



TECHNICAL INSTRUCTION HAC23-001, Rev. NC, July 25, 2023

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INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

a) 100-003-182-001FS: Display, Liquid Crystal, Dual Cell Dichroic

INSTALLED ON

**BOEING 737, 747, 757, 767 AND AIRBUS A318/319/320/321, A330, A340
SERIES AIRCRAFT**

(SEE FLIGHT SPECIALTIES COMPONENTS SUPPLEMENT(S) FOR SPECIFIC MODELS)



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1. Introduction

This HEICO Aerospace Technical Instruction (TI) defines the Instructions for Continued Airworthiness when P/N 100-003-182-001FS, Display, Liquid Crystal, Dual Cell Dichroic (hereafter referred to as LCD) is installed on the Boeing and Airbus aircraft listed in the PMA supplements found on <http://ipc.heico.com>.

The P/N 100-003-182-001FS LCD is FAA Approved (PMA) as a replacement for GE Aviation P/N 100-003-182-001.

2. Description and Operation

The LCD, P/N 100-003-182-001, is an electrical component of the GE Aviation Digital Electronic Chronometer used in the cockpit of various Boeing and Airbus aircraft. The LCD is used to display the time.

LCD displays utilize two sheets of polarizing material with a liquid crystal solution between them. An electric current passed through the liquid causes the crystals to align so that light cannot pass through them. Each crystal, therefore, is like a shutter, either allowing light to pass through or blocking the light.

3. Installation

Shown below in Figure 1 is a sample installation of the Next Higher Assembly (NHA) GE Aviation Digital Electronic Chronometers, containing P/N 100-003-182-001 LCD, on the Boeing 747 Series Aircraft. The Digital Electronic Chronometers are mounted in two locations on the instrument panel (Captain and First Officer locations).



Figure 1. Digital Electronic Chronometer Installation Locations



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4. Airworthiness Limitations

The Airworthiness Limitations section is FAA-approved and specifies maintenance required under Sec. 43.16 and 91.403 of the Federal Aviation Regulations, unless an alternative program has been FAA approved. The Instructions for Continued Airworthiness presently acceptable to the FAA for P/N 100-003-182-001 is valid for use on P/N 100-003-182-001FS with exception to the installation eligibility found below in Section 5 "Installation Eligibility Discussion." Due to the fact that P/N 100-003-182-001FS is not a life limited part, no additional airworthiness limitations are imposed by the supplementary Instructions for Continued Airworthiness found below in Section 5.

5. Installation Eligibility Discussion

The purpose of this TI is to exclude P/N 100-003-182-001FS from eligibility for installation in conjunction with certain NHA service bulletins. See installation eligibility listed in Table 1 below:

Table 1. Installation Eligibility for P/N 100-003-182-001FS

Aircraft	NHA P/N	Installation Exceptions (Service Bulletin)
Boeing 737	2610-07-1	None
Boeing 747, 757, 767	2610-08-1	Post SB 2610-31-306*
Boeing 747, 767	2610-10-1	Post SB 2610-31-307**
Airbus A318, A319, A320, A321, A330, A340	2610-13-1	None

* - SB 2610-31-306 is known as Mod F and includes the introduction of a new diode D1 onto the power supply board assembly and three new capacitors C1 to C3 onto the driver display board assembly.

** - SB 2610-31-307 is known as Mod E and includes the introduction of a new diode D1 onto the power supply and interface PCB assembly and three new capacitors C1 to C3 onto the driver display PCB assembly.

The installation of P/N 100-003-182-001FS in an NHA with the implementation of the Service Bulletins listed in Table 1 above could result in "ghosting" – persistence of display segments after the removal of power.

6. Material Information

This document will be maintained and the latest approved revision posted on the HEICO web site at <http://ipc.heico.com>.



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7. Revision and Approval History

Rev. Level	Rev. Date	Remarks
NC	July 25, 2023	Initial release