
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Auxiliary Power Units**AD/APU/18 Fuel Leaks on Hamilton Sundstrand APU 3/2005**
Models T-62T-46C12 and T-62T-40C14

Applicability: Hamilton Sundstrand Power Systems Models T-62T-46C12 and T-62T-40C14 (APS 500R) auxiliary power units (APUs) with fuel filter housing assemblies, part numbers (P/Ns) 4951627, 4951960, or 4952039 installed.

Note 1: These APUs are installed on, but not limited to, Bombardier DHC-8-400 airplanes and Empresa Brasileira de Aeronautica S.A. (EMBRAER) EMB-135 and -145 series aircraft.

Requirement: **APU Model T-62T-46C12**

Install a bracket onto the fuel filter housing assembly on APU Model T-62T-46C12 as per provisions of Hamilton Sundstrand Alert Service Bulletin (ASB) No. ASB-4503067-49-9 dated 2 December 2003.

APU Model T-62T-40C14 (APS 500R)

Unless previously installed, install a bracket onto the fuel filter housing assembly on APU Model T-62T-40C14 (APS 500R) as per provisions of Hamilton Sundstrand ASB- 4504112-49-22 Revision 2 dated 4 October 2004.

For brackets previously installed using Original Issue of the ASB-4504112-49-22, dated 2 December 2003, perform a one-time inspection for proper gap and if necessary, adjust the gap between the bracket and bypass button. Use paragraph 2.B. and 2.D. (1) of the Accomplishment Instructions of ASB-4504112-49-22 Revision 2 dated 4 October 2004 to inspect and adjust the gap.

Note 2: For APU Model T-62T-40C14 (APS 500R), installation of a part number fuel filter assembly that is not listed in this AD constitutes optional terminating action to the requirements of this AD.

Note 3: FAA Airworthiness Directive 2004-24-03 Amendment 39-13879 refers.

Compliance: Unless accomplished earlier, within 500 hours time-in-service or 6 months after the effective date of this AD, whichever occurs earlier.

This Airworthiness Directive becomes effective on 17 March 2005.

Auxiliary Power Units

AD/APU/18 (continued)

Background: There have been reports of failed / cracked fuel bypass button on the fuel filter housing, protruding beyond internal o-ring seal and causing fuel leak.

This AD addresses the identified unsafe condition caused by leaking fuel and resultant fire or explosion.



James Coyne
Delegate of the Civil Aviation Safety Authority

4 February 2005