**TO: HOLDERS OF THE BOTTLE ASSEMBLY FIRE EXTINGUISHER, ENGINE P/N 28200-1**

## REVISION NO. 3, DATED MAY 17/24

## HIGHLIGHTS

The highlights of the revision are outlined below. All pages have been revised and maintain the format of ATA 100 and the AECMA Simplified English guidelines.

| Chapter/Section and Page No. | Description of Change | Effectivity |
|---|---|---|
| All Pages | Updated date and total pages from 4 to 3 pages. | |

## REVISION HISTORY

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|---|---|
| Initial Release: | Rev. N/C, Dated 6-9-11 |
| Release 1: | Rev. 1, Dated 6-13-11 |
| Release 2: | Rev. 2, Dated 2-27-13 |
| Release 3: | Rev. 3, Dated 5-17-24 |

# SERVICE BULLETIN SB-26-5

## FIRE PROTECTION: BOTTLE ASSEMBLY FIRE EXTINGUISHER, ENGINE P/N 28200-1

### 1. PLANNING INFORMATION

A. Effectivity

Bottle Assembly Fire Extinguisher, Engine P/N 28200-1 used on Bell V-22 aircraft, serial numbers (S/N's) 0155 thru 0513 equipped with Temperature Compensated Pressure Switch (TCPS).

B. Reason

The TCPS on the fire extinguisher has been identified as suspect to have a bimetallic disc installed in a reversed orientation which causes the TCPS to give a "No-Go" (Open Circuit). The "No-Go" signal occurs when the Fire Extinguisher deviates from 70°F. Figure 1 below provides an electrical diagram of the TCPS.

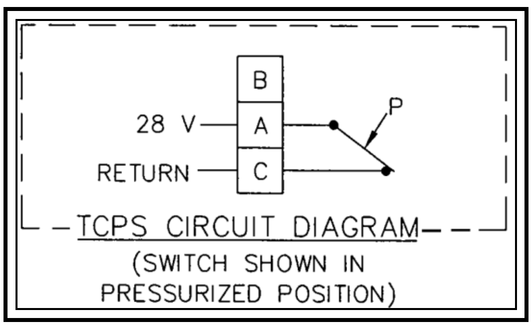


Figure 1: **Electrical Diagrams for TCPS**

C. Description

This Service Bulletin requires testing of fire extinguisher P/N 28200-1 which is equipped with a TCPS. All fire extinguishers in stock/inventory that have a discharge advisory on the aircraft within S/N's 0155 thru 0513 must be removed from service and tested according to this SB.

D. Affected Serial Numbers

Fire Extinguisher S/N's 0155 thru 0513.

E. Compliance

All affected fire extinguishers shall be inspected for a reversed bimetallic disc by conducting either a Hot or Cold Soak test per the following steps. All data should be recorded and documented per Bell Helicopter-Textron quality standards and documentation system:

1. Check Pressure Switch for continuity between Pins A & C as a baseline check and record data as necessary. The TCPS should always show continuity (closed circuit) between pins A & C for conforming units, see Figure 1.
2. Place two thermocouples on the fire extinguisher, one thermocouple shall be placed on the bottle (any location near center along the weld joint of the bottle) and one at the base of the TCPS port (within 1" radius about center axis of TCPS), see Figure 2.

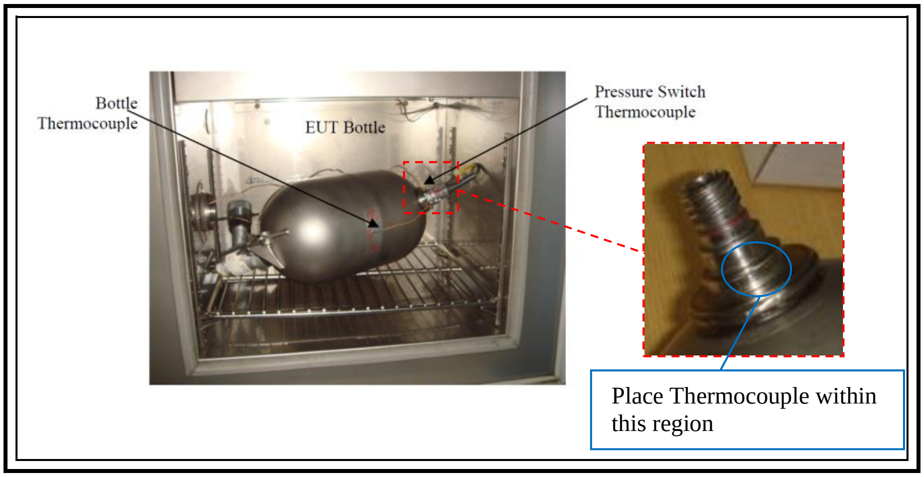


**Figure 2: Thermocouple Positioning on Bottle**

3. Place Fire Extinguisher in an environmental chamber and conduct the following **<u>Hot Soak Test</u>**:
   a. **<u>OPTIONAL:</u>** Stabilize the fire extinguisher at 70$^{o}$F ± 10 to ensure a baseline that the TCPS is operational. TCPS should show continuity (closed circuit) between pins A & C. Record data as necessary.
   b. Increase temperature to 105$^{o}$F ± 10 in the environmental chamber and stabilize temperature for a minimum three (3) hours. Each fire extinguisher should be checked for continuity and data recorded as necessary while in the chamber. Otherwise, each fire extinguisher should be checked within five (5) minutes after removal from the environmental chamber, and data recorded as necessary.
      i. Check for continuity between Pins A & C (closed circuit). If continuity (closed circuit) is found the Pressure Switch is operating according to specifications. Record data as necessary.

ii. If no continuity (open circuit) is found, return fire extinguisher to MASS Systems for repair, and record data as necessary.

4. **ALTERNATIVE:** Place Fire Extinguisher in an environmental chamber and conduct the following **Cold Soak Test**.
   a. **OPTIONAL:** Stabilize the fire extinguisher at 70°F ± 10 to ensure a baseline that the TCPS is operational. TCPS should show continuity (closed circuit) between pins A & C. Record data as necessary.
   b. Place two thermocouples on the fire extinguisher, one thermocouple shall be placed on the bottle (any location near center along the weld joint of the bottle) and one at the base of the TCPS port (within 1" radius about center axis of TCPS), see Figure 2.
   c. Decrease temperature to 30°F ± 10 in the environmental chamber and stabilize temperature for a minimum three (3) hours. Each fire extinguisher should be checked and data recorded as necessary while in the chamber. Otherwise, each fire extinguisher should be checked within five (5) minutes after removal from the environmental chamber, and data recorded as necessary.
      i. Check for continuity between Pins A & C (closed circuit). If continuity (closed circuit) is found the Pressure Switch is operating according to specifications. Record data as necessary.
      ii. If no continuity (open circuit) is found, return fire extinguisher to MASS Systems for repair, and record data as necessary.

F. Deleted

G. Return Information

Return the affected fire extinguisher for repair to:

AMETEK Ameron LLC / MASS Systems
4750 Littlejohn Street
Baldwin Park, California 91706, U.S.A

H. Contact

Contact Manager of Product Support if technical assistance is needed.

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| Telephone No. | 626-337-4640 |
| Fax No. | 626-337-1641 |

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| E-mail | service@MASS.AMETEK.com |
| Address | Same as above |

**>>> END OF SERVICE BULLETIN <<<**