

# LMSSC PACKAGING STANDARD

P-126  
Revision 2  
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## PRECISION PARTS PROTECTED WITH/WITHOUT SLEEVES

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### 1.0 SCOPE

This standard provides for the individual protection of close tolerance, external threaded or unthreaded precision hardware (e.g., bolts, screws, fittings, pins, etc).

### 2.0 REFERENCES

- 2.1 Lockheed Packaging Standard LPS 40-001 (General Requirements Specification)
- 2.2 NAS Packaging Standard NAS 3433

### 3.0 REQUIREMENTS

#### 3.1 GENERAL

- 3.1.1 Unless otherwise specified, the quantity per unit package shall be in accordance with the requirements of this standard.
- 3.1.2 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 items.  
**NOTE:** The treated side of the inhibitor material must be facing the item(s).  
**CAUTION:** ITEMS HAVING ANY SURFACES INCOMPATIBLE WITH THE TARNISH INHIBITOR SHALL BE COMPLETELY WRAPPED WITH A NEUTRAL MATERIAL PRIOR TO APPLICATION.
- 3.1.3 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).
- 3.1.4 The operational integrity of the item(s) shall be protected against damage during shipment from the supplier to destination. Critical areas and/or surfaces of the item(s) shall be adequately protected against degradation.

#### 3.2 UNIT PACKAGING

- 3.2.1 Protect each part (exceeding No. 8 screw size) with a thread protector, e.g., plastic or fiber sleeve covering the entire critical surfaces of the part (Figure 1). The sleeves shall be of sufficient thickness to protect critical areas adequately during handling or shipment. The protectors shall fit snugly over the critical surfaces so as not to become dislodged during normal handling.
- 3.2.2 Parts that need thread protection and are No. 8 screw size or less shall be individually packaged. Individual packaging shall be of sufficient thickness to protect critical surfaces adequately during handling and shipping individual packaging shall accommodate issuing part quantities of one.
- 3.2.3 Titanium or coated parts shall be individually packaged (Figure 2).
- 3.2.4 Use of other methods for protecting critical surfaces may be used if equivalent or better protection is provided.
- 3.2.5 Unless otherwise specified in the contracting document, drawing, or specification, the package quantity shall be in accordance with the following:
  - 3.2.5.1 Parts with thread sizes or diameters not exceeding 3/8 inch shall be packaged in quantities not to exceed 100 parts.
  - 3.2.5.2 Parts with thread sizes exceeding 3/8 inch diameters but not greater than 1 inch shall be packaged in quantities not to exceed 50 parts.
  - 3.2.5.3 Parts with thread sizes or diameters exceeding 1 inch shall be packaged in quantities not to exceed 25 parts.
- 3.2.6 Place specified quantity of protected parts in an appropriate size setup, folding or corrugated box (Figure 2). Fill all voids with suitable dunnage to prevent damage during shipment.  
**NOTE:** Parts not requiring thread protectors may be placed in plastic bags; close bags by heat sealing, taping or stapling.

3.3 INTERMEDIATE PACKAGING – (Consolidation of unit packages, when applicable. See Figure 3.)

3.3.1 Unless otherwise specified, the number of unit packages per intermediate container (containing identical parts) shall be limited to the dimensions and gross weight provisions of the container specification (Ref Carrier Regulations).

3.3.2 Fill all voids with suitable dunnage, blocking or bracing, to prevent damage during handling/shipment.

3.4 PACKING

3.4.1 Pack appropriate number of intermediate containers uniformly into each shipping container.

3.4.2 Shipping containers as packed shall protect the item from damage during ordinary handling/shipping and shall meet the minimum requirements of common carriers for safe transportation at the lowest rate to the point of delivery (see contractual document).

3.4.3 Unit or intermediate containers which meet the requirements of Paragraph 3.4.2 may be used as shipping containers.

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

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, quantity, and supplier identity. 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 show at least part number per contracting document, supplier, and quantity of parts. 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 Apply special handling and precautionary markings as required. 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 Specifications</u>
Box, Corrugated	ASTM D5118, Type CF, Class Domestic, SW, Style RSC, Grade 44 ECT or 200 Mullen
Box, Folding	PPP-B-566
Box, Metal-Stayed	PPP-B-665
Box, Setup	PPP-B-676
Paperboard, Wrapping & Cushioning	A-A-1051
Cushioning, Cellulosic	A-A-1898, Grade 1, Class 1, Style 1, Size L, Kraft Backed
Cushioning, Flexible Plastic	PPP-C-795, Class 2
Fiberboard, Corrugated	ASTM D4727, Type CF, Class Domestic, SW
Paper, Neutral	MIL-P-17667, Type 2, Class 1
Silver Tarnish Inhibitor	Commercially Available (Must be approved by LMSSC PMP)
Fiber Box, Closing	ASTM D1974

