brass or steel fuel line nipple or elbow fitting, inspect for double support tubes on the gascolator, install these tubes if they do not exist, and inspect the fuel line fittings between the carburetor and gascolator for cracks or misalignment and replace as necessary. This AD will not affect those airplanes with the gascolator mounted on the firewall. This AD is a result of cracks in the subject area on airplanes in compliance with the current ADs. The actions specified by this AD are intended to prevent failure of the fuel line fittings or the gascolator because of the current airplane design configuration (aluminum fuel line nipples, aluminum fuel line elbows, and/or no double support tubes on the gascolator). Such failure could result in a lack of fuel to the engine with consequent loss of control of the airplane.

**DATES:** This AD becomes effective on September 13, 2002.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of September 13, 2002.

**ADDRESSES:** You may get the service information referenced in this AD from Univair Aircraft Corporation, 2500 Himalaya Road, Aurora, Colorado 80011; telephone: (303) 375-8882; facsimile: (303) 375-8888. You may view this information at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-CE-79-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Elizabeth Bumann, Aerospace Engineer, FAA, Denver Aircraft Certification Office, 26805 East 68th Avenue, Room 214, Denver, Colorado 80249; telephone: (303) 342-1083; facsimile: (303) 342-1088.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

#### *Has FAA Taken Any Action to This Point?*

Reports of fuel leakage due to cracked fuel line nipples on Univair 415 series and Models F1 and F1A airplanes caused FAA to issue AD 86-22-09, Amendment 39-5457. This AD requires you to do the following on Univair Models (ERCO) 415-C, (ERCO) 415-CD, (ERCO) 415-D, (ERCO) 415-E, (ERCO) 415-G, (Forney) F-1, and (Forney) F-1A airplanes:

- inspect the fuel line nipple between the gascolator and the carburetor for cracks, incorrect alignment, or over torque; and
- replace any suspect part.

These actions are specified in Univair Service Bulletin No. 24A, dated August 22, 1986.

In addition, the potential for fuel system failures due to the installation of part number (P/N) 914-2D dural elbow fittings on Erco (now Univair) Models 415-C, 415-CD, and 415-D airplanes caused FAA to issue AD 46-38-03. This AD requires you to replace this P/N 914-2 D dural elbow fitting with a P/N 914-2 elbow fitting.

#### *What Has Happened To Initiate This Action?*

The FAA has received reports of failure of the aluminum fuel line nipple, part number AN911-2D, on airplanes that were in compliance with AD 86-22-09. In one instance, a Model (ERCO) 415-C made an emergency landing because the failure led to engine fuel starvation.

AD 86-22-09 requires a one-time inspection of the part number AN911-2D fuel line nipple. Since 15 years have passed since issuance of that AD, most of the affected airplanes have had this inspection accomplished. If the fuel line nipple was not suspect at the time of inspection, then final AD compliance was obtained. In 15 years, cracks could develop in the aluminum fuel line nipple on these airplanes in compliance with AD 86-22-09.

In addition, Univair Service Bulletin No. 24A, dated August 22, 1986, also specifies replacing any aluminum fuel line nipple with a brass or steel fuel line nipple and installing double support tubes on the gascolator for those airplanes with a gascolator connected to the side of the carburetor. AD 86-22-09 required the fuel line nipple replacement only if damage was found during the one-time inspection and did not require installation of the double support tubes.

The installation of these parts would eliminate the need for AD 46-38-03.

#### *What Is the Potential Impact if FAA Took No Action?*

This condition, if not corrected, could result in failure of the fuel line nipple or the gascolator because of the current airplane design configuration (aluminum fuel line nipples or no double support tubes on the gascolator). Such failure could result in a lack of fuel to the engine with consequent loss of control of the airplane.

