

Boeing 747 Series Aeroplanes

AD/B747/121 **Inspection of APU and Cargo Compartment** **11/93**
Amdt 1 **Fire Extinguisher Bottle Cartridges**

Applicability: All model 747-400 aircraft identified in Boeing Alert Service Bulletin 747-26A2210 dated 29 October 1992.

Requirement: 1. Visually inspect, in accordance with Boeing Alert Service Bulletin 747-26A2210 dated 29 October 1992, the discharge cartridges (squibs) and electrical connectors installed on each fire extinguisher bottle in the auxiliary power unit, lower cargo and main deck cargo fire extinguishing systems.

Note 1: The operational tests of the discharge cartridges specified in the Accomplishment Instructions of the Service Bulletin are not required to be performed prior to accomplishing the visual inspection.

Note 2: The cross-wiring end-to-end functional checks required by AD/B747/68 Amdt 1 are not obligatory, following performance of the visual inspection, if the inspection is accomplished one discharge cartridge at a time.

2. If any damage is detected during the visual inspection, then prior to further flight replace the damaged item and perform an operational test of the fire bottle discharge cartridge circuit in accordance with Boeing Alert Service Bulletin 747-26A2210 dated 29 October 1992.

Note: FAA AD 93-09-01 Amdt 39-8568 refers.

Compliance: Unless previously accomplished, prior to 30 November 1993.

Background: This directive is prompted by reports of bent pins in discharge cartridge cartridges and damaged electrical connectors on some fire extinguisher bottles. These conditions, although being able to prevent the fire bottle discharging, remain undetected by the Discharge Cartridge Circuit Operational Test. (The damage is believed to result from installation or removal of a shunt plug from the cartridge, shunt plugs were installed to protect the cartridge during maintenance.) The one time inspection of the cartridges and electrical connectors, required by this Directive, is intended to ensure the proper discharge of the fire extinguisher bottle in the event of a fire.

Amendment 1 is issued to clarify the requirement to include inspection of both the lower and main deck cargo fire extinguisher systems.