

ENGINE FIRE DETECTION SYSTEM - DESCRIPTION AND OPERATION

1. General

- A. Fire protection consists of an engine fire detection system and a portable Halon 1211 fire extinguisher mounted in the pilot's door. The fire detection system provides the means to detect a fire in the engine compartment and alert the crew by a visual and an audible indication.

2. Description and Operation

- A. The fire detection system is installed in the engine compartment. The system consists of a flexible closed loop consisting of three section with high resistance at normal operating temperature, decreasing as temperature rises. The loop is connected to a control box which detects the change in resistance when the temperature reaches a set point of 425°F on the first section, 625°F to 650°F on the second section and 450°F on the third section. The change in resistance causes an audible alarm in the flight compartment and the pilot's headphones and the following indications:
 - (1) For Airplane 208B2197 and Airplanes 208B5000 and On:
 - (a) An ENGINE FIRE CAS message shows on the primary flight display (PFD).
 - (2) For Airplanes 20800001 and On and Airplanes 208B0001 thru 208B2196, and Airplanes 208B2198 thru 208B4999:
 - (a) An ENGINE FIRE annunciator comes on the instrument panel.