*Has FAA Taken Any Action to This Point?*

We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain Univair (ERCO) 415-1986C, (ERCO) 415-CD, (ERCO) 415-D, (ERCO) 415-E, (ERCO) 415-G, (Forney) F-1, and (Forney) F-1A airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on October 4, 2001 (66 FR 50578). The NPRM proposed to supersede AD 86-22-09 with a new AD that would require you to accomplish the following on airplanes with the gascolator connected to the side of the carburetor:

- replace any aluminum fuel line nipple with a brass or steel fuel line nipple; and
- inspect for the existence of double support tubes on the gascolator and install these tubes if they do not exist.

The proposed AD would not affect those airplanes with the gascolator mounted on the firewall.

*Was the Public Invited To Comment?*

The FAA encouraged interested persons to participate in the making of this amendment. Comments received on the NPRM caused us to revise the proposed action to add requirements to replace the elbow fittings with brass or steel elbow fittings and inspect the fuel line fittings between the carburetor and gascolator for cracks or misalignment and replace as necessary.

Because these additions increased the burden upon the public above that already proposed, we issued a supplemental NPRM on April 5, 2002 (67 FR 18141, April 15, 2002).

We then encouraged interested persons to again participate in the making of this amendment. We did not receive any comments on the supplemental NPRM.

**FAA's Determination**

*What Is FAA's Final Determination on This Issue?*

After careful review of all available information related to the subject presented above, we have determined that air safety and the public interest require the adoption of the rule as proposed in the supplemental NPRM except for minor editorial corrections. We have determined that these minor corrections:

- provide the intent that was proposed in the NPRM for correcting the unsafe condition; and
- do not add any additional burden upon the public than was already proposed in the NPRM.

**Cost Impact**

*How Many Airplanes Does This AD Impact?*

We estimate that this AD affects 2,500 airplanes in the U.S. registry.

*What Is the Cost Impact of This AD on Owners/Operators of the Affected Airplanes?*

We estimate the following costs to accomplish the replacement and installation:

<b>Labor cost</b>	<b>Parts cost</b>	<b>Total cost per airplane</b>	<b>Total cost on U.S. operators</b>
2 workhours x \$60 per hour = \$120.	\$70.	\$190 per airplane.	\$475,000.

## **Regulatory Impact**

### *Does This AD Impact Various Entities?*

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

### *Does This AD Involve a Significant Rule or Regulatory Action?*

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under 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. A copy of the final evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

## **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 Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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.

#### **Sec. 39.13 [Amended]**

2. FAA amends Sec. 39.13 by removing Airworthiness Directive (AD) 46-38-03 and AD 86-22-09, Amendment 39-5457, and by adding a new AD to read as follows:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "[www.airweb.faa.gov/rgl](http://www.airweb.faa.gov/rgl)"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2002-16-04 Univair Aircraft Corporation:** Amendment 39-12843; Docket No. 2000-CE-79-AD; Supersedes AD 46-38-03 and AD 86-22-09, Amendment 39-5457.

(a) *What airplanes are affected by this AD?* This AD affects all serial numbers of Models (ERCO) 415-C, (ERCO) 415-CD, (ERCO) 415-D, (ERCO) 415-E, (ERCO) 415-G, (Forney) F-1, and (Forney) F-1A airplanes that:

- (1) are certificated in any category; and
- (2) have the gascolator connected to the side of the carburetor. This AD does not affect those airplanes with the gascolator mounted on the firewall.

(b) *Who must comply with this AD?* Anyone who wishes to operate any of the airplanes identified in paragraph (a) of this AD must comply with this AD.

(c) *What problem does this AD address?* The actions specified by this AD are intended to prevent failure of the fuel line fittings or the gascolator because of the current airplane design configuration (aluminum fuel line nipples, aluminum fuel line elbows, and/or no double support tubes on the gascolator). Such failure could result in a lack of fuel to the engine with consequent loss of control of the airplane.

