
IDENTICAL PARTS WITH ENDS SEALED OR PLACED IN SEALED PLASTIC BAG

1.0 SCOPE

This standard provides a method for the individual packaging of rigid or flexible tubular lines, hose assemblies and other similar types of cylindrical shaped hardware.

2.0 REFERENCES

- 2.1 Lockheed Packaging Standard LPS 40-001 (General Requirements Specification)
- 2.2 Lockheed Packaging Standard P-201 "Thermal Control" Labels
- 2.3 NAS Packaging Standard 3449

3.0 REQUIREMENTS

3.1 GENERAL

- 3.1.1 The quantity per unit package shall be one (1) each.
- 3.1.2 Any loose item(s) required per part shall be enclosed in a separate plastic bag or vial and placed within the item bag.
- 3.1.3 Exposed silver or silver-plated parts shall be protected with tarnish-inhibitor material. Minimum surface area of the tarnish inhibitor shall be twice the area of the silver surface of the item.

NOTE: The treated side of the inhibitor material must be facing the item.

CAUTION: ITEMS HAVING ANY SURFACES INCOMPATIBLE WITH THE TARNISH INHIBITOR SHALL BE COMPLETELY WRAPPED WITH A NEUTRAL MATERIAL PRIOR TO APPLICATION.

- 3.1.4 Tarnish inhibitor may be adjacent to but shall not be allowed to come in contact with chemically finished surfaces such as anodize, iridite, chromate coatings and other nonferrous metals (e.g., cadmium, copper and brass).
- 3.1.5 Seal openings and protect all exposed or projecting pins, contacts, fittings, etc., with proper size and style of protective caps, plugs, closures (Paragraph 5.1.2).
- 3.1.6 Flexible items may be formed/coiled to a smaller dimension, providing that no permanent deformation or damage results from such action.
- 3.1.7 Unflexible, noncoilable items which must be kept in a straight configuration, shall be packaged in a manner which assures retention of its shape/configuration during shipment/storage.

3.2 UNIT PACKAGING

- 3.2.1 Items which may be safely coiled or formed to a minimum practical dimension, shall be secured with tape or ties prior to placing in a plastic bag (Ref Figure 1).
 - 3.2.1.1 . Overwrap or cushion areas on the item which might puncture the bag.
 - 3.2.1.2 . Enclose tarnish inhibitor (if applicable), expel excess air from bag and close by heat sealing, stapling, or with tape.

NOTE: Heat sealing is the preferred closure method. Allow sufficient material to permit at least one additional reseal.

- 3.2.2 Items which cannot be safely coiled shall be overwrapped/cushioned and sealed in a plastic bag per Paragraphs 3.2.1.1 , 3.2.1.2 (Ref Figure 2).

3.3 INTERMEDIATE PACKAGING (Consolidation of Unit Packages)

- 3.3.1 Pack identical coiled/formed items uniformly into fiberboard/wood containers (supplier option). Gross weight/dimensions of each container shall not exceed its design specification.

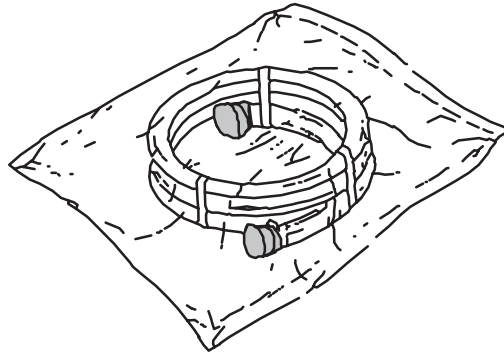


Figure 1. Coilable Item Unit Package

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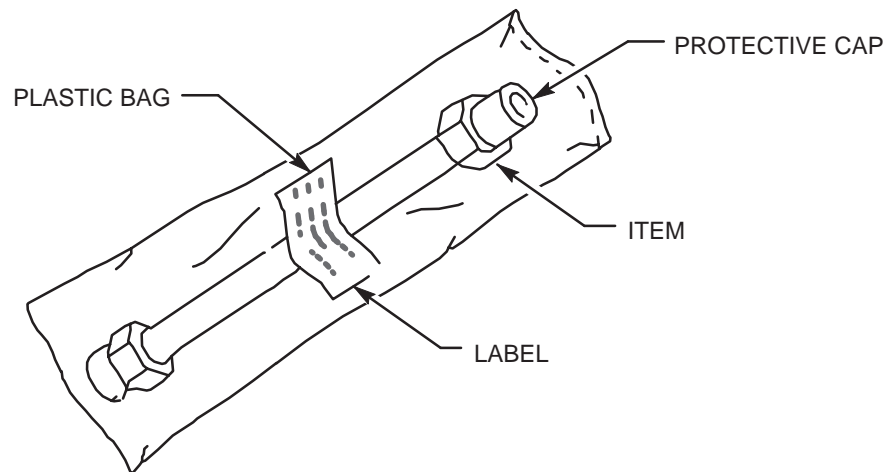


Figure 2. Noncoilable Item Unit Package

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3.3.1.1 . Unless otherwise specified, noncoilable items may be packed individually or in multiple quantities within a rigid spiral-wound fiber tube (Ref Figure 3) or other types of containers providing equivalent protection.

