

Boeing 737 Series Aeroplanes

AD/B737/19

**Engine Overheat, Fire Detection and
Fire Extinguishing Systems**

3/89

Applicability: All 737-200, -300 and -400 aeroplanes.

Requirement: "FIRE EXTINGUISHER BOTTLE CROSS-CONNECTION"

1. The routing of the electrical wiring to the fire extinguisher bottles is to be permanently modified in such a manner that inadvertent cross-connection of any explosive squib electrical connectors is impossible.

Note: Boeing Service Letter 737-SL-24-57 refers.

**ENGINE OVERHEAT, FIRE DETECTION AND FIRE EXTINGUISHING
SYSTEMS**

2. 737-200 series aircraft. Carry out a functional check of each system in accordance with Boeing Telex M-7272-89-0532 dated 31 January 1989.
3. 737-300 and -400 series aircraft. Carry out a functional check of each system in accordance with Boeing Telex M-7272-89-0530 dated 31 January 1989.

Note 1: Operators of models 737-300 and -400 series aircraft that have completed a functional check of one engine's overheat and fire detection system, and a continuity check of the second engine's overheat and fire protection system to comply with FAA AD 89-01-51 dated 11 January 1989, are only required to complete the functional check on the second engine, and the "Fire Extinguishing Wire" portion of the functional test procedure detailed in Boeing Telex M-7272-89-0530 (Requirement 3 above).

Note 2: Boeing have superseded Telex 0156 with 0530.

Note 3: FAA Telegraphic AD T89-03-51 refers to Requirements 2 and 3.

Compliance: Requirement 1: Within 25 days from 7 February 1989.

2 and 3: Within 25 days from 7 February 1989, and thereafter before next flight following any maintenance action involving engine overheat, fire detection and/or fire extinguishing systems which could possibly result in cross-connection or mis-connection of any system wiring or plumbing.

Background: Requirement 1: Boeing have advised that the possibility exists that the electrical connectors for the fire bottle explosive squibs can be cross-connected. Under some circumstances this could result in the fire extinguisher bottle being dispensed to both engines simultaneously. Note that unlike, Boeing Service Letter 737-SL-24-57, applicability is not limited to a specific line position number.

SCHEDULE OF AIRWORTHINESS DIRECTIVES

Requirements 2 and 3: There have been reports in the last several months of improperly installed wiring and/or plumbing in the engine and cargo compartment Fire Protection System on various model Boeing aircraft. Whilst the cause of these problems has not been identified in each case, the FAA has determined that, due to design similarity or common production lines, these conditions are likely to exist on other fire protection systems of other Boeing aircraft not covered by previous AD action, and that as a precautionary measure, checks must be performed on specified aircraft.