(d) *What actions must I accomplish to address this problem?* To address this problem, you must accomplish the following:

<b>Actions</b>	<b>Compliance</b>	<b>Procedures</b>
(1) Visually inspect the fuel line nipple and elbow located between the carburetor and gascolator for cracks or misalignment, and replace as necessary.	Inspect within the next 25 hours time-in-service (TIS) after September 13, 2002 (the effective date of this AD) and replace prior to further flight after the inspection. You must inspect even if you have inspected previously.	In accordance with Univair Service Bulletin No. 24B, dated January 29, 2002.
(2) Replace any aluminum fuel line nipple with one made of brass or steel.	Within the next 25 TIS after September 13, 2002 (the effective date of this AD), unless already accomplished (compliance with AD 86-22-09 and/or Univair Service Bulletin No. 24A, dated August 22, 1986).	In accordance with Univair Service Bulletin No. 24B, dated January 29, 2002.

(3) Replace any aluminum fuel elbow fitting with one made of brass or steel. Manufacturer replacement parts numbers are referenced in the service information.	Within the next 25 hours TIS after September 13, 2002 (the effective date of this AD), unless already accomplished (compliance with AD 46-38-03).	In accordance with Univair Service Bulletin No. 24B, dated January 29, 2002.
(4) Inspect for the existence of double support tubes on the gascolator and install these tubes if they do not exist, as follows: (i) For all affected airplanes except for (Forney) F-1 and (Forney) F-1A airplanes, install part numbers 48076 and 48096 (or FAA-approved equivalent part numbers) double support tubes; and (ii) For all affected (Forney) F-1 and (Forney) F1-A airplanes, install part numbers 48098 and 48099 (or FAA-approved equivalent part numbers) double support tubes.	Inspect within the next 25 hours TIS after September 13, 2002 (the effective date of this AD) and install the double support tubes prior to further flight after the inspection, unless already accomplished (compliance with Univair Service Bulletin No. 24A, dated August 22, 1986).	In accordance with Univair Service Bulletin No. 24B, dated January 29, 2002.
(5) Do not install, on any affected airplane, an aluminum fuel line nipple or aluminum elbow.	As of September 13, 2002 (the effective date of this AD).	Not Applicable.
(6) Do not install a gascolator on the side of the carburetor on any affected airplane, unless the double support tubes specified in paragraph (d)(4)(i) or (d)(4)(ii) of this AD are installed.	As of September 13, 2002 (the effective date of this AD).	Not Applicable.

(e) *Can I comply with this AD in any other way?*

(1) You may use an alternative method of compliance or adjust the compliance time if:

(i) Your alternative method of compliance provides an equivalent level of safety; and

(ii) The Manager, Denver Aircraft Certification Office (ACO), approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Denver ACO.

(2) Alternative methods of compliance approved in accordance with AD 46-38-03 and/or AD 86-22-09, which are superseded by this AD, are not approved as alternative methods of compliance with this AD.

**Note:** This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(f) *Where can I get information about any already-approved alternative methods of compliance?* Contact Elizabeth Bumann, Aerospace Engineer, FAA, Denver Aircraft Certification Office, 26805 East 68th Avenue, Room 214, Denver, Colorado 80249; telephone: (303) 342-1083; facsimile: (303) 342-1088.

(g) *What if I need to fly the airplane to another location to comply with this AD?* The FAA can issue a special flight permit under Secs. 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(h) *Are any service bulletins incorporated into this AD by reference?* Actions required by this AD must be done in accordance with Univair Service Bulletin No. 24B, dated January 29, 2002. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You can get copies from Univair Aircraft Corporation, 2500 Himalaya Road, Aurora, Colorado 80011. You can look at copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

(i) *Does this AD action affect any existing AD actions?* This amendment supersedes AD 46-38-03 and AD 86-22-09, Amendment 39-5457.

(j) *When does this amendment become effective?* This amendment becomes effective on September 13, 2002.

Issued in Kansas City, Missouri, on July 30, 2002.

Michael Gallagher,  
Manager, Small Airplane Directorate, Aircraft Certification Service.  
[FR Doc. 02-19874 Filed 8-9-02; 8:45 am]  
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