3.3.2 Fill all voids with suitable dunnage, blocking or bracing.

3.4 PACKING

3.4.1 Shipping containers, as packed, shall protect each item and package during ordinary handling and shipping and shall meet the minimum requirements the common carriers for acceptance for safe transportation at the lowest rate to the point of delivery (see contractual document).

3.4.2 Intermediate containers which meet the requirements of Paragraph 3.4.1 may be used as shipping containers.

3.4.3 Enclose or attach a copy of packing slip to the shipping container.

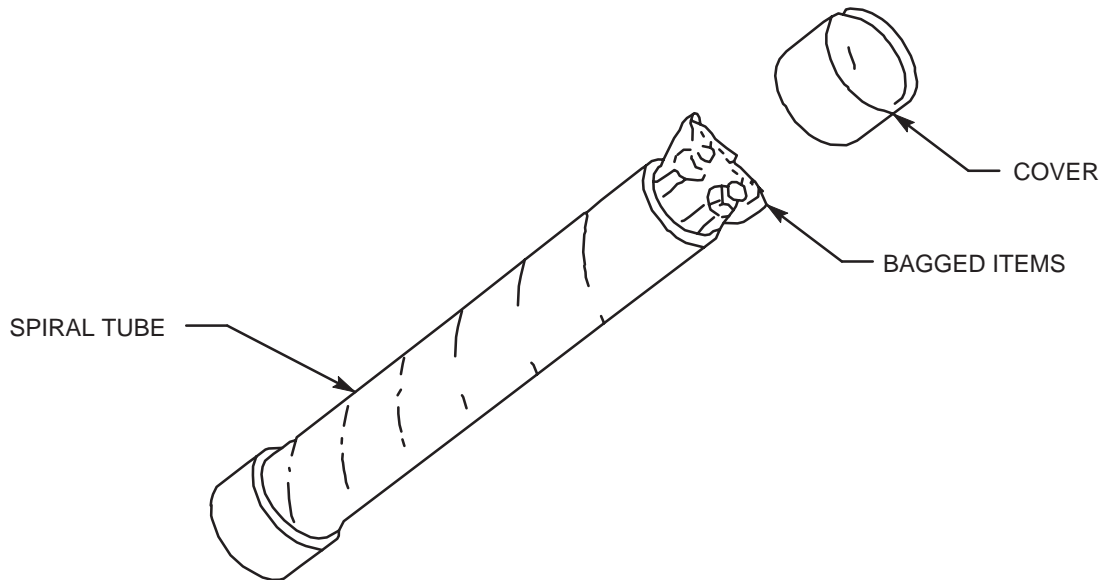


Figure 3. Intermediate Package – Noncoilable Item

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3.5 MARKING (Unless otherwise specified in the contract or P.O. use the following criteria)

3.5.1 Unit Package Marking

Label or mark each package to show at least the part number per contracting document and supplier identity. If this data is readily visible and legible on each part inside the unopened container, the labeling or marking requirement is waived. Additional markings may be specified in the item detail specification or drawing. Marking should be limited to that required by the PO or part specification.

3.5.2 Intermediate Packaging Marking

Label or mark each container to, at least, show part number per contracting document, supplier and quantity of parts. Apply P-201 labels to intermediate container(s) when applicable. Marking should be limited to that required by the PO or part specification.

3.5.3 Shipping Container Marking

Label or mark each container to show part number per contracting document, the LMSSC contracting document number, supplier, destination and quantity of parts. Marking should be limited to that required by the PO or part specification.

3.5.4 Special, precautionary and handling markings shall be applied as required. When packages contain HI RELIABILITY or thermal control parts, label each package per P-201, as applicable. Packages containing tarnish inhibitor shall be marked/labeled: "Protected with Tarnish Inhibitor – Do Not Open Until Ready for Use or Inspection." Special and precautionary handling labels shall meet ASTM D5445, Pictorial Marking for Handling of Goods.

4.0 QUALITY ASSURANCE

4.1 Packaging shall be accomplished in such a manner as to prevent physical damage to, or degradation of, the packaged items during delivery to the using activity. It shall be the prerogative of LMSSC to return damaged items, at supplier's expense, when such damage is attributable to improper or inadequate protection.

5.0 NOTES

5.1 The following information is intended as a guide or aid to suppliers in meeting the requirements of this specification:

5.1.1 DEFINITION – Unprotected Silver Surfaces. All metallic silver surfaces (having stringent reflectivity or conductivity requirements, close-tolerance finishes and/or dimensions, without supplementary tarnish-resistant treatment), the deterioration of which may result in premature failure or malfunction of the item or equipment having such surfaces.

5.1.2 REFERENCES

<u>Commodity</u>	<u>Military/Commercial Specification</u>
Box, Corrugated	ASTM D5118, Type CF, Class Domestic, SW, Style, RSC, Grade 44 ECT or 200 Mullen
Box, Wood	ASTM D6880
Box, Wood, Cleated	ASTM D6251
Cushioning, Cellular Plastic	PPP-C-795, Class 2
Cushioning, Cellulosic	A-A-1898, Grade 1, Class C, Style 1, Size L, Kraft Backed
Protective Caps	AS-90376 or NAS 831; NAS 813, 820
Sheet, Plastic	A-A-3174, Type I Class 1, Grade B
Silver Tarnish, Inhibitor	Commercially Available (Must be approved by LMSSC PMP)
Tube, Fiber	Commercially Available (Suggestion; Sonoco Products Co.)
Fiber Box, Closing	ASTM D1974