



# SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation

**Federal Aviation  
Administration**

CE-06-04  
October 18, 2005

<http://www.faa.gov/aircraft/safety/alerts/SAIB>

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*This is information only. Recommendations aren't mandatory.*

## Introduction

This Special Airworthiness Information Bulletin alerts you, possible owners and operators of **Aero Accessories, Inc. (Tempest) new production or overhauled dry vacuum pumps**, of the need to replace certain units. These vacuum pumps are used on **Cessna model A185E, A185F, A188A, A188B, U206B, U206C, U206D, U206E, U206F, U206G, 207, 207A, 210K, 210L, 210M, 210N, 210R, 404, 411, 411A, 421, 421A, 421B, and 421C; Twin Commander (formerly Aero Commander) model 685** airplanes.

## Background

We have received information that vacuum pumps that Aero Accessories, Inc. manufactured or overhauled under their **brand name, Tempest**, may not meet acceptable standards. These pumps are identified as model number AA3216CW (new pumps) and overhauled Airborne model 216CW. These pumps may fail prematurely. There have been 30 reports of premature failure of these pumps.

Aero Accessories, Inc. (Tempest) vacuum pumps were supplied as new units, model AA3216CW (S/Ns N31670 through N34175 inclusive except S/N N33994), and overhauled Airborne model 216CW (S/Ns 36735 through 40087 inclusive except S/Ns 34865, 38506, 36510, 38512 through 38514, 38516, 38517, 39509, 39965 through 39972 and 40003 through 40020).

Aero Accessories has issued Service Bulletin (SB), SB-003 dated September 14, 2005 (attached). The SB specifies that you are not to operator the aircraft in instrument meteorological conditions until you replace any installed suspect pump with a serviceable unit. SB-003 also specifies that suspect pumps may be operated for up to 10 hours or 60 days, from September 14, 2005 (the date of SB-003) in visual meteorological conditions where reliance on vacuum powered flight instruments is not required.

## Recommendation

Based on currently available information, we only recommend the actions of SB-003. However, we will continue this investigation and we may determine that additional action, such as issuance of an airworthiness directive is necessary based on analysis of new information.

We highly recommend replacing suspect vacuum pumps in accordance with the schedule described above and in Aero Accessories, Inc. SB-003.

## For Further Information Contact

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# TEMPEST excellence

## SERVICE BULLETIN

### MANDATORY

**Service Bulletin Number: SB-003**

*(Technical aspects are FAA Approved)*

**Subject: Vacuum Pump Replacement.**

**Applicability: MODELS AFFECTED:** New vacuum pumps manufactured by Aero Accessories, Inc. model number AA3216CW (new pumps) and Airborne pumps model 216CW overhauled by Aero Accessories, Inc. Whose serial numbers are included in the ranges listed below. these pumps were manufactured between March 1, 2005 and August 11, 2005.

**New Pump Model AA3216CW,** serial numbers N31670 through N34175 inclusive, except serial number N33994.

**Overhauled Airborne Models 216CW** with serial numbers 36735 thru 40087 inclusive, except the following serial numbers: 34865, 38506, 38510, 38512, 38513, 38514, 38516, 38517, 39509, 39965 thru 39972, and 40003 thru 40020.

**TIME OF COMPLIANCE:** Compliance is required immediately. Do not conduct flight in IFR meteorological conditions until affected pumps are removed and replaced with non-affected pumps.

Aero Accessories, Inc. has determined that a number of vacuum pumps with Aero Accessories model number AA3216CW (new pumps) and a number of overhauled Airborne vacuum pumps with model number 216CW may not have been manufactured or overhauled in conformance with acceptable standards. These pumps may fail prematurely.

If your aircraft has AA3216CW or 216CW type vacuum pumps installed and the serial number of that pump(s) falls within the ranges cited above, do not operate the aircraft in instrument meteorological conditions prior to replacing the affected pump(s). VFR flights during which reliance on vacuum powered instruments is not required may be conducted prior to replacing the pump(s). Affected pumps must be replaced within the next 10 hours of operation or 60 days from the date of this Service Bulletin.

**Do not enter IFR conditions until affected pumps are replaced.**

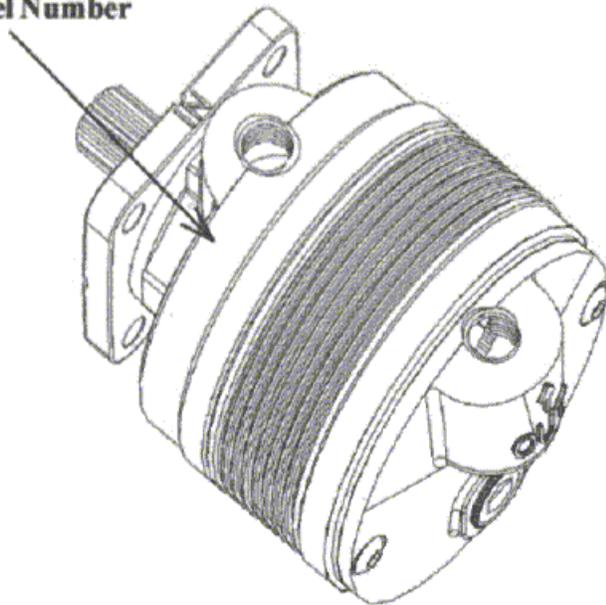
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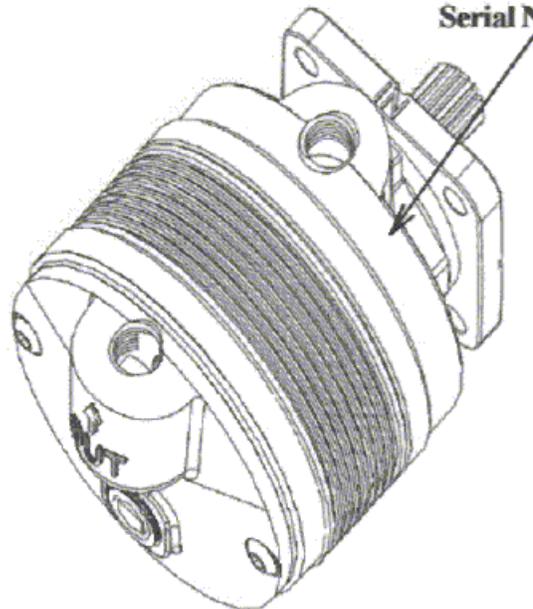
(Technical aspects are FAA Approved)

To identify affected pumps, check the model and serial number decals located on the periphery of the pump's front cover. If the model and serial number of the pumps(s) falls within the ranges listed on page 1, the pump is affected and must be replaced. If the serial number is obliterated, call Aero Accessories, Inc. at 1-800-822-3200 for assistance.

**Model Number**



**Serial Number**



**AA3216CW Shown, Others similar**

**Warranty:** If replacement is required, reimbursement is available for a replacement pump through Aero Accessories, Inc. distributors. Aircraft model and serial number from which the pump(s) was removed from must accompany the returned pump(s) for warranty consideration.

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