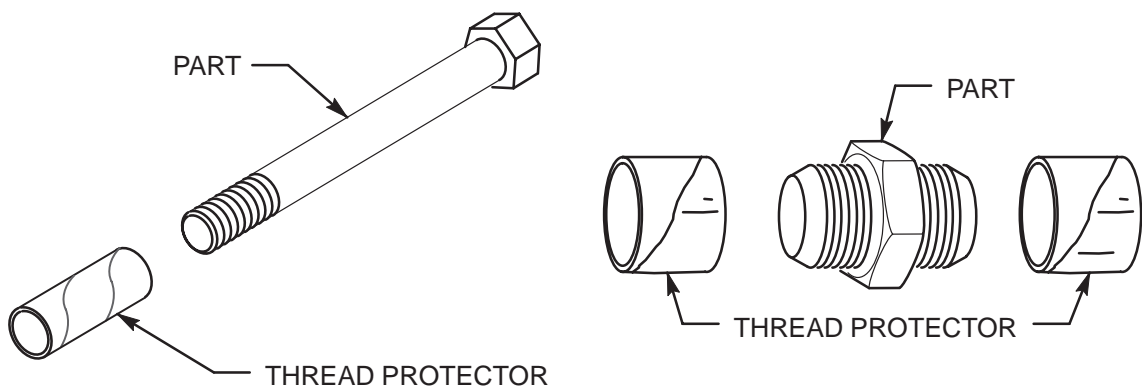


Figure 1. Part/Thread Protector

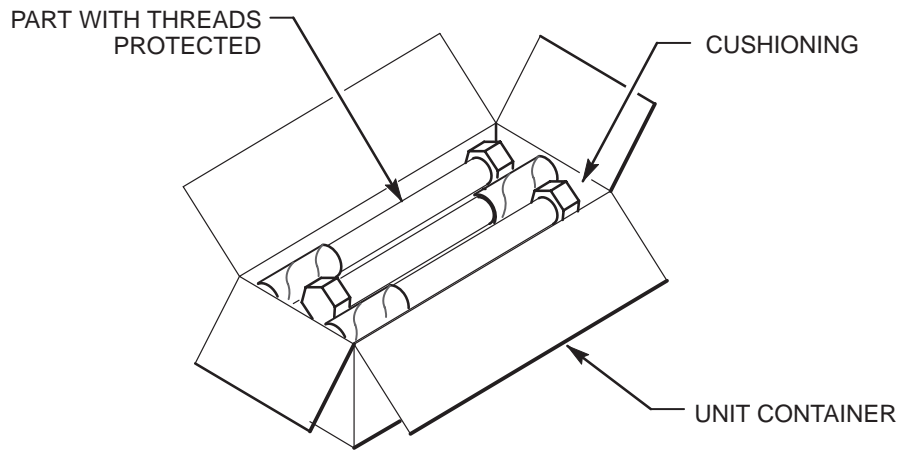


Figure 2. Unit Package

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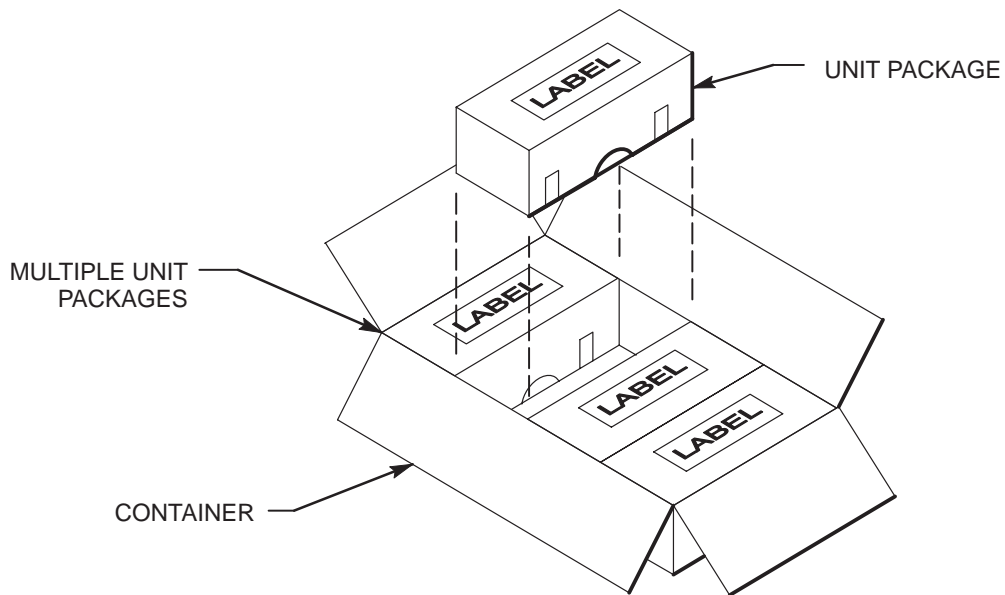


Figure 3. Intermediate/Shipping Container

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