



AEROSPACE RECOMMENDED PRACTICE

ARP6824™

Issued

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Guidelines for the Use and Installation of Large Size Wire/Cable Jacket Damage Repair Sleeve

RATIONALE

This SAE Aerospace Recommended Practice (ARP) provides users a means to correctly install a repair sleeve designed for large size wire or cable jacket damage repair.

1. SCOPE

This SAE Aerospace Recommended Practice (ARP) contains guidance to assist users by providing a method to install an AS6224/2 repair sleeve.

2. APPLICABLE DOCUMENTS

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AMS3819 Cloths, Cleaning, for Aircraft Primary and Secondary Structural Surfaces

AS6224/2 Repair Sleeve, Large Wire/Cable Insulation Damage, Electric, Permanent, Environment Resistant, 260 °C Maximum Operating Temperature, Type II

3. INSTALLATION PROCEDURE

3.1 Recommended Tools

3.1.1 Thermal heat gun with enclosed heat reflector—NSN: 4940-01-641-1192 or PR-38 (CAGE 06090).

3.1.2 Heat source—MCH100A - NSN: 4940-01-475-2026, CV-2014 (CAGE 06090) or equivalent.

CAUTION: Heat source, when used in fueled aircraft, must be approved for such an environment.

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3.2 Installation Steps

- 3.2.1 Examine damage to ensure the conductor is free of damage (e.g., nicks). The Figure 1 damage shown is for example only. Measure the damaged area to ensure compliance to the applicable detail specification.
- 3.2.2 Abrade the periphery of the outer jacket repair area using 240 grit or finer abrasive paper or general purpose scouring pad. Clean the outer jacket repair area with a cleaning cloth per AMS3819 Class 1 Grade A Form 1 moistened with isopropyl alcohol or appropriate cleaning solution for the wire insulation as in Figure 1. Take foreign object debris precaution with the cable preparation materials.



Figure 1 - Abraded cable

- 3.2.3 Install PTFE or masking tape on each side of the damaged area to protect the outer jacket outside of the repair area. The damage area should be located approximately in the center between the two taped area which is approximately 1.5 inches (38.1 mm) apart. See Figure 2. It is acceptable to use an ink marking to mark the edges of the repair area.



Figure 2 - Application of PTFE protective tape

- 3.2.4 Place the split repair sleeve around the wire/cable over the damaged area between the ink markings. The split edges should meet or overlap approximately 1-1/2 times around the wire/cable prior to shrinking. See Figure 3. Note that the split edges of the sleeve should touch or overlap after shrinking into place.



Figure 3 - Sleeve placement