SERVICE INFORMATION LETTER (SIL)

Field Leak Check of Oxygen Regulator

Federal Express P/Ns 3500007, 3500009
Cobham P/Ns 2239-0001-3, 2239-0001-1
McDonnell Douglas P/Ns BBM7004-505, BBM7004-503

OXYGEN – ATA CHAPTER 35  CAGE CODE: 04577

PURPOSE: To provide aircraft maintenance personnel with Leak Check method for oxygen regulators.

A. BACKGROUND

This SIL is issued by Cobham because of unnecessary removals of the oxygen regulator. Regulators suspected of leaking are being removed without confirmation of leakage. This SIL will provide instructions for leak testing any suspect regulator.

B. APPLICABILITY

This SIL is applicable to all aircraft where this oxygen regulator is installed, especially certain series MD-11 model aircraft.

C. RECOMMENDED ACTIONS

Perform a leak test on any oxygen regulator suspected of leaking while it is still installed on the aircraft and before removing it.

D. INSTRUCTIONS

Before removing any oxygen regulator suspected of leaking perform the following:

1. **Check for full cylinder.** The pointer on the gage should be in red band between 1800 and 2000.
2. **Fully open cylinder.** Turn valve handle counter clock-wise to fully open and pressurize the regulator.
3. **Let regulator sit for 5 minutes** while pressurized for stabilization.
4. **Apply oxygen compatible leak test solution (per MIL-PRF-25567)** to all external threaded ports and joints (including connection to cylinder). Do not apply solution to the green dome area.
5. **Let regulator sit for 3 minutes** while pressurized with leak test solution applied.
6. **Visually inspect after 3 minutes for bubbles.**
   - If there are no bubbles, the regulator does not leak and should be left installed.
   - If there are bubbles, follow aircraft maintenance manual procedures for leaking regulator.
7. **De-pressurize** as needed according to aircraft maintenance manual instructions.
   - Bubbles may appear and are allowed during de-pressurization.
8. **Dry external surface** of the regulator with clean, lint-free cloth